N90845.AR.001829
NWIRP BETHPAGE
5090.3a

TREATABILITY STUDY SUMMARY REPORT BASEWIDE INVESTIGATION AND STUDIES REPORT FOR SITE 4 NWIRP BETHPAGE NY

2/1/2016

RESOLUTION CONSULTANTS

TREATABILITY STUDY SUMMARY REPORT
BASEWIDE INVESTIGATION AND STUDIES SUPPORT

TREATABILITY STUDY SUMMARY REPORT

SITE 4
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE
BETHPAGE, NEW YORK

Prepared for:

Department of the Navy
Naval Facilities Engineering Command, Mid-Atlantic
9742 Maryland Avenue
Norfolk, Virginia 23511-3095

February 2016

TREATABILITY STUDY SUMMARY REPORT
BASEWIDE INVESTIGATION AND STUDIES SUPPORT

TREATABILITY STUDY SUMMARY REPORT

SITE 4
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE
BETHPAGE, NEW YORK

Prepared for:

Department of the Navy
Naval Facilities Engineering Command, Mid-Atlantic
9742 Maryland Avenue
Norfolk, Virginia 23511-3095

Prepared by:

Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, Virginia 23510

Contract Number: N62470-11-D-8013
CTO WE08-05

February 2016

Table of Contents

1.0 PROJECT BACKGROUND 1-1
- 1.1 Introduction 1-1
- 1.2 Site 4 Background 1-1
- 1.3 Objectives 1-3
- 1.4 Approach 1-3

2.0 FIELD BULK SAMPLE COLLECTION 2-1
- 2.1 Mobilization 2-1
- 2.2 Location of Utilities 2-1
- 2.3 Soil Boring Installation 2-1
- 2.4 Collecting Bulk Soil for Treatability Testing 2-3
- 2.5 Collecting NAPL for Property Testing 2-3
- 2.6 Community Air Monitoring Plan 2-3
- 2.7 Management of Investigation Derived Waste 2-4
- 2.8 Equipment Decontamination and Demobilization 2-4
- 2.9 Analytical Sampling 2-4
- 2.10 Bench Testing 2-5

3.0 TREATABILITY TESTING RESULTS 3-1
- 3.1 NAPL Properties 3-1
- 3.2 Soil Properties 3-1
- 3.3 Low Temperature Steam/Hot Water Flushing 3-2
- 3.4 Steam Enhanced Extraction 3-5

4.0 BASELINE GROUNDWATER CONDITIONS 4-1

5.0 TREATABILITY STUDY CONCLUSIONS 5-1

6.0 REFERENCES 6-1

Figures

Figure 1 Site Location Map 1-2
Figure 2 Soil Boring Location Map 2-2

Tables

Table 2-1 Summary of Visual Impacts 2-3
Table 2-2 Summary of Soil Analytical Samples 2-4
Table 2-3 Summary of Aqueous Analytical Samples 2-5
Table 3-1 Summary of NAPL Properties 3-1
Table 3-2 Untreated Soil Physical/Geotechnical Data 3-2
Table 3-3 HWF Summary Soil Data 3-2
Table 3-4 HWF Leachate Analysis Summary Data 3-3
Table 3-5 HWF Flush SPLP (SIM PAHs, Detected Compounds Only) 3-4
Table 3-6 SEE Summary Soil Data 3-5
Table 3-7 SEE Flush SPLP (SIM PAHs, Detected Compounds Only) 3-6

Appendices

Appendix A	Boring Log
Appendix B	Photographic Log
Appendix C	Treatability Study Report
Appendix D	Analytical Data
Appendix E	Monitoring Well Sample Logs

List of Acronyms

ASTM	American Society for Testing and Materials
bgs	below ground surface
CAMP	Community Air Monitoring Plan
Cascade	Cascade Drilling, L.P.
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CLEAN	Comprehensive Long-Term Environmental Action Navy
CTO	Contract Task Order
HWF	Hot Water Flushing
Kemron	Kemron Environmental Services
NAPL	Non Aqueous Phase Liquid
NAVFAC MIDLANT	Naval Facilities Engineering Command, Mid-Atlantic
NWIRP	Naval Weapons Industrial Reserve Plant
NYSDEC	New York State Department of Environmental Conservation
OU	Operable Unit
PAHs	Polycyclic Aromatic Hydrocarbons
PV	Pore Volume
SEE	Steam Enhanced Extraction
SIM	Selected Ion Monitoring
SPLP	Synthetic Precipitation Leaching Procedure
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TerraTherm	TerraTherm, Inc.
VOCs	Volatile Organic Compounds

1.0 PROJECT BACKGROUND

1.1 Introduction

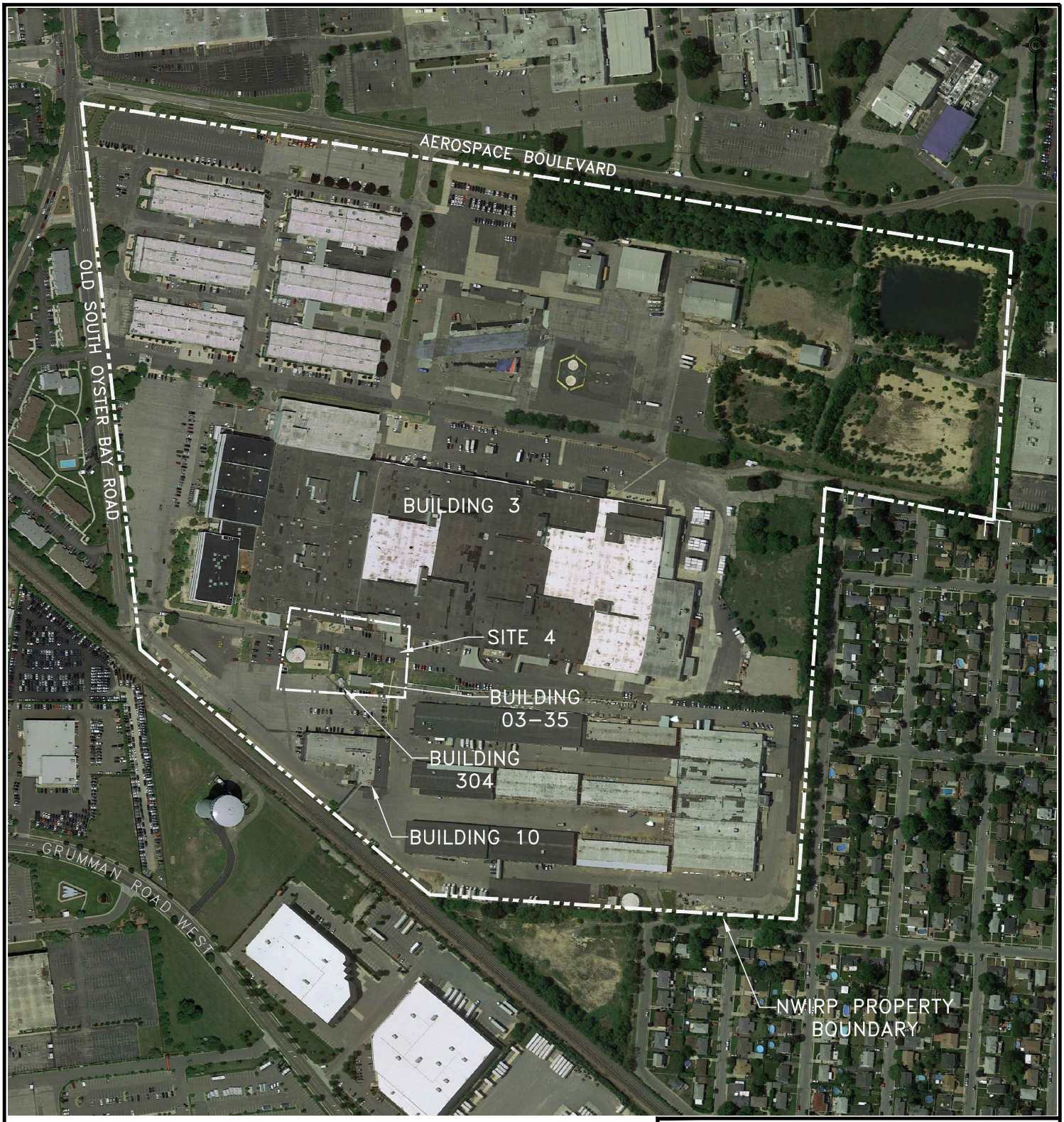
Under the direction of the Naval Facilities Engineering Command, Mid-Atlantic (NAVFAC MIDLANT), Resolution Consultants is supporting the Navy with environmental activities at Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage. This Treatability Study Summary Report is associated with the Contract Task Order (CTO) WE08 Modification 05, under the Comprehensive Long-Term Environmental Action Navy (CLEAN) program. This summary report presents the results of a treatability study that was completed to evaluate the effectiveness of hot water flushing (to simulate low temperature steam extraction) and high temperature steam extraction in meeting the Site 4 cleanup goals presented in the Proposed Plan (NAVY 2014) and Record of Decision. The treatability study was completed in accordance with the Treatability Study Work Plan (Resolution Consultants, 2015) and evaluated the effectiveness of recovering Non Aqueous Phase Liquid (NAPL), meeting the soil clean-up levels, and reducing the potential for contaminants to leach to groundwater.

1.2 Site 4 Background

Site 4 is located on a 9-acre parcel being retained by the Navy to complete environmental investigation and remediation. Site 4 is located south of Plant No. 3 between Plant No. 3 and Building 03-35 (Figure 1). Environmental concerns were first identified at Site 4 during a 1997 investigation by Northrup Grumman Corporation that identified former underground storage tanks and petroleum contaminated soil in the area. The underground storage tanks reportedly contained No. 6 Fuel Oil, and were removed between 1980 and 1984. Since then, petroleum-contaminated soil and semi-solid petroleum NAPL have been identified above and below the water table (approximately 50 feet below ground surface [bgs]) between approximately 20 and 73 feet bgs.

The Navy evaluated remedial alternatives for the Site in a Feasibility Study/Corrective Measures Study (TT NUS 2013). Steam Injection with NAPL Recovery was selected as the preferred remedy in the Proposed Plan (NAVY 2014).

The Navy conducts its environmental cleanup work for the former NWIRP Bethpage (including Site 4) under Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Defense Environmental Restoration Program. The Navy is the lead agency for the CERCLA cleanup. The New York State Department of Environmental Conservation (NYSDEC), with assistance from the New York State Department of Health, is the lead state agency providing regulatory consultation to the Navy.



NOTES

1. GOOGLE EARTH PRO IMAGERY – 06/19/2014

0 400 800
SCALE IN FEET

FIGURE 1
SITE LOCATION MAP
TREATABILITY STUDY SUMMARY REPORT–SITE 4
NAVAL WEAPONS INDUSTRIAL
RESERVE PLANT BETHPAGE
BETHPAGE, NEW YORK

REQUESTED BY: JP	DWG DATE: 19JUN2015
DRAWN BY: JDL	DWG NO: 13596

NAVFAC Naval Facilities Engineering Command
RESOLUTION CONSULTANTS

I:\2015 Projects BST\13596 Bethpage WP Figures\Plans\13596 Bethpage Existing Site Plan – 5.08.15.dwg, 6/19/2015 5:46:39 PM

1.3 Objectives

The treatability test was completed to evaluate the effectiveness of the use of steam technologies to recover NAPL, meet the soil clean-up levels, and reduce the potential for contaminants to leach to groundwater. The objectives of the treatability study were as follows:

- To determine the effectiveness of hot water flushing (~140°F) to remove NAPL and reduce the concentration of contaminates of concerns.
- To determine the effectiveness of steam enhanced extraction (~212°F) to remove NAPL and reduce the concentration of contaminates of concerns.
- Understand NAPL characteristics (density, viscosity, surface tension) over a range of temperatures.
- Understand the leaching potential of Polycyclic Aromatic Hydrocarbons (PAHs) following the bench-scale thermal simulations.

1.4 Approach

This treatability study was completed to collect data needed to complete the remedial design of the preferred remedial alternative which includes steam injection and NAPL recovery to treat impacted soils. The completed scope of work is summarized herein and included the following:

- Collection of the Bulk Soil Sample — Advancement of soil boring SITE4TS-SB1 to assess subsurface conditions and collect analytical samples and bulk soil for treatability testing.
- Completion of the Treatability Study — Treatability testing was performed by Kemron Environmental Services (Kemron) under the direction of TerraTherm, Inc. (TerraTherm) under Resolution Consultants subcontract and direction. Treatability testing included hot water flushing and steam enhanced extraction testing. Also, NAPL properties related to subsurface and bulk transport were evaluated.

2.0 FIELD BULK SAMPLE COLLECTION

The scope of work completed to collect the bulk soil sample included:

- Location of Utilities
- Mobilization
- Installation of one soil boring and collecting bulk soil for treatability testing
- Implementation of the Community Air Monitoring plan (CAMP)
- Management of investigation derived waste
- Equipment decontamination and demobilization

Each of these activities is summarized in sections below.

2.1 Mobilization

Resolution Consultants subcontracted Cascade Drilling, L.P. (Cascade) to complete the soil boring. Cascade, under the direction of Resolution Consultants, mobilized to site on 3 June 2015. Cascade unloaded materials and equipment, cordoned off the drilling area, and set up a temporary decontamination pad.

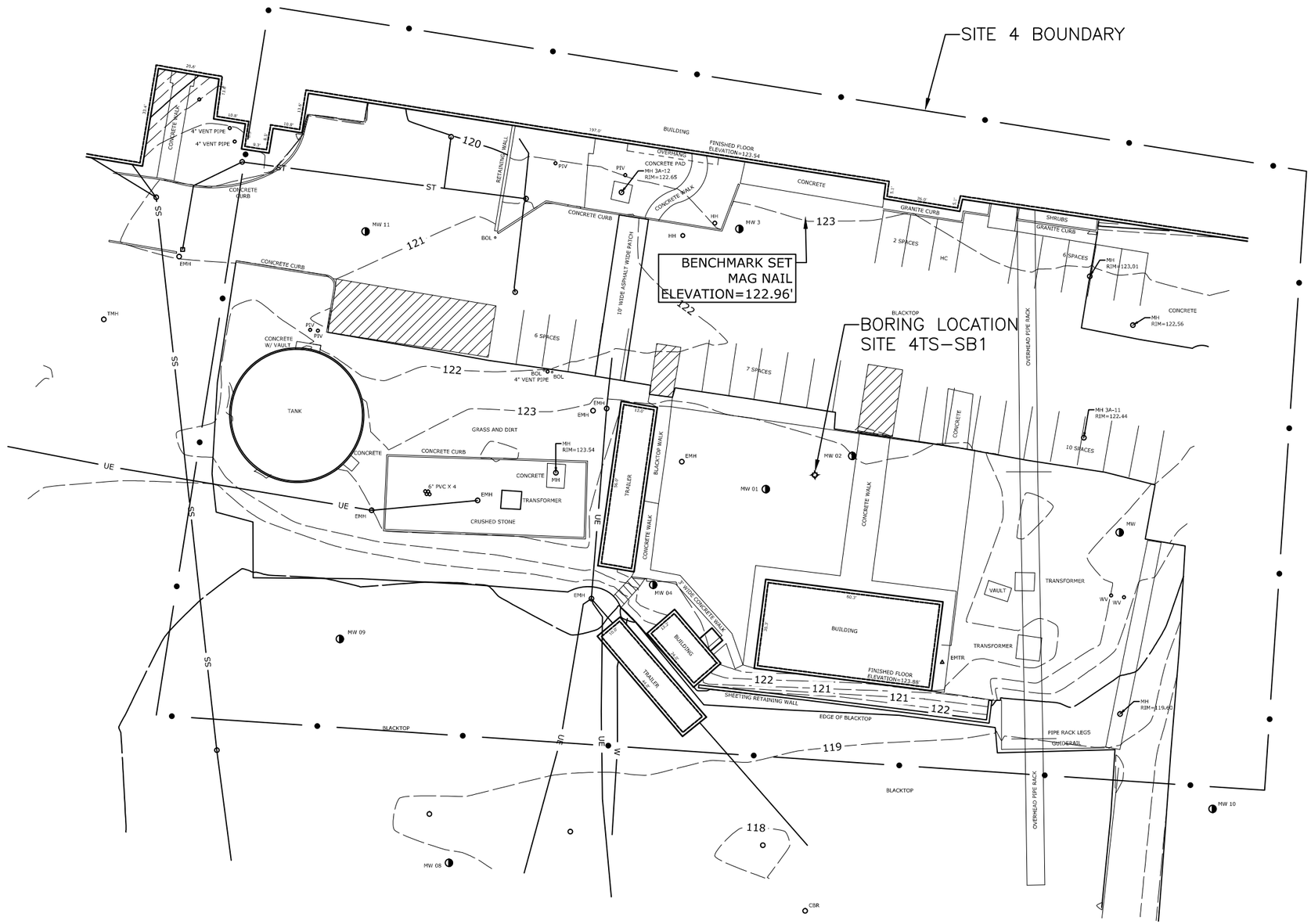
2.2 Location of Utilities

Prior to mobilization, Cascade contacted New York One Call Center and utilities were located within the right of way. Resolution Consultants subcontracted Advanced Geologic Services to locate utilities on Navy owned property. Advanced Geologic Services located onsite utilities on 2 June 2015.

2.3 Soil Boring Installation

Cascade drilled one soil boring, SITE4TS-SB1, to a depth of 70 feet bgs using Rotosonic drilling techniques. The soil boring was installed at the location shown on Figure 2.

Cascade hand cleared the location for the first 5 feet of boring depth. The soil boring was advanced through predominately well graded sand with gravel. Visual contamination was observed as shallow as 22.1 feet bgs and as deep as 62.5 feet bgs. A continuous soil core was retrieved from the soil boring and continuously logged. Soils were screened for volatile organic compounds (VOCs) utilizing a photoionization detector and each 5 feet of soil core was photo logged. Visual contamination consisted predominantly of soil coated with a petroleum-like material. Petroleum saturation was only identified in a one foot thick lense between 60 and 61 feet bgs. A boring and photo log of SITE4TS-SB1 is provided in Appendix A and Appendix B, respectively. A bulk soil sample was collected from the most visually impacted intervals. Table 2-1 summarizes the visual impacts.



MAP NOTES

1. TOPOGRAPHIC INFORMATION SHOWN HEREON WAS COMPILED FROM AN ACTUAL FIELD SURVEY CONDUCTED ON DECEMBER 9, 2014.
2. NORTH ORIENTATION IS GRID NORTH BASED ON THE NEW YORK STATE PLANE COORDINATE SYSTEM, LONG ISLAND ZONE, NAD 83 AS OBTAINED FROM GPS OBSERVATION.
3. VERTICAL DATUM SHOWN HEREON IS NAVD 88 AS OBTAINED FROM GPS OBSERVATION.
4. THE LOCATION OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS, IF ANY EXIST, OR AS SHOWN HEREON, ARE NOT CERTIFIED. THERE MAY BE UNDERGROUND UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN TO THE UNDERSIGNED. SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES. DIG SAFELY NEW YORK MUST BE NOTIFIED PRIOR TO CONDUCTING TEST BORINGS, EXCAVATION AND CONSTRUCTION.

LEGEND

	Boring Location
CBCI	Catch Basin Curb Inlet
CBR	Catch Basin Round
CBS	Catch Basin Square
DMH	Drainage Manhole
EMH	Electric Manhole
EMTR	Electric Meter
HH	Hand Hold
MH	Manhole
MW	Monitoring Well
PVC	Poly Vinyl Chloride
PIV	Post Indicator Valve
RCP	Reinforced Concrete Pipe
SMH	Sanitary Manhole
TMH	Telephone Manhole
WV	Water Valve
UE	Underground Electric Line
SS	Underground Sanitary Sewer Line
W	Underground Water Line

0 40 80

SCALE IN FEET

FIGURE 2
SOIL BORING LOCATION MAP
TREATABILITY STUDY SUMMARY REPORT–SITE 4
NAVAL WEAPONS INDUSTRIAL
RESERVE PLANT BETHPAGE
BETHPAGE, NEW YORK

REQUESTED BY: JP	DWG DATE: 19JUN2015
DRAWN BY: JDL	DWG NO: 13596

NAVFAC Naval Facilities Engineering Command

RESOLUTION CONSULTANTS

I:\2015 Projects BST\13596 Bethpage WP Figures\Plans\13596 Bethpage Existing Site Plan – 6.19.15.dwg, 6/30/2015 12:44:19 PM

Table 2-1
Summary of Visual Impacts

Depth Interval (feet bgs)	Observed Visual Impact	Included in Bulk Sample	Depth Interval (feet bgs)	Observed Visual Impact	Included in Bulk Sample
0-5	None	No	35-40	Lightly petroleum coated	No
5-10	None	No	40-45	None	No
10-15	None	No	45-50	Lightly petroleum coated	No
15-20	None	No	50-55	Petroleum coated	No
20-25	Petroleum coated from 22.1-25 feet bgs.	No	55-60	Lightly to heavily petroleum coated	Yes
25-30	Petroleum coated	No	60-65	Heavily coated with petroleum to 62.5 feet bgs with a 1 foot band of petroleum saturation from 60-61 feet bgs.	Yes
30-35	Heavily petroleum coated	Yes	65-70	None	No

Note:
bgs = below grounds surface

Following completion of the soil boring, the borehole was abandoned by grouting the borehole with a Volclay bentonite slurry. The slurry was installed from the bottom of the borehole using a tremie pipe. The borehole was patched with soil to restore the surface.

2.4 Collecting Bulk Soil for Treatability Testing

Approximately 1 cubic foot of soil from the most visually impacted soils (i.e., 60-65 feet bgs) were collected, homogenized, and shipped to Kemron for conducting the treatability study. Soils were homogenized so that each of the four bench tests described in Section 3.0 would contain similar soils which would provide for a better comparison of results upon conclusion of the tests. Resolution Consultants collected a baseline sample of the homogenized impacted soil prior to shipment. The sample was shipped to Katahdin Analytical Laboratories for analytical testing. Analytical testing results are discussed in Section 3.0.

2.5 Collecting NAPL for Property Testing

Approximately 1 liter of NAPL from monitor well MW-02 was collected using a weighted bailer and improvised steel pipe sections. NAPL was transferred to glass sample bottles and shipped to Kemron and PTS Laboratories for property testing. NAPL property testing results are discussed in Section 3.0.

2.6 Community Air Monitoring Plan

During soil sample collection, a CAMP was implemented to monitor dust and VOCs in accordance with NYSDEC requirements. The data collected during CAMP showed there were no exceedances of regulatory criteria for dust or VOCs.

2.7 Management of Investigation Derived Waste

Investigative derived waste generated during the drilling event was placed with and will be disposed of with waste generated as part of ongoing Operable Unit 2 (OU-2) investigative work. Cascade containerized any decontamination water and transferred it to the on-site frac tank used for Investigation Derived Waste. The most impacted soil core interval was collected and was used for bench testing.

2.8 Equipment Decontamination and Demobilization

Cascade decontaminated their drilling equipment using a pressurized steam cleaner at the decontamination pad that is set up as part of the ongoing work at OU-2 adjacent to the drum storage pad. All equipment was cleaned up and removed from the site. Cascade demobilized on 4 June 2015.

2.9 Analytical Sampling

Analytical samples were collected as shown on Tables 2-2 and 2-3.

Table 2-2
Summary of Soil Analytical Samples

	VOCs 8260C	SVOCs 8270D	TAL Metals 6010C/7471B	SPLP VOCs 1312/8260C	SPLP SVOCs 1312/8270D	SPLP Metals 1312/6010C/7470A
Field Sampling						
Field Baseline	X	X	X	X	X	X
Field Duplicate	X	X	X	X	X	X
Aqueous Field Blank	X	X	X	X	X	X
Aqueous Equipment Blank	X	X	X	X	X	X
Aqueous Trip Blank[1]	X	X	X	X	X	X
Hot Water Flushing Test						
Column 1 (24 hours)	X	X		X	X	
Column 2 (48 hours)	X	X		X	X	
Column 1 (24 hours)	X	X		X	X	
Column 2 (48 hours)	X	X		X	X	
Aqueous Trip Blank[1]	XX	XX		XX	XX	
Steam Enhanced Extraction Test						
Column 1 (24 hours)	X	X		X	X	
Column 2 (48 hours)	X	X		X	X	
Column 1 (24 hours)	X	X		X	X	
Column 2 (48 hours)	X	X	X	X	X	X
Aqueous Trip Blank[1]	XX	XX	XX	XX	XX	XX

Notes:
VOC = Volatile Organic Compound
SVOC = Semi-Volatile Organic Compound
TAL = Target Analyte List
SPLP = Synthetic Precipitation Leaching Procedure
[1]Trip blanks were sent with every shipment to the laboratory.

Table 2-3
Summary of Aqueous Analytical Samples

	VOCs 8260C	SVOCs 8270D	TAL Metals 6010/7470A
Leachate Samples			
HWF Column 2 — First Flush	X	X	X
HWF Column 2 — Final Flush	X	X	X

Notes:
HWF = Hot Water Flushing
VOC = Volatile Organic Compound
SVOC = Semi-Volatile Organic Compound
TAL = Target Analyte List
[1]Trip blanks were sent with every shipment to the laboratory.

The laboratory performed all of the internal quality control procedures specified in the Standard associated with the laboratory test. Quality control procedures for sample handling and documentation are described in the applicable American Society for Testing and Materials (ASTM) Standards.

All data was reviewed by the Project Chemist or CTO Manager upon receipt to ensure completeness and compliance with project objectives. Formal data validation was not performed.

2.10 Bench Testing

The following sections summarize the bench tests performed by TerraTherm. TerraTherm's Treatability Study Report is attached in Appendix C.

Evaluation of NAPL Properties

NAPL samples were collected from MW-02 and analyzed for density as a function of temperature (ASTM D7263 mod), viscosity as a function of temperature (ASTM D445), as well as surface and interfacial tension as a function of temperature (ASTM D971). In addition, the flash point of the NAPL sample was also determined.

Evaluation of Soil Properties

The moisture content, bulk density and specific gravity of the soil sample were measured. These measurements were used to calculate the porosity of soil. The calculated porosity was used to prepare the soil columns for the hot water flushing and steam enhanced extraction tests. The porosity values were also used to determine the amount of water needed for the 15 and 30 pore volume (PV) flushes and the amount steam needed for 2 and 6 PV flushes.

Low Temperature Steam Extraction / Hot Water Flushing Test

Under the direction of Resolution Consultants, TerraTherm and Kemron conducted the Hot Water Flushing Test as described in Appendix C. Hot water (~140°F/~50°C) was used to simulate treatment with low temperature steam. Two soil columns were set up as presented in Appendix C. Baseline samples of the material that went into each column were collected for VOCs, Semi-Volatile Organic Compound (SVOCs), and Synthetic Precipitation Leaching Procedure (SPLP) analysis. The soil column temperature was maintained at 140°F for each test using temperature controlled ovens and thermocouples. The initial test was run until 30 PV were flushed. The second column, or intermediate test, was run 15 PV flush in order to generate data at an intermediate interval. Two columns were necessary to obtain intermediate data because the columns could not be sampled mid test without disturbing the core and compromising the test. For each test, temperature was recorded at 1 hour intervals. NAPL release was monitored, including recording the volume of NAPL recovered and conducting a visual inspection of NAPL properties. The amount of PVs flushed during treatment was also recorded.

At the conclusion of the tests, the soil columns were allowed to reach ambient temperature before sampling for VOCs, SVOCs, Target Analyte List (TAL) metals, and SPLP analysis. The treated soil was also extruded from the columns and inspected and photo documented. The photos are included in Appendix C. The visual inspection included an evaluation of the presence of NAPL. The liquid that discharged from the column during the first flush and the final flush was containerized and sampled for VOCs, SVOCs, and TAL metals.

Steam Enhanced Extraction Test

Under the direction of Resolution Consultants, TerraTherm and Kemron conducted the Steam Enhanced Extraction Test are described in Appendix C. The soil column temperature was maintained at approximately 212°F (~100°C) using temperature controlled ovens and thermocouples in replicate high temperature steam extraction. Two soil columns were set up as presented in Appendix C. Baseline samples of the material that went into each column were collected for VOCs, SVOCs, and SPLP analysis. One column was flushed with steam for 2 PV. This test simulated a typical steam injection that would be suitable for removal of NAPL and volatile chemicals. The second test was conducted for approximately 6 PV flushes. This test simulated a typical steam injection that would be suitable for the removal of NAPL, volatile, and semi-volatile chemicals. Pressure cycling (letting steam pressure build in the soil column, releasing the pressure, and repeating this cycle) was begun when steam was observed at the column outlet. Pressure cycling continued until the PV flushes were complete. The intent of the pressure cycling was to remove additional NAPL. During pressure cycling, the soil column temperature was maintained at approximately 212°F (~100°C).

Two columns were necessary to obtain intermediate data because the columns cannot be sampled without disturbing the tests; the 2 PV columns provided the intermediate results. For each test, temperature was recorded at 1 hour intervals. NAPL release was monitored, the volume of NAPL recovered was recorded, and a visual inspection of NAPL properties was conducted. The number of PVs flushed during each column test was also recorded.

At the conclusion of the tests, the soil columns were allowed to reach ambient temperature before sampling for VOCs, SVOCs, TAL metals, and SPLP analysis. The soil was also extruded from the columns and visually inspected and photo documented. The visual inspection included an evaluation of the presence of NAPL and a determination of the percent saturation of the PV by the stream was made.

3.0 TREATABILITY TESTING RESULTS

The results of the treatability testing including NAPL properties, hot water flushing and steam enhanced extraction are presented below.

3.1 NAPL Properties

The properties of NAPL sample collected from MW-02 are summarized in Table 3-1.

Table 3-1
Summary of NAPL Properties

Parameter	Unit	Result
Density		
24°C	g/cc	0.9854
50°C	g/cc	0.9719
90°C	g/cc	0.9439
Viscosity		
24°C	Centipoise	120,000
50°C	Centipoise	1,000
90°C	Centipoise	93.1
Interfacial Tension		
24°C	Dynes/cm	35.7
50°C	Dynes/cm	30.6
66°C	Dynes/cm	29.1
Flash Point	°C	40.6

The NAPL property results show that NAPL is viscous and will resist flow at ambient conditions. To enhance recovery and transport of NAPL, the temperature of NAPL will need to be greater than 90°C (~194°F). At lower temperatures, NAPL stuck to bench testing equipment and coated surfaces with NAPL requiring use of toluene as solvent to clean equipment at the end of the bench test. The density data show that the density of the NAPL remained lower than that of water at each of the temperatures tested. The interfacial tension data show NAPL has a lower interfacial tension than water (72 dynes/cm at 25 °C), indicating a potential for NAPL to form droplets that can agglomerate to form a separate NAPL layer.

3.2 Soil Properties

Table 3-2 summarizes the soil properties; porosity and PV calculations are presented in Appendix C.

Table 3-2
Untreated Soil Physical/Geotechnical Data

Testing Parameter	Test Method	Unit	SAMPLE Site 4TS-FB
Moisture Content	ASTM D2216		
ASTM Moisture Content	(modified)*	%	13.50
Percent Solids		%	88.10
Bulk Unit Weight	ASTM D7263	pcf	129.6
Specific Gravity	ASTM D854		2.42
Porosity	ASTM D7263 X1 (Calculated)	%	24.4

Notes:
ASTM = American Society for Testing and Materials
pcf = pounds per cubic foot
* = Oven temperature increased to 300°C to remove NAPL from pore space. Porosity was calculated using this moisture content value.

The soil properties data show that the calculated soil porosity is lower than previously estimated in the Feasibility Study. The calculated porosity is based on a modified moisture content measurement at high temperature to mobilize and remove NAPL. This lower soil porosity value may lower the estimated volume of NAPL to be recovered.

3.3 Low Temperature Steam/Hot Water Flushing

A summary of the Low Temperature Steam/Hot Water Flushing (HWF) (~140°F/~50°C) test material concentrations [of Selected Ion Monitoring (SIM) PAHs] before and after treatment is shown below in Table 3-3. Detailed corresponding summary tables with comparisons to standards and remedial goals and supporting laboratory analytical data are provided in Appendix D.

Table 3-3
HWF Summary Soil Data (SIM PAHs)

Compound	Site 4 Remedial Goals	NYSDEC Unrestricted Use Soil	HWF1 (15PV) Baseline (mg/kg)		HWF1 (15PV) Treated (mg/kg)		HWF2 (30PV) Baseline (mg/kg)		HWF2 (30PV) Treated (mg/kg)	
2-Methylnaphthalene		NE	**1.5**		**0.84**		**1.3**		**1**	
Acenaphthene		20	**0.56**		**0.74**		**0.5**		**0.8**	
Acenaphthylene		100	0.21	U	0.21	U	0.20	U	0.21	U
Anthracene		100	**0.99**		**1.2**		**0.95**		**2**	
Benzo[A]Anthracene	1	1	***1.7*****		***1.8*****		***1.5*****		***1.8*****	
Benzo[A]Pyrene	1	1	***1.2*****		***1.4*****		***1.1*****		***1.4*****	
Benzo[B]Fluoranthene	1	1	**0.65**		**0.76**		**0.56**		**0.76**	
Benzo[K]Fluoranthene		0.8	0.21	U	0.21	U	0.20	U	0.21	U
Benzo[G,H,I]Perylene		100	**0.75**		**0.89**		**0.67**		**0.86**	
Chrysene	1	1	***2.6*****		***2.9*****		***2.6*****		***3.3*****	
Dibenz[A,H]Anthracene		0.33	0.21	U	**0.31**	**J**	**0.22**	**J**	**0.28**	**J**

Table 3-3
HWF Summary Soil Data (SIM PAHs)

Compound	Site 4 Remedial Goals	NYSDEC Unrestricted Use Soil	HWF1 (15PV)				HWF2 (30PV)			
			Baseline (mg/kg)		Treated (mg/kg)		Baseline (mg/kg)		Treated (mg/kg)	
Fluoranthene		100	**0.58**		**0.57**		**0.44**		**0.6**	
Fluorene		30	**0.83**		**0.81**		**0.76**		**0.84**	
Indeno[1,2,3-Cd]Pyrene		0.5	**0.32**	J	**0.36**	J	**0.24**	J	**0.36**	J
Naphthalene		12	**0.45**		**0.26**	J	**0.4**		**0.28**	J
Phenanthrene		100	**2.2**		**2.1**		**2.1**		**2.7**	
Pyrene		100	**7**		**12**		**6.1**		**7.8**	

Notes:
Detected values are in bold

Bold	=	Exceeds NYSDEC Unrestricted Use Soil
Bold**	=	Exceeds Site 4 Remedial Goal
U	=	Not detected at the reporting limit shown
J	=	Estimated concentration, below the reporting limit but above the method detection limit.
mg/kg	=	Milligrams per Kilogram
PV	=	Pore Volume
NYSDEC	=	New York State Department of Environmental Conservation
NE	=	Not Established

The low temperature steam/hot water flushing data shows that hot water flushing did not effectively remove PAHs from soil. Longer duration of hot water flushing also does not improve PAHs removal. However, some PAHs values increased after the hot water flush tests indicating limited mobilization of contaminants in the soil pores at low temperature.

To evaluate if any contaminants was leached during long-term steam extraction, the leachate from the 30 PV hot water flush column from the first and last flushing intervals were collected and analyzed. Table 3-4 summarizes these results. Appendix D contains detailed corresponding summary tables with comparisons to standards and remedial goals and supporting laboratory analytical data.

Table 3-4
HWF Leachate Analysis Summary Data (SIM PAHs)

Compound	Site 4 Remedial Goals	NYSDEC AWQS Class GA Groundwater	First Flush (µg/L)		Final Flush (µg/L)	
2-Methylnaphthalene		NE	**18**		0.10	U
Acenaphthene		20*	**1.1**		**0.89**	
Acenaphthylene		NE	0.10	U	0.10	U
Anthracene		50*	**0.73**		**0.33**	
Benzo[A]Anthracene		0.002*	0.10	U	***0.11***	***J***
Benzo[A]Pyrene		ND	0.10	U	0.10	U
Benzo[B]Fluoranthene		0.002*	***0.13***	***J***	***0.1***	***J***
Benzo[G,H,I]Perylene		NE	0.10	U	0.10	U
Benzo[K]Fluoranthene		0.002*	0.10	U	0.10	U
Chrysene		0.002*	0.10	U	0.10	U
Dibenzo[A,H]Anthracene		NE	0.10	U	0.10	U

Table 3-4
HWF Leachate Analysis Summary Data (SIM PAHs)

Compound	Site 4 Remedial Goals	NYSDEC AWQS Class GA Groundwater	First Flush (µg/L)		Final Flush (µg/L)	
Fluoranthene		50*	**0.21**		**0.15**	**J**
Fluorene		50*	**1.5**		**1.0**	
[Indeno[1,2,3-Cd]Pyrene		0.002*	0.10	U	0.10	U
Naphthalene	17	10*	***22*****		**3.1**	
Phenanthrene		50*	**3.9**		**1.4**	
Pyrene		50*	**0.59**		**0.72**	

Notes:
Detected values are in bold

Bold	=	Exceeds NYSDEC AWQS Class GA Groundwater
Bold**	=	Exceeds Site 4 Remedial Goal
U	=	Not detected at the reporting limit shown
J	=	Estimated concentration below the reporting limit but above the method detection limit.
µg/L	=	Micrograms per Liter
AWQS	=	Ambient Water Quality Standards
NYSDEC	=	New York State Department of Environmental Conservation
NE	=	Not Established
ND	=	Not Detected

* indicates the value is a guidance value and not a standard

The leachate data show that the increased solubility of PAHs to groundwater due to high temperature will diminish with time and distance from the higher temperature steam extraction zone.

The soil from the low temperature steam extraction/hot water flush columns for the 15 PV and 30 PV were analyzed for residual PAHs using SPLP and compared to field baseline soil sample. Table 3-5 summarizes the SPLP results for hot water flush columns. Appendix D contains detailed corresponding summary tables with comparisons to standards and remedial goals and supporting laboratory analytical data are attached.

Table 3-5
HWF Flush SPLP (SIM PAHs, Detected Compounds Only)

SPLP SVOCs (Detects Only)	Site 4 Remedial Goals	NYSDEC AWQS Class GA Groundwater	HWF1 (15 PV)				HWF2 (30 PV)			
			Baseline (µg/L)		Treated (µg/L)		Baseline (µg/L)		Treated (µg/L)	
2-Methylnaphthalene		NE	**2.0**		**0.28**		**1.7**		**0.22**	**J**
Anthracene		50*	**0.12**	**JL**	**0.08**	**JL**	**0.11**	**JL**	**0.091**	**JL**
Benzo[A]Pyrene		ND	***0.081***	***J***	0.10	U	0.098	U	0.11	U
Benzo[B]Fluoranthene		0.002*	***0.18***	***JBLL***	***0.17***	***JBLL***	***0.14***	***JBLL***	***0.18***	***JBLL***
Bis(2-Chloroethyl)Ether		1	0.098	U	**0.076**	**JLL**	0.098	ULL	0.11	ULL
Dibenzofuran		NE	**0.14**	**JL**	0.10	UL	**0.12**	**JL**	0.11	UL
Indeno[1,2,3-Cd]Pyrene		0.002*	***0.064***	***J***	0.10	U	0.098	U	0.11	U
Naphthalene	17	10*	**0.84**		**0.51**		**0.73**		**0.43**	
Phenanthrene		50*	**0.56**	**LL**	**0.33**	**LL**	**0.54**	**LL**	**0.32**	**LL**

Table 3-5
HWF Flush SPLP (SIM PAHs, Detected Compounds Only)

SPLP SVOCs (Detects Only)	Site 4 Remedial Goals	NYSDEC AWQS Class GA Groundwater	HWF1 (15 PV)				HWF2 (30 PV)			
			Baseline (µg/L)		Treated (µg/L)		Baseline (µg/L)		Treated (µg/L)	
Pyrene		50*	**0.16**	**JLL**	**0.18**	**JLL**	**0.21**	**LL**	**0.16**	**JLL**

Notes:
Detected values are in bold
Bold = Exceeds NYSDEC AWQS Class GA Groundwater
Bold** = Exceeds Site 4 Remedial Goal
U = Not detected at the reporting limit shown
J = Estimated value, the analyte was detected in the sample at a concentration less than the laboratory limit of quantitation, but above the method detection limit.
L = Compound did not meet Department of Defense criteria in the corresponding Laboratory Control Sample
µg/L = Micrograms per Liter
AWQS = Ambient Water Quality Standards
NYSDEC = New York State Department of Environmental Conservation
NE = Not Established
ND = Not Detected
* indicates the value is a guidance value and not a standard

The SPLP data show that some PAH residues remained after the hot water flush, however, the leachability was diminished and will not likely increase dissolved PAHs in groundwater. The duration of hot water flush did not appear to affect the residual PAH levels.

3.4 Steam Enhanced Extraction

Table 3-6 summarizes the results of the Steam Enhanced Extraction (SEE) test. This table shows the test material concentrations (of SIM PAHs) before and after treatment.

Table 3-6
SEE Summary Soil Data (SIM PAHs)

Compound	Site 4 Remedial Goals	NYSDEC Unrestricted Use Soil	SEE1 (2 PV)				SEE2 (6 PV)			
			Baseline (mg/kg)		Treated (mg/kg)		Baseline (mg/kg)		Treated (mg/kg)	
2-Methylnaphthalene		NE	**1.7**		**0.62**		**1.8**		0.094	U
Acenaphthene		20	**0.53**		**0.49**		**0.56**		**0.06**	**J**
Acenaphthylene		100	**0.13**	**J**	0.097	U	**0.15**	**J**	0.094	U
Anthracene		100	**0.65**		**0.65**		**0.83**		**0.17**	**J**
Benzo[A]Anthracene	1	1	***1.5*****		***1.6*****		***1.8*****		**0.3**	
Benzo[A]Pyrene	1	1	***1.6*****		***1.3*****		***1.6*****		**0.3**	
Benzo[B]Fluoranthene	1	1	***1.1*****	***L***	**0.78**	**L**	**0.97**	**L**	**0.2**	
Benzo[G,H,I]Perylene		100	**1.6**		**1.3**		**1.5**		**0.18**	**J**
Benzo[K]Fluoranthene		0.8	**0.3**		**0.16**	**J**	**0.26**		0.094	U
Chrysene	1	1	***3.2*****		***2.8*****		***2.8*****		**0.54**	
Dibenz[A,H]Anthracene		0.33	***0.36***		**0.3**		***0.35***		**0.048**	**J**
Fluoranthene		100	**0.33**		**0.39**		**0.36**		**0.1 J**	
Fluorene		30	**0.76**		**0.66**		**0.91**		**0.1 J**	
Indeno[1,2,3-Cd]Pyrene		0.5	***0.66***		**0.45**		***0.52***		**0.074**	**J**
Naphthalene	12	12	**0.39**		**0.11**	**J**	**0.45**		0.094	U

Table 3-6
SEE Summary Soil Data (SIM PAHs)

Compound	Site 4 Remedial Goals	NYSDEC Unrestricted Use Soil	SEE1 (2 PV)				SEE2 (6 PV)			
			Baseline (mg/kg)		Treated (mg/kg)		Baseline (mg/kg)		Treated (mg/kg)	
Phenanthrene		100	**1.7**		**1.6**		**2**		**0.44**	
Pyrene		100	**9.7**		**7.2**		**9.9**		**1.2**	

Notes:
Detected values are in bold

Bold	=	Exceeds NYSDEC Unrestricted Use Soil
Bold**	=	Exceeds Site 4 Remedial Goal
U	=	Not detected at the reporting limit shown
J	=	Estimated concentration, below the reporting limit but above the method detection limit
L	=	Compound did not meet DoD criteria in the corresponding Laboratory Control Sample
mg/kg	=	Milligrams per Kilogram
PV	=	Pore Volume
NYSDEC	=	New York State Department of Environmental Conservation
NE	=	Not Established

The Steam Enhanced Extraction did not effectively remove PAHs from soil. Longer duration of Steam Enhanced Extraction may show some improvement; however the majority of the PAHs were still present.

The soil from the steam enhanced extraction columns after 2 PV flush and 6 PV flush were analyzed for residual PAHs using SPLP and compared to field baseline soil sample. Table 3-7 summarizes the SPLP results for the steam enhanced extraction columns. Detailed corresponding summary tables with comparisons to standards and remedial goals and supporting laboratory analytical data provided in Appendix D.

Table 3-7
SEE Flush SPLP (SIM PAHs, Detected Compounds Only)

SPLP SVOCs (Detects Only)	Site 4 Remedial Goals	NYSDEC AWQS GA Groundwater	SEE1 (2PV)				SEE2 (6PV)			
			Baseline (µg/L)		Treated (µg/L)		Baseline (µg/L)		Treated (µg/L)	
2-Methylnaphthalene		NE	**1.5**	**L**	**0.68**	**L**	**1.6**	**L**	0.10	U
Anthracene		50*	**0.12**	**JL**	**0.11**	**JL**	**0.11**	**JL**	**0.071**	**J**
Benzo[G,H,I]Perylene		NE	**0.12**	**J**	**0.075**	**J**	**0.082**	**J**	0.10	U
Dibenz[A,H]Anthracene		NE	0.17	UL	0.11	UL	**0.30**	**L**	0.10	U
Dibenzofuran		NE	**0.14**	**J**	**0.11**	**J**	**0.15**	**J**	0.10	UL
Indeno[1,2,3-Cd]Pyrene		0.002*	***0.54***		**0.35**		**0.35**		0.10	U
Naphthalene	17	10*	**0.68**		**0.26**		**0.70**		0.10	U
Phenanthrene		50*	**0.52**	**L**	**0.48**	**L**	**0.49**	**L**	**0.47 LL**	
Pyrene		50*	**0.17**	**JL**	**0.18**	**JL**	**0.16**	**JL**	**0.13 J**	

Table 3-7
SEE Flush SPLP (SIM PAHs, Detected Compounds Only)

SPLP SVOCs (Detects Only)	Site 4 Remedial Goals	NYSDEC AWQS GA Groundwater	SEE1 (2PV)		SEE2 (6PV)	
			Baseline (µg/L)	Treated (µg/L)	Baseline (µg/L)	Treated (µg/L)

Notes:
Detected values are in bold

Bold	=	Exceeds NYSDEC AWQS Class GA Groundwater
Bold**	=	Exceeds Site 4 Remedial Goal
U	=	Not Detected at the reporting limit shown
J	=	Estimated value, the analyte was detected in the sample at a concentration less than the laboratory limit of quantitation, but above the method detection limit.
L	=	Indicates that the flagged compound did not meet Department of Defense criteria in the corresponding laboratory control sample and/or duplicate prepared and/or analyzed concurrently with the sample.
µg/L	=	Micrograms per Liter
AWQS	=	Ambient Water Quality Standards
NYSDEC	=	New York State Department of Environmental Conservation
NE	=	Not Established
ND	=	Not Detected

* indicates the value is a guidance value and not a standard

The SPLP data show that some PAH residues remained after steam enhanced extraction, however, it will not likely increase dissolved PAHs in groundwater. The duration of steam enhanced extraction did not appear to affect the residual PAH levels.

4.0 BASELINE GROUNDWATER CONDITIONS

A groundwater sampling event was completed between 31 March and 2 April 2015 at Site 4 to evaluate the baseline groundwater conditions. Groundwater samples were collected and analyzed from nine Site monitoring wells including MW-01, MW-03, MW-04, MW-06, MW-07, MW-08, MW-09, MW-10, and MW-11. MW-02 was not sampled due to the presence of a measurable quantity of NAPL. MW-05 was located within Building 3 and has been abandoned. Monitoring well sample logs are presented in Appendix E.

Observations

Table D5 in Appendix D presents the groundwater analytical data. VOCs and SVOCs were not detected in any monitoring well above site remedial goals or New York State Ambient Water Quality Standards (NYS AWQS) for GA groundwater, with the exception of benzo(b)fluoranthene (1.2 µg/L) at MW-11 located sidegradient of the NAPL impacted zone. This indicates that the NAPL is not impacting downgradient groundwater. VOC and PAH concentrations at MW-01, located within the source area, did not exceed the NYS AWQS GA standard or the Remedial Goals. Metals including cadmium, iron, manganese, sodium, and thallium were detected above NYS AWQS standards for GA groundwater. These metals are likely attributed to naturally occurring background conditions; however, manganese has an established Remedial Goal which was exceeded only at MW-06.

5.0 TREATABILITY STUDY CONCLUSIONS

Section 5.0 presents the conclusions and recommendations of the Treatability Study.

5.1 Conclusions

Based on the treatability test results, we conclude the following:

- Chemical concentrations of impacted soil are low. The baseline soil sample collected as part of the treatability study had a total PAH concentration of less than 38 PPM. In addition, only 3 PAHs slightly exceeded NYSDEC Unrestricted Use Criteria (Benzo(a)anthracene — 2.6 mg/kg, Benzo(a)pyrene — 1.8 mg/kg, Chrysene — 4.2 mg/kg) in the baseline sample. These PAHs have very low solubility in water and likely to remain adsorbed to soil particles.

- In downgradient groundwater, VOC and PAH concentrations are not present above Remedial Goals or NYS AWQS GA groundwater standards, indicating that there is minimal impact to site groundwater from site NAPL.

- NAPL is very viscous at ambient conditions; therefore, it is not mobile. In addition the data collected show that the NAPL is of low PAH concentration and is not affecting downgradient groundwater.

- Low temperature steam/hot water flushing (as proposed for the planned remedy) was not effective in the removal of NAPL or PAHs from soil.

- Steam Enhanced Extraction did not effectively remove PAHs from soil. Longer duration of Steam Enhanced Extraction may show some improvement; however the majority of the PAHs were still present. NAPL is likely to remain after treatment.

- The leachate data show that the increased solubility of PAHs due to high temperature will diminish with time and distance from the steam extraction zone.

- Soil SPLP data collected from both the low temperature steam/hot water flush and steam extraction soil columns indicate that residual PAHs in soil remaining after treatment have low potential for leaching to groundwater.

In conclusion, the treatability study results show that impacted soils within the NAPL zone is of low PAH concentration (38 PPM of total PAHs), deep (below 20 feet bgs), and is not acting as a

source. Baseline groundwater data indicate that downgradient groundwater, outside of the NAPL zone, is not impacted. Low temperature steam, as planned for use in the remedy, will not be effective at recovering NAPL and reducing PAHs in soil. High temperature steam extraction may reduce some PAHs in soil and recovered some NAPL in a controlled laboratory setting; however, residual NAPL was present in the soil pore spaces upon conclusion of the test. As such, a LUC based remedy should be considered in lieu of the current planned remedy. Compared with the current planned remedy, a LUC based remedy restricting residential land use and the use of groundwater in the NAPL zone would be equally protective of human health and the environment, have similar long term effectiveness, will have significantly less short term impact, is more implementable, will provide for equivalent land use, and be much more cost effective and sustainable.

6.0 REFERENCES

Resolution Consultants. *Treatability Study Work Plan*, *Site 4*, Naval Weapons Industrial Reserve Plane, Bethpage, Bethpage New York. June 2015.

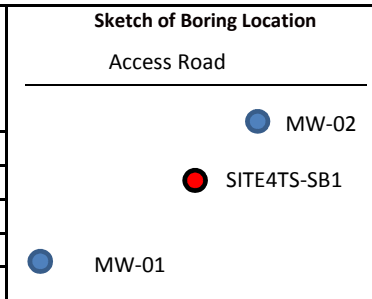
Tetra Tech NUS. *Proposed Plan Site 4, Former Underground Storage Tanks, Free Product, Petroleum and Chlorinated Solvent-Contaminated Soil*, Naval Weapons Industrial Reserve Plant Bethpage, New York. October 2014.

— *Feasibility Study/Corrective Measures Study, Site 4 (Area of Concern 22) Former Underground Storage Tanks*, Naval Weapons Industrial Reserve Plant Bethpage, New York. February 2013.

Appendix A
Boring Log

Client:	Navy CLEAN
Project #:	888813596
Purpose:	Treatability Study
Project:	NWIRP Bethpage
Location:	Site 4

Sketch of Boring Location



Location ID: **SITE4TS-SB1**

Start Date/Time: 6/3/2015 : 07:30
End Date/Time: 6/3/2015 : 17:00
Sampling Method: Sonic Core
Drilling Equipment: MiniSonic
Drilling Company: Cascade Drilling
Engineer: J. Parillo

Sample Number	Sample Interval	Inches Rec.	PID Reading (ppm)	USCS	Depth (FT)	Lithologic Description
1	0-5				0	0-2' Topsoil, brown fine to course sand, ~30% fine to course gravel, fill.
				SW	1	3-5' Fine to course sand, ~30% fine to course gravel, tan, fill.
					2	
					3	
					4	
2	5-10	26	0.3	SM	5	5-7.3' Fine to course sand, ~20% fine to medium gravel, less than 10%
					6	fines, brown.
			0.2		7	7.3-8'- Sandy clay layer, brown.
					8	8-10' - Fine to course sand, ~10% fine to medium gravel, less than 10%
			0.1		9	fines, brown.
3	10-15	10	0.1	SM	10	10-12.7' - Fine to course sand, ~5% fine to medium gravel, ~10%
					11	fines, tan.
			0.1		12	12.7-15' - Fine to course sand, ~10% fine to medium gravel, ~ 10%
					13	fines, tan.
			0.1		14	
4	15-20	52	0.5	SM	15	15-18.8' - Same as above.
				SW	16	18.8-20' - Fine to course sand, ~25% fine to course gravel, tan, slight
			0.6		17	petroleum-like odor.
					18	
			6.7		19	
5	20-25	54	7.0	SW	20	20-22.1' - Same as above, slight petroleum-like odor.
					21	22.1-25' - Fine to course sand, ~25% fine to course gravel, cobbles,
			4.0		22	Petroleum coated, strong petroleum-like odor.
					23	
			11.0		24	
6	25-30	53	5.1	SW	25	25-30' - Same as above, petroleum coated, strong petroleum-like odor.
					26	
			11.9		27	
					28	
			5.1		29	
7	30-35	50	0.5	SW	30	30-35' - Fine to course sand, ~20% fine to course gravel, less than
					31	10% fines, light petroleum coating throughout.
			16.0	SP	32	32.7-33.2' - fine to medium sand, heavily coated with petroleum, strong
					33	petroleum-like odor.
			3.4		34	

RESOLUTION CONSULTANTS		Sketch of Boring Location	Location ID: **SITE4TS-SB1**
Client:	Navy CLEAN	Access Road	Start Date/Time: 6/3/2015 : 07:30
Project #:	888813596	MW-02	End Date/Time: 6/3/2015 : 17:00
Purpose:	Treatability Study	SITE4TS-SB1	Sampling Method: Sonic Core
Project:	NWIRP Bethpage		Drilling Equipment: MiniSonic
Location:	Site 4	MW-01	Drilling Company: Cascade Drilling
			Engineer: J. Parillo

Sample Number	Sample Interval	Inches Rec.	PID Reading (ppm)	USCS	Depth (FT)	Lithologic Description
8	35-40	52	6.6	SM	35	35-40' - Fine to course sand, ~25% fine to course gravel, ~10% fines,
					36	light petroleum coating throughout, strong petroleum-like odor.
			1.7		37	
					38	
			1.7		39	
9	40-45	30	0.9	SW	40	40-45' - Fine to course sand, ~20% fine to course gravel, brown,
					41	slight petroleum-like odor.
					42	
			0.9		43	
					44	
10	45-50	51	0.7	SW	45	45-50' - Fine to course sand, ~ 20% fine to course gravel, brown, light
					46	petroleum coating, petroleum-like odor.
			23.0		47	
					48	
			76.0		49	
11	50-55	41	21.0	SW	50	50-55' - Same as above, petroleum coated throughout, strong petroleum-like
					51	odor.
			9.0		52	
					53	
			15.0		54	
12	55-60	53	17.0	SW	55	55-58' - Fine to medium sand, ~10% course sand, ~10% fine to
					56	course gravel, brown, light petroleum coating throughout, petroleum-like odor
			107.0	SP	57	58-60' - fine to medium sand, ~5% fine gravel, heavily coated with petroleum,
					58	Strong petroleum-like odor.
			210.0		59	
13	60-65	52	27.0	SP	60	60-62.5' - Same as above, heavily coated with petroleum, band of saturation
					61	in the top foot, strong petroleum-like odor.
			5.0		62	
				SP	63	62.5-65' - Fine to medium sand, tan, pink tint, slight petroleum-like odor.
			2.3		64	
14	65-70			SP	65	65-70' - Same as above.
					66	
					67	
					68	
					69	
					70	70' - End of boring.

Appendix B
Photographic Log

DRILLING SITE4TS-SB1

DRILLING SITE4TS-SB1

SITE4TS-SB1 (10-15’)

SITE4TS-SB1 (5-10’)

SITE4TS-SB1 (5-10’)

SITE4TS-SB1 (10-15’)

SITE4TS-SB1 (15-20’)

SITE4TS-SB1 (20-25’)

SITE4TS-SB1 (20-25’) PETRO COATING

SITE4TS-SB1 (25-30’)

SITE4TS-SB1 (30-35’)

SITE4TS-SB1 (30-35’) PETRO COATING

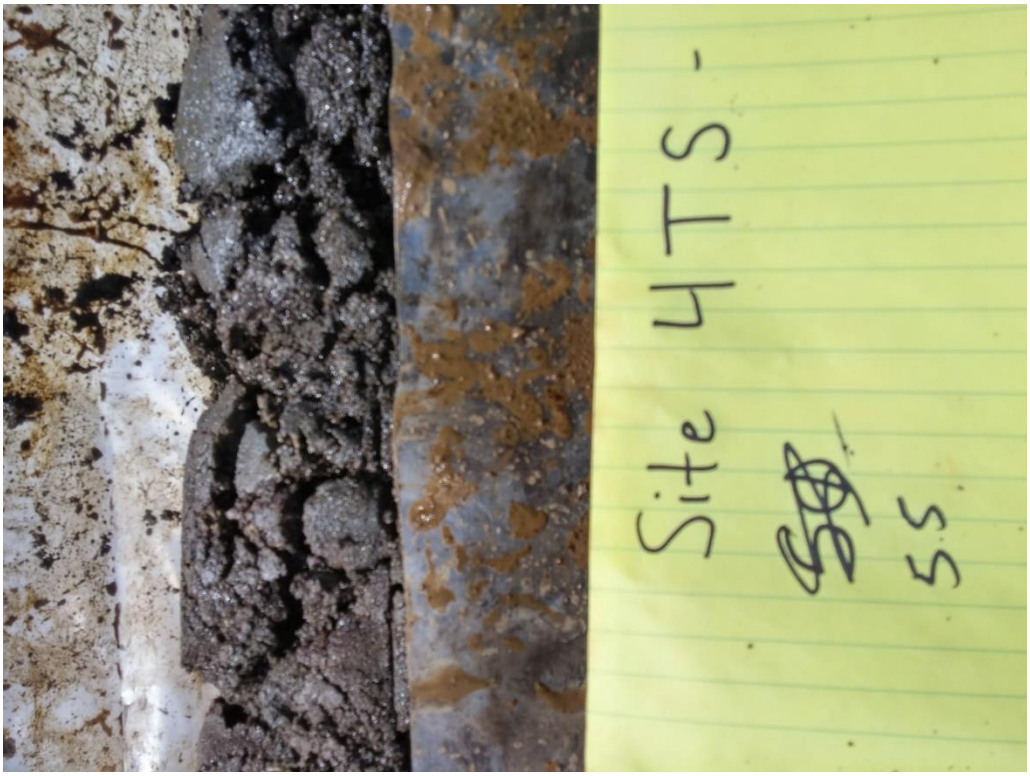
SITE4TS-SB1 (35-40’)

SITE4TS-SB1 (40-45’)

SITE4TS-SB1 (45-50’)

SITE4TS-SB1 (50-55’)

SITE4TS-SB1 (55-60’)



SITE4TS-SB1 (55-60’) PETRO COATING

SITE4TS-SB1 (60-65’)

Appendix C
TerraTherm Thermal Treatability Study Report

NWIRP Site #4
Bethpage, NY
July 2015

Thermal Treatability Study Report

Provided to:

Resolution Consultants

Wethersfield, CT

Prepared by:

TERRATHERM

151 Suffolk Lane
Gardner, MA 01440
T: (978) 730-1200
F: (978) 632-3422
www.terratherm.com

©TerraTherm, Inc., 2015, All Rights Reserved

Confidential, Do Not Distribute Outside Project Team

Table of Contents

1 BACKGROUND & TREATABILITY STUDY OBJECTIVES 1
2 SAMPLE COLLECTION 1
3 LNAPL TESTING 2
4 BASELINE SOIL ANALYSIS 5
5 THERMAL TREATMENT SUMMARY 6
6 THERMAL TREATMENT RESULTS 6
6.1 Hot Water Flushing (HWF) Results 7
6.2 Steam Enhanced Extraction (SEE) Results 8
6.3 Flush Water Analysis Results 10
6.4 SPLP Results (PAHs) 11
7 DATA DISCUSSION 12
8 CONCLUSIONS and RECOMMENDATIONS 13

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

1 BACKGROUND & TREATABILITY STUDY OBJECTIVES

NWIRP Site 4 in Bethpage, NY was impacted by a release of No. 6 Fuel Oil from underground storage tanks between 1940s and 1982. The release resulted in petroleum-contaminated soil and semi-solid petroleum product at a depth of approximately 20 to 71 feet below ground surface (ft bgs). Free product is not readily water soluble, lighter than water, generally very viscous and is mostly adsorbed onto site soils. General site geology includes fine to coarse sand with trace clay, gravel and silt to approximately 80 ft bgs; gravel fill material is present at the ground surface.

Bethpage NWIRP Site 4 soils are contaminated with the following:

- #6 Fuel Oil, present as light non-aqueous phase liquid (LNAPL)
    - Chemicals of Concern include Polycyclic Aromatic Hydrocarbons (PAHs)

It should be noted that LNAPL is known to be present in a very viscous form in the impacted soil.

The objectives of the treatability study are as follows:

#1: Understand LNAPL characteristics (density, viscosity, surface tension) over a range of temperatures, as applicable

#2: Determine interim removal rates of PAHs from bench-scale thermal simulations

#3: Determine extent of PAH removal from bench-scale thermal simulations

#4: Understand the leaching potential of PAHs following the bench-scale thermal simulations

This report summarizes how these main objectives were met.

2 SAMPLE COLLECTION

Resolution Consultants collected contaminated site soil material labeled “Site 4TS-NAPL” from Site 4 on June 4, 2015. The material was shipped in two 5-gallon buckets to KEMRON Environmental Services (KEMRON) in Atlanta, GA and received on June 5, 2015. The same sampling event and shipment to KEMRON also contained two 4-oz jars of LNAPL to be subjected to flash point testing. Copies of the associated chain of custody forms are found in Appendix B of Attachment 1, KEMRON’s Treatability Study Final Report. Photographs of the material upon receipt are located in Appendix F of Attachment 1.

Resolution Consultants also collected LNAPL material labeled “SITE4TS-NAPL MW-02” from Site 4 on June 3, 2015. The material was shipped in two 1L containers to PTS Laboratories (PTS) in Santa

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

Fe Springs, CA, and received on June 5, 2015. Copies of the associated chain of custody forms are found in Appendix C of Attachment 1, KEMRON's Treatability Study Final Report.

3 LNAPL TESTING

Upon mobilization to the field, Resolution Consultants discovered that sufficient LNAPL could be collected from an existing well (MW-02) on site. Therefore, the LNAPL generation portion of the Treatability Study Work Plan was not required. Collected LNAPL was shipped directly to KEMRON and PTS for analysis.

Site LNAPL was subjected to the following testing to observe heating effects:

1. LNAPL was tested at ambient temperatures, 50°C and 90°C; and the following was measured at each temperature:
   - Density (ASTM D1481)
   - Viscosity (ASTM D445)
2. LNAPL was tested for the following at ambient temperatures and 50°C, as well as a slightly higher temperature (66°C).
   - Surface Tension (ASTM D971)
3. Flash Point of the collected LNAPL was determined by KEMRON (ASTM D3278).

Figure 1 presents the density and viscosity changes with temperature while Figure 2 displays the change in interfacial/surface tension (DuNuoy method) with temperature. Summary Table 1 summarizes the LNAPL testing results, including flash point. It should be noted that the very high viscosity reported at ambient temperature may indicate non-Newtonian flow; the actual product viscosity at ambient temperature may be lower than that measured by the specific analytical method used (glass capillary viscometer). In addition, observations were noted that two of the three surface tension ruptures at various temperatures were unusually slow due to the high viscosity of the LNAPL.

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

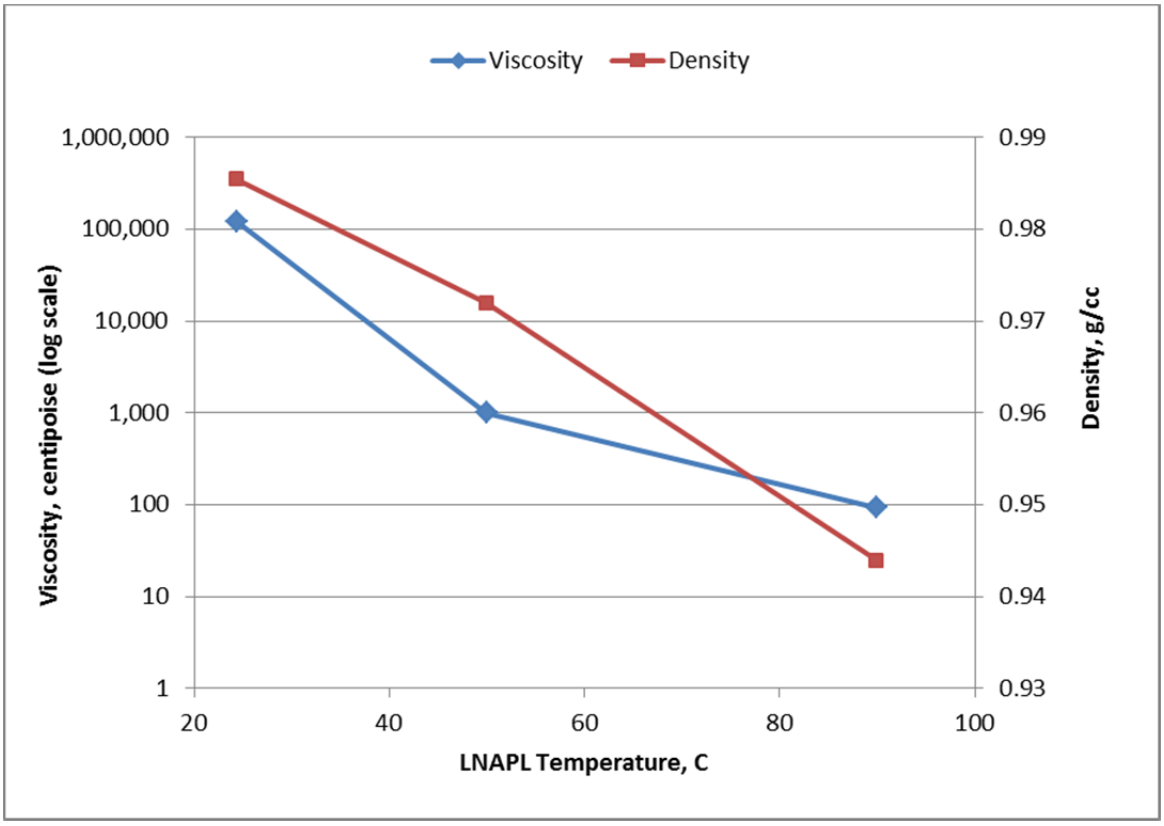


FIGURE 1. LNAPL Viscosity and Density

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

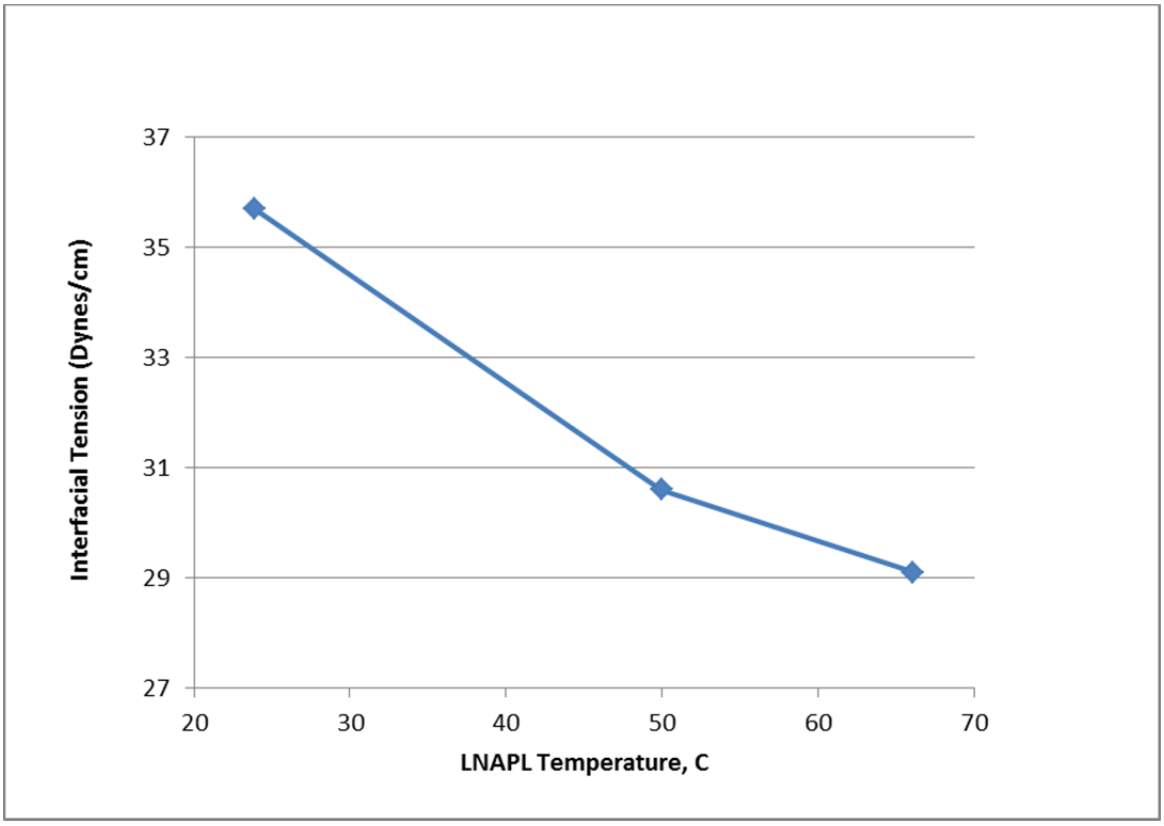


FIGURE 2. LNAPL Interfacial Tension

Summary Table 1. LNAPL Testing Summary

Parameter	Unit	Result
Density		
24°C	g/cc	0.9854
50°C	g/cc	0.9719
90°C	g/cc	0.9439
Viscosity		
24°C	Centipoise	120,000
50°C	Centipoise	1,000
90°C	Centipoise	93.1
Interfacial Tension		
24°C	Dynes/cm	35.7
50°C	Dynes/cm	30.6
66°C	Dynes/cm	29.1
Flash Point	°C	40.6

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

4 BASELINE SOIL ANALYSIS

A field baseline sample was collected by Resolution Consultants at the time of sample collection. This sample was submitted to Katahdin Analytical for chemical testing; results are out of the scope of this report, and therefore are not included.

Site soil materials were analyzed at KEMRON for the following physical/geotechnical parameters:

- ATSM Moisture Content (ASTM D2216)
- Bulk Unit Weight (ASTM D7263)
- Specific Gravity (ASTM D854)
- Porosity (Calculated)

Results from these baseline physical/geotechnical analyses are presented in Table 1. These data were assumed to be representative of the material used in all four thermal test chambers. KEMRON repeated the ASTM moisture analysis after a low percent moisture (and therefore low porosity, which was deemed by professional judgment to be lower than anticipated) was observed under the normal test conditions. The drying oven temperature was increased to 300°C, to remove some of the NAPL from the pore spaces, thus resulting in a slightly higher moisture content and more representative porosity.

In preparation for thermal treatment simulations and chemical analysis, the bulk soil material was then homogenized and sieved with a 0.5 inch screen and materials larger than 0.5 inches (e.g. rocks, not contaminated soil materials) were removed in order to provide a consistent material for laboratory bench testing. A representative aliquot of the material used for each of the four individual thermal test chambers (total of 4 baseline samples) was submitted to Katahdin Analytical for the following chemical analyses:

- EPA SW846 8270D [PAHs only, full scan and selected ion monitoring (SIM) analyses]
- EPA SW846 8260C [Volatile Organic Compounds]
- EPA SW846 1312/8270D [SPLP PAHs]
- EPA SW846 1312/8260C [SPLP VOCs]

Untreated chemical analysis results are presented in Tables 1B (Note that only 8270-SIM results are shown in this report, as all full scan analyses were non-detect for all compounds. Metals and SPLP Metals are not included at this time). Resolution Consultants contracted directly with Katahdin and therefore received copies of all complete analytical laboratory reports under separate cover.

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

5 THERMAL TREATMENT SUMMARY

The Site 4 material was thermally treated with Steam Enhanced Extraction (SEE) at two different levels of treatment: 2 pore volume (PV) flushes and 6 PV flushes. These two levels of treatment represent a typical amount of steam flushing for a more mobile contaminant and a practical endpoint of a longer duration steam flushing for a more viscous product, respectively. In addition, Hot Water Flushing (HWF) at approximately 50°C was evaluated at two different levels of treatment: 15 PV flushes and 30 PV flushes. Before thermal treatment, soil samples were collected from each individual treatment column and subjected to analytical testing. The relative standard deviation between the total PAHs detected in the four test columns was approximately 15%, indicating that there was very reasonable homogeneity between the four test columns.

After thermal treatment, analytical samples were collected from the treated soil, leachate, and condensate. Details on these treatment procedures, including photographs and setup schematics, are provided in the Treatability Study Work Plan found in Appendix A of Attachment 1, KEMRON's Treatability Study Final Report.

6 THERMAL TREATMENT RESULTS

Mass Removal Efficiencies (MREs) were calculated for each contaminant for each thermal test. (Note that MREs are not displayed for the HWF tests, since post treatment concentrations were slightly higher than pre treatment concentrations.) Percent removal is calculated using the following equation:

Removal (%) = $100*(C_o - C_F) / C_o$

Where:

C_o = starting concentration, and
C_F = concentration after thermal treatment and cooling.

In addition, the leachability of contaminants from the treated soil was evaluated via Synthetic Precipitation Leaching Procedure (SPLP) testing performed by Katahdin.

Summary tables and figures presenting the low level (SIM) PAH data are presented embedded within the text below. Total VOC concentrations in both the baseline and treated soil samples were generally less than 1-2 mg/kg.

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

Complete data tables are presented at the end of this report in Tables 1-4C. Complete analytical laboratory reports for the treated materials were provided by Katahdin directly to Resolution Consultants under separate cover.

6.1 Hot Water Flushing (HWF) Results

A summary of the HWF (50°C) test material concentrations (of SIM PAHs) before and after treatment is shown below in Figure 3 and Summary Table 2.

Summary Table 2. HWF summary soil data (SIM PAHs)

	HWF1 (15PV)				HWF2 (30PV)			
	Baseline		Treated		Baseline		Treated	
Compound	µg/kg		µg/kg		µg/kg		µg/kg	
2-METHYLNAPHTHALENE	**1500**		**840**		**1300**		**1000**	
ACENAPHTHENE	**560**		**740**		**500**		**800**	
ACENAPHTHYLENE	210	U	210	U	200	U	210	U
ANTHRACENE	**990**		**1200**		**950**		**2000**	
BENZO(A)ANTHRACENE	**1700**		**1800**		**1500**		**1800**	
BENZO(A)PYRENE	**1200**		**1400**		**1100**		**1400**	
BENZO(B)FLUORANTHENE	**650**		**760**		**560**		**760**	
BENZO(K)FLUORANTHENE	210	U	210	U	200	U	210	U
BENZO[G,H,I]PERYLENE	**750**		**890**		**670**		**860**	
CHRYSENE	**2600**		**2900**		**2600**		**3300**	
DIBENZO(A,H)ANTHRACENE	210	U	**310**	**J**	**220**	**J**	**280**	J
FLUORANTHENE	**580**		**570**		**440**		**600**	
FLUORENE	**830**		**810**		**760**		**840**	
INDENO(1,2,3-CD)PYRENE	**320**	**J**	**360**	**J**	**240**	**J**	**360**	J
NAPHTHALENE	**450**		**260**	**J**	**400**		**280**	J
PHENANTHRENE	**2200**		**2100**		**2100**		**2700**	
PYRENE	**7000**		**12000**		**6100**		**7800**	

U = Not detected at the reporting limit shown

J = Estimated concentration, below the reporting limit but above the method detection limit.

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

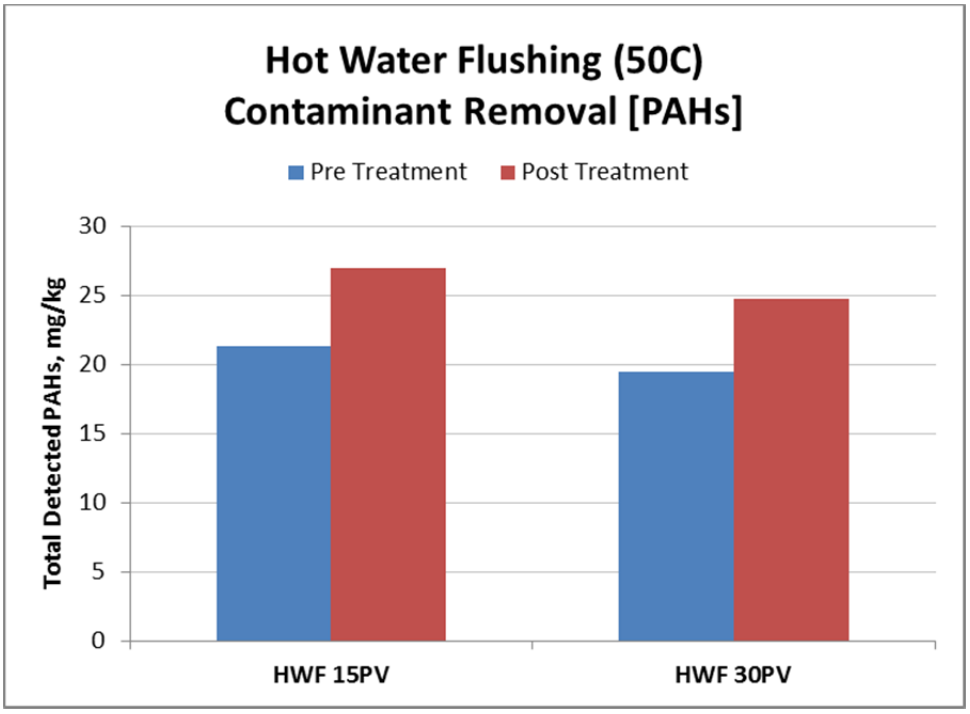


FIGURE 3. HWF Treatment of Site 4 Material

6.2 Steam Enhanced Extraction (SEE) Results

A summary of the SEE test material concentrations (of SIM PAHs) before and after treatment is shown below in Figure 4 and Summary Table 3.

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

Summary Table 3. SEE summary soil data (SIM PAHs)

Compound	SEE1 (2PV)				SEE2 (6PV)			
	Baseline µg/kg		Treated µg/kg		Baseline µg/kg		Treated µg/kg	
2-METHYLNAPHTHALENE	**1700**		**620**		**1800**		94	U
ACENAPHTHENE	**530**		**490**		**560**		**60**	**J**
ACENAPHTHYLENE	**130**	**J**	97	U	**150**	**J**	94	U
ANTHRACENE	**650**		**650**		**830**		**170**	**J**
BENZO(A)ANTHRACENE	**1500**		**1600**		**1800**		**300**	
BENZO(A)PYRENE	**1600**		**1300**		**1600**		**300**	
BENZO(B)FLUORANTHENE	**1100**	**L**	**780**	**L**	**970**	**L**	**200**	
BENZO(K)FLUORANTHENE	**300**		**160**	**J**	**260**		94	U
BENZO[G,H,I]PERYLENE	**1600**		**1300**		**1500**		**180**	**J**
CHRYSENE	**3200**		**2800**		**2800**		**540**	
DIBENZO(A,H)ANTHRACENE	**360**		**300**		**350**		**48**	**J**
FLUORANTHENE	**330**		**390**		**360**		**100**	**J**
FLUORENE	**760**		**660**		**910**		**100**	**J**
INDENO(1,2,3-CD)PYRENE	**660**		**450**		**520**		**74**	**J**
NAPHTHALENE	**390**		**110**	**J**	**450**		94	U
PHENANTHRENE	**1700**		**1600**		**2000**		**440**	
PYRENE	**9700**		**7200**		**9900**		**1200**	

U = Not detected at the reporting limit shown

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

©TerraTherm, Inc., 2015, All Rights Reserved

Confidential, Do Not Distribute Outside Project Team

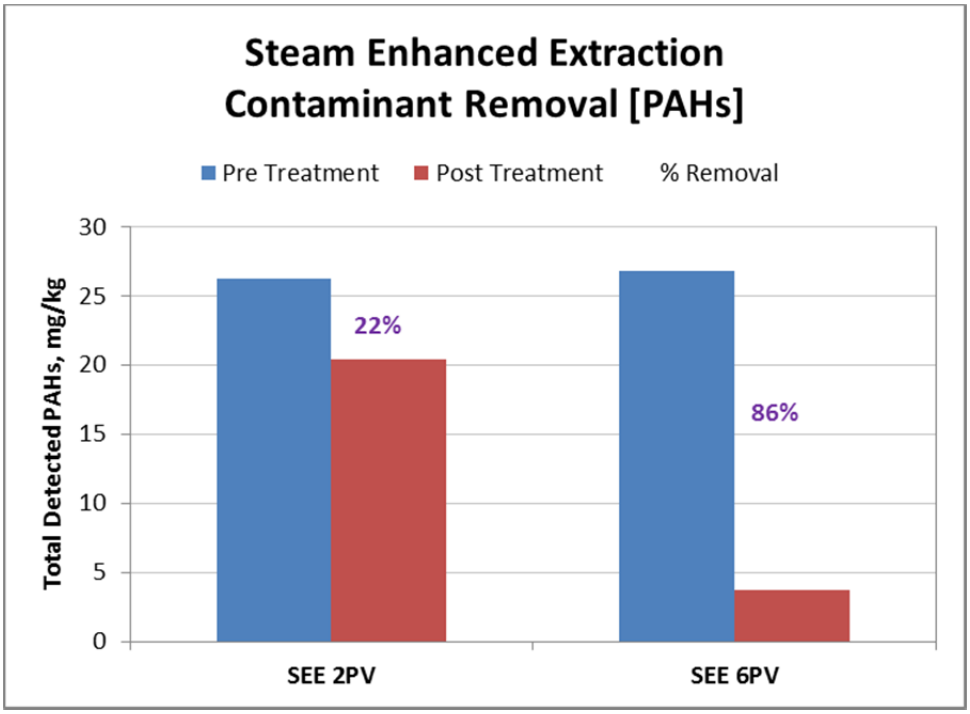


FIGURE 4. SEE Treatment of Site 4 Material

6.3 Flush Water Analysis Results

A full chemical characterization of the collected flush water (called "leachate" in the workplan) from the HWF2 (30 PV flush) testing was performed. The flush water was collected in two aliquots; the "first flush" and "final flush" were the first and last intervals of flushing. PAH results of the flush waters are shown in Summary Table 4.

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

Summary Table 4. HWF Flush Water Analysis summary data (SIM PAHs)

Compound	First Flush µg/L		Final Flush µg/L	
2-METHYLNAPHTHALENE	**18**		0.10	U
ACENAPHTHENE	**1.1**		**0.89**	
ACENAPHTHYLENE	0.10	U	0.10	U
ANTHRACENE	**0.73**		**0.33**	
BENZO(A)ANTHRACENE	0.10	U	**0.11**	J
BENZO(A)PYRENE	0.10	U	0.10	U
BENZO(B)FLUORANTHENE	**0.13**	J	**0.10**	J
BENZO[G,H,I]PERYLENE	0.10	U	0.10	U
BENZO(K)FLUORANTHENE	0.10	U	0.10	U
CHRYSENE	0.10	U	0.10	U
DIBENZO(A,H)ANTHRACENE	0.10	U	0.10	U
FLUORANTHENE	**0.21**		**0.15**	J
FLUORENE	**1.5**		**1.0**	
INDENO(1,2,3-CD)PYRENE	0.10	U	0.10	U
NAPHTHALENE	**22**		**3.1**	
PHENANTHRENE	**3.9**		**1.4**	
PYRENE	**0.59**		**0.72**	

U = Not detected at the reporting limit shown

J = Estimated concentration, below the reporting limit but above the method detection limit.

6.4 SPLP Results (PAHs)

SPLP results indicate the leachability of the soils from acid rain effects. The SPLP was performed on the untreated and treated samples. SPLP data is presented for the two HWF tests and the two SEE tests in Tables 5 and 6, respectively.

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

Summary Table 5. HWF Flush SPLP (SIM PAHs, Detected Compounds Only)

SPLP SVOCs (Detects only)	HWF1 (15PV) Baseline µg/L		HWF1 (15PV) Treated µg/L		HWF2 (30PV) Baseline µg/L		HWF2 (30PV) Treated µg/L	
2-METHYLNAPHTHALENE	**2.0**		**0.28**		**1.7**		**0.22**	**J**
ANTHRACENE	**0.12**	**JL**	**0.08**	**JL**	**0.11**	**JL**	**0.091**	**JL**
BENZO(A)PYRENE	**0.081**	**J**	0.10	U	0.098	U	0.11	U
BENZO(B)FLUORANTHENE	**0.18**	**JBLL**	**0.17**	**JBLL**	**0.14**	**JBLL**	**0.18**	**JBLL**
BIS(2-CHLOROETHYL) ETHER	0.098	ULL	**0.076**	**JLL**	0.098	ULL	0.11	ULL
DIBENZOFURAN	**0.14**	**JL**	0.10	UL	**0.12**	**JL**	0.11	UL
INDENO(1,2,3-CD)PYRENE	**0.064**	**J**	0.10	U	0.098	U	0.11	U
NAPHTHALENE	**0.84**		**0.51**		**0.73**		**0.43**	
PHENANTHRENE	**0.56**	**LL**	**0.33**	**LL**	**0.54**	**LL**	**0.32**	**LL**
PYRENE	**0.16**	**JLL**	**0.18**	**JLL**	**0.21**	**LL**	**0.16**	**JLL**

U = Not detected at the reporting limit shown

B = Compound was detected in the laboratory method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Summary Table 6. SEE Flush SPLP (SIM PAHs, Detected Compounds Only)

SPLP SVOCs (Detects only)	SEE1 (2PV) Baseline µg/L		SEE1 (2PV) Treated µg/L		SEE2 (6PV) Baseline µg/L		SEE2 (6PV) Treated µg/L	
2-METHYLNAPHTHALENE	**1.5**	**L**	**0.68**	**L**	**1.6**	**L**	0.10	U
ANTHRACENE	**0.12**	**JL**	**0.11**	**JL**	**0.11**	**JL**	**0.071**	**J**
BENZO[G,H,I]PERYLENE	**0.12**	**J**	**0.075**	**J**	**0.082**	**J**	0.10	U
DIBENZO(A,H)ANTHRACENE	0.17	UL	0.11	UL	**0.30**	**L**	0.10	U
DIBENZOFURAN	**0.14**	**J**	**0.11**	**J**	**0.15**	**J**	0.10	UL
INDENO(1,2,3-CD)PYRENE	**0.54**		**0.35**		**0.35**		0.10	U
NAPHTHALENE	**0.68**		**0.26**		**0.70**		0.10	U
PHENANTHRENE	**0.52**	**L**	**0.48**	**L**	**0.49**	**L**	**0.47**	**LL**
PYRENE	**0.17**	**JL**	**0.18**	**JL**	**0.16**	**JL**	**0.13**	**J**

U = Not detected at the reporting limit shown

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

7 DATA DISCUSSION

Overall, the data obtained from this treatability study met the objectives of the study. No major issues or deviations from the project work plan were encountered.

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

The HWF simulation at 50°C did not prove effective on the Site 4 materials, resulting in concentrations close to (slightly above) the baseline concentrations.

The SEE simulation with 2PV flushing proved mildly effective, while the 6PV flushing proved most effective.

The "first" and "final" flush water analysis indicated that many of the more volatile (and more water soluble) PAH species are present in the treatment liquid stream initially, with concentrations decreasing over time. Lower concentrations of the less volatile (and less water soluble) PAH species are observed to remain at a steady concentration throughout treatment.

The pH values of the collected condensates and flush waters were in the range of 5-7, indicating that the stream was slightly acidic.

8 CONCLUSIONS and RECOMMENDATIONS

The following conclusions to the treatability testing presented in this report can be made:

1. Due to the viscous nature of the LNAPL contamination on Site 4 materials, a longer SEE treatment (in the range of 6-8 months, instead of a shorter duration treatment in the range of 2-3 months, which would typically be used for more volatile contaminants) will be required to most effectively reduce concentrations in the subsurface and recover the maximum amount of LNAPL from the Site.
    a. Heating will decrease the viscosity of the LNAPL material by several orders of magnitude. This will facilitate transport and pumping of LNAPL from recovery wells. The density and surface tensions will also decrease as temperature increases.
    b. LNAPL recovery and transport in a field scale setting would require pumps capable of handling highly viscous liquids (e.g. TerraTherm has used Blackhawk pumps for previous viscous product recovery projects). Heat-tracing of the extraction well and pump lines would be considered in a pilot/design effort – this would further facilitate pumping of viscous LNAPL.
    c. Due to the viscous nature of the contamination, and based on the results of the two different SEE PV flush tests, a longer steam cycling period will likely be needed to maximize recovery of LNAPL at the Site.
2. Based on the results of the SPLP analyses before and after thermal treatment, an SPLP contaminant reduction of 83% was observed for the 6PV SEE treatment. This further supports that the longer the SEE treatment, the more protection is offered to groundwater, i.e., the less contaminants will leach from the treated soils.

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

3. The observed pH values are well within typical ranges for TerraTherm sites, but will be taken into consideration, specifically, the selection of materials of construction of piping and related equipment, should related field work occur.
4. A thermal pilot study, utilizing a small scale steam injection and recovery system, has been reviewed with Resolution Consultants should further demonstration of SEE effectiveness be warranted. Various objectives and evaluations could be examined in a pilot study, including:
    a. Effectiveness of steam injection, documenting steam migration paths and radius of influence
    b. LNAPL recovery in a multi-phase extraction well, utilizing specialized pump as described above
    c. LNAPL separation behavior in collection tank/extraction piping
    d. Water quality of pumped waters, LNAPL characterization of pumped LNAPL

©TerraTherm, Inc., 2015, All Rights Reserved
Confidential, Do Not Distribute Outside Project Team

Table 1. Untreated Soils Physical/Geotechnical Data

TESTING PARAMETER	TEST METHOD	UNIT	SAMPLE Site 4TS-NAPL
Moisture Content	ASTM D2216		
ASTM Moisture Content	(modified)*	%	13.50
Percent Solids		%	88.10
Bulk Unit Weight	ASTM D7263	pcf	129.6
Specific Gravity	ASTM D854		2.42
Porosity	ASTM D7263 X1 (Calculated)	%	24.4

pcf = pounds per cubic foot

*= Oven temperature increased to 300°C to remove NAPL from pore space. Porosity was calculated using this moisture content value.

U = Not detected at the reporting limit shown
B = Compound detected in method blank
L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample
J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 2A: Untreated/Treated Soils Analytical Data (HWF Columns): EPA 8260C

Compound	HWF1 (15PV)		HWF2 (30PV)	
	Baseline µg/kg	Treated µg/kg	Baseline µg/kg	Treated µg/kg
1,1,1-TRICHLOROETHANE	2.2 U	2.2 U	3.2 U	2.0 U
1,1,2,2-TETRACHLOROETHANE	2.2 U	2.2 U	3.2 U	2.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	**1.3** J	**0.95** J	3.2 U	2.0 U
1,1,2-TRICHLOROETHANE	2.2 U	2.2 U	3.2 U	2.0 U
1,1-DICHLOROETHANE	2.2 U	2.2 U	3.2 U	2.0 U
1,1-DICHLOROETHENE	2.2 U	2.2 U	3.2 U	2.0 U
1,1-DICHLOROPROPENE	2.2 U	2.2 U	3.2 U	2.0 U
1,2,3-TRICHLOROBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
1,2,3-TRICHLOROPROPANE	2.2 U	2.2 U	3.2 U	2.0 U
1,2,4-TRICHLOROBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
1,2,4-TRIMETHYLBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
1,2-DIBROMO-3-CHLOROPROPANE	2.2 U	2.2 U	3.2 U	2.0 U
1,2-DIBROMOETHANE	2.2 U	2.2 U	3.2 U	2.0 U
1,2-DICHLOROBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
1,2-DICHLOROETHANE	2.2 U	2.2 U	3.2 U	2.0 U
1,2-DICHLOROETHYLENE	**2.0** J	4.4 U	6.5 U	3.9 U
1,2-DICHLOROPROPANE	2.2 U	2.2 U	3.2 U	2.0 U
1,3,5-TRICHLOROBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
1,3,5-TRIMETHYLBENZENE	**35**	2.2 U	**69**	2.0 U
1,3-DICHLOROBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
1,3-DICHLOROPROPANE	2.2 U	2.2 U	3.2 U	2.0 U
1,4-DICHLOROBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
2,2-DICHLOROPROPANE	2.2 U	2.2 U	3.2 U	2.0 U
2-BUTANONE	**62**	**66**	16 U	**31**
2-CHLOROTOLUENE	2.2 U	2.2 U	3.2 U	2.0 U
2-HEXANONE	11 U	11 U	16 U	9.8 U
4-CHLOROTOLUENE	2.2 U	2.2 U	3.2 U	2.0 U
4-ISOPROPYLTOLUENE	**46**	**39**	3.2 U	**29**
4-METHYL-2-PENTANONE	11 U	11 U	16 U	9.8 U
ACETONE	**240**	**230**	**350**	**77**
BENZENE	**2.9** J	2.2 U	3.2 U	2.0 U
BROMOBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
BROMOCHLOROMETHANE	2.2 U	2.2 U	3.2 U	2.0 U
BROMODICHLOROMETHANE	2.2 U	**3.3** J	3.2 U	2.0 U
BROMOFORM	2.2 U	2.2 U	3.2 U	2.0 U
BROMOMETHANE	4.3 U	4.4 U	6.5 U	3.9 U
CARBON DISULFIDE	**4.7**	**6.4**	3.2 U	**3.4** J

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Compound	HWF1 (15PV)		HWF2 (30PV)	
	Baseline µg/kg	Treated µg/kg	Baseline µg/kg	Treated µg/kg
CARBON TETRACHLORIDE	2.2 U	2.2 U	3.2 U	2.0 U
CHLOROBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
CHLOROETHANE	4.3 U	4.4 U	6.5 U	3.9 U
CHLOROFORM	2.2 U	**20**	3.2 U	**4.9**
CHLOROMETHANE	4.3 U	4.4 U	6.5 U	3.9 U
CIS-1,2-DICHLOROETHENE	**2.0** J	2.2 U	3.2 U	2.0 U
CIS-1,3-DICHLOROPROPENE	2.2 U	2.2 U	3.2 U	2.0 U
CYCLOHEXANE	**34**	**31**	**24**	**20**
DIBROMOCHLOROMETHANE	2.2 U	2.2 U	3.2 U	2.0 U
DIBROMOMETHANE	2.2 U	2.2 U	3.2 U	2.0 U
DICHLORODIFLUOROMETHANE	4.3 U	4.4 U	6.5 U	3.9 U
DIETHYL ETHER	2.2 U	2.2 U	3.2 U	2.0 U
DI-ISOPROPYL ETHER	2.2 U	2.2 U	3.2 U	2.0 U
ETHYLBENZENE	**30**	**3.0** J	**55**	**4.1**
HEXACHLOROBUTADIENE	2.2 U	2.2 U	3.2 U	2.0 U
ISOPROPYLBENZENE	**35**	2.2 U	**69**	**4.7**
M-,P-XYLENE	**8.7**	**6.9** J	**22**	**4.7** J
METHYL ACETATE	2.6 U	2.6 U	3.9 U	2.3 U
METHYL TERT-BUTYL ETHER	2.2 U	2.2 U	3.2 U	2.0 U
METHYLCYCLOHEXANE	**120**	**120**	**110**	**71**
METHYLENE CHLORIDE	**8.0** J	**8.4** J	16 U	9.8 U
NAPHTHALENE	**48**	2.2 U	3.2 U	2.0 U
N-BUTYLBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
N-PROPYLBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
O-XYLENE	**7.4**	**7.0**	**18**	**4.2**
SEC-BUTYLBENZENE	**35**	2.2 U	3.2 U	2.0 U
STYRENE	2.2 U	2.2 U	3.2 U	2.0 U
TERT-BUTYLBENZENE	2.2 U	2.2 U	3.2 U	2.0 U
TETRACHLOROETHENE	**10**	**12**	3.2 U	**4.5**
TETRAHYDROFURAN	22 U	22 U	32 U	20 U
TOLUENE	**3.8** J	**2.0** J	**6.2** J	**1.4** J
TRANS-1,2-DICHLOROETHENE	2.2 U	2.2 U	3.2 U	2.0 U
TRANS-1,3-DICHLOROPROPENE	2.2 U	2.2 U	3.2 U	2.0 U
TRICHLOROETHENE	2.2 U	**2.2** U	3.2 U	2.0 U
TRICHLOROFLUOROMETHANE	4.3 U	4.4 U	6.5 U	**3.9** U
VINYL ACETATE	2.2 U	2.2 U	3.2 U	2.0 U
VINYL CHLORIDE	4.3 U	4.4 U	6.5 U	3.9 U
XYLENES (TOTAL)	**16**	**14**	**40**	**8.8** J

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 2B: Untreated/Treated SPLP Analytical Data (HWF Columns): EPA 8260C

Compound	HWF1 (15PV)		HWF2 (30PV)	
	Baseline µg/L	Treated µg/L	Baseline µg/L	Treated µg/L
1,1,1-TRICHLOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-TETRACHLOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-TRICHLOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,1-DICHLOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,1-DICHLOROETHENE	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-TRICHLOROPROPANE	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-TRICHLOROBENZENE	2.5 U	2.5 U	2.5 U	2.5 U
1,2-DIBROMO-3-CHLOROPROPANE	2.5 U	2.5 U	2.5 U	2.5 U
1,2-DIBROMOETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,2-DICHLOROBENZENE	2.5 U	2.5 U	2.5 U	2.5 U
1,2-DICHLOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,2-DICHLOROPROPANE	2.5 U	2.5 U	2.5 U	2.5 U
1,3-DICHLOROBENZENE	2.5 U	2.5 U	2.5 U	2.5 U
1,4-DICHLOROBENZENE	2.5 U	2.5 U	2.5 U	2.5 U
2-BUTANONE	12 U	12 U	12 U	12 U
2-HEXANONE	12 U	12 U	12 U	12 U
4-METHYL-2-PENTANONE	12 U	12 U	12 U	12 U
ACETONE	12 U	12 U	12 U	12 U
BENZENE	2.5 U	2.5 U	2.5 U	2.5 U
BROMOCHLOROMETHANE	2.5 U	2.5 U	2.5 U	2.5 U
BROMODICHLOROMETHANE	2.5 U	2.5 U	2.5 U	2.5 U
BROMOFORM	2.5 U	2.5 U	2.5 U	2.5 U
BROMOMETHANE	5.0 U	5.0 U	5.0 U	5.0 U
CARBON DISULFIDE	2.5 U	2.5 U	2.5 U	2.5 U
CARBON TETRACHLORIDE	2.5 U	2.5 U	2.5 U	2.5 U
CHLOROBENZENE	2.5 U	2.5 U	2.5 U	2.5 U
CHLOROETHANE	5.0 U	5.0 U	5.0 U	5.0 U
CHLOROFORM	2.5 U	2.5 U	2.5 U	2.5 U
CHLOROMETHANE	5.0 U	5.0 U	5.0 U	5.0 U
CIS-1,2-DICHLOROETHENE	2.5 U	2.5 U	2.5 U	2.5 U
CIS-1,3-DICHLOROPROPENE	2.5 U	2.5 U	2.5 U	2.5 U
CYCLOHEXANE	2.5 U	2.5 U	2.5 U	2.5 U
DIBROMOCHLOROMETHANE	2.5 U	2.5 U	2.5 U	2.5 U
DICHLORODIFLUOROMETHANE	5.0 U	5.0 U	5.0 U	5.0 U
ETHYLBENZENE	2.5 U	2.5 U	2.5 U	2.5 U
ISOPROPYLBENZENE	2.5 U	2.5 U	2.5 U	2.5 U

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Compound	HWF1 (15PV)		HWF2 (30PV)	
	Baseline µg/L	Treated µg/L	Baseline µg/L	Treated µg/L
M-,P-XYLENE	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ACETATE	3.8 U	3.8 U	3.8 U	3.8 U
METHYL TERT-BUTYL ETHER	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	2.5 U	2.5 U	2.5 U	2.5 U
METHYLENE CHLORIDE	**9.6** J	**9.9** J	**9.9** J	**10** J
O-XYLENE	2.5 U	2.5 U	2.5 U	2.5 U
STYRENE	2.5 U	2.5 U	2.5 U	2.5 U
TETRACHLOROETHENE	2.5 U	2.5 U	2.5 U	2.5 U
TOLUENE	2.5 U	2.5 U	2.5 U	2.5 U
TRANS-1,2-DICHLOROETHENE	2.5 U	2.5 U	2.5 U	2.5 U
TRANS-1,3-DICHLOROPROPENE	2.5 U	2.5 U	2.5 U	2.5 U
TRICHLOROETHENE	2.5 U	2.5 U	2.5 U	2.5 U
TRICHLOROFLUOROMETHANE	5.0 U	5.0 U	5.0 U	5.0 U
VINYL CHLORIDE	5.0 U	5.0 U	5.0 U	5.0 U
XYLENES (TOTAL)	7.5 U	7.5 U	7.5 U	7.5 U

Table 2C: Untreated/Treated Soils Analytical Data (HWF Columns): EPA 8270D

Compound	HWF1 (15PV)		HWF2 (30PV)	
	Baseline µg/kg	Treated µg/kg	Baseline µg/kg	Treated µg/kg
1,1'-BIPHENYL	1500 U	1600 U	1500 U	1600 U
1,2,4-TRICHLOROBENZENE	1500 U	1600 U	1500 U	1600 U
1,2-DICHLOROBENZENE	1500 U	1600 U	1500 U	1600 U
1,2-DIPHENYLHYDRAZINE	3100 U	3100 U	2900 U	3100 U
1,3-DICHLOROBENZENE	1500 U	1600 U	1500 U	1600 U
1,4-DICHLOROBENZENE	1500 U	1600 U	1500 U	1600 U
2,2'-OXYBIS(1-CHLOROPROPANE)	1500 U	1600 U	1500 U	1600 U
2,4,5-TRICHLOROPHENOL	3800 U	3900 U	3600 U	3900 U
2,4,6-TRICHLOROPHENOL	1500 U	1600 U	1500 U	1600 U
2,4-DICHLOROPHENOL	1500 U	1600 U	1500 U	1600 U
2,4-DIMETHYLPHENOL	1500 U	1600 U	1500 U	1600 U
2,4-DINITROPHENOL	3800 U	3900 U	3600 U	3900 U
2,4-DINITROTOLUENE	1500 U	1600 U	1500 U	1600 U
2,6-DICHLOROPHENOL	1500 U	1600 U	1500 U	1600 U
2,6-DINITROTOLUENE	1500 U	1600 U	1500 U	1600 U
2-CHLORONAPHTHALENE	1500 U	1600 U	1500 U	1600 U
2-CHLOROPHENOL	1500 U	1600 U	1500 U	1600 U

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Compound	HWF1 (15PV)		HWF2 (30PV)	
	Baseline µg/kg	Treated µg/kg	Baseline µg/kg	Treated µg/kg
2-METHYLPHENOL	1500 U	1600 U	1500 U	1600 U
2-NITROANILINE	3800 U	3900 U	3600 U	3900 U
2-NITROPHENOL	1500 U	1600 U	1500 U	1600 U
3,3'-DICHLOROBENZIDINE	1500 U	1600 U	1500 U	1600 U
3-NITROANILINE	3800 U	3900 U	3600 U	3900 U
4,6-DINITRO-2-METHYLPHENOL	3800 U	3900 U	3600 U	3900 U
4-BROMOPHENYL PHENYL ETHER	1500 U	1600 U	1500 U	1600 U
4-CHLORO-3-METHYLPHENOL	1500 U	1600 U	1500 U	1600 U
4-CHLOROANILINE	1500 U	1600 U	1500 U	1600 U
4-CHLOROPHENYL PHENYL ETHER	1500 U	1600 U	1500 U	1600 U
4-NITROANILINE	3800 U	3900 U	3600 U	3900 U
4-NITROPHENOL	3800 U	3900 U	3600 U	3900 U
BENZIDINE	7000 U	7100 U	6700 U	7100 U
BENZOIC ACID	3800 U	3900 U	3600 U	3900 U
BENZYL ALCOHOL	3100 U	3100 U	2900 U	3100 U
BIS(2-CHLOROETHOXY) METHANE	1500 U	1600 U	1500 U	1600 U
BIS(2-CHLOROETHYL) ETHER	1500 U	1600 U	1500 U	1600 U
BIS(2-ETHYLHEXYL) PHTHALATE	1500 U	1600 U	1500 U	1600 U
BUTYL BENZYL PHTHALATE	1500 U	1600 U	1500 U	1600 U
CAPROLACTAM	1500 U	1600 U	1500 U	1600 U
CARBAZOLE	1500 U	1600 U	1500 U	1600 U
CRESOLS, M & P	1500 U	3900 U	1500 U	1600 U
DIBENZOFURAN	1500 U	1600 U	1500 U	1600 U
DIETHYL PHTHALATE	1500 U	1600 U	1500 U	1600 U
DIMETHYL PHTHALATE	1500 U	1600 U	1500 U	1600 U
DI-N-BUTYL PHTHALATE	1500 U	1600 U	1500 U	1600 U
DI-N-OCTYLPHTHALATE	1500 U	1600 U	1500 U	1600 U
HEXACHLOROBENZENE	1500 U	1600 U	1500 U	1600 U
HEXACHLOROBUTADIENE	1500 U	1600 U	1500 U	1600 U
HEXACHLOROETHANE	1500 U	1600 U	1500 U	1600 U
ISOPHORONE	1500 U	1600 U	1500 U	1600 U
NITROBENZENE	1500 U	1600 U	1500 U	1600 U
N-NITROSO-DI-N-PROPYLAMINE	1500 U	1600 U	1500 U	1600 U
N-NITROSODIPHENYLAMINE	1500 U	1600 U	1500 U	1600 U
PENTACHLOROPHENOL	3800 U	3900 U	3600 U	3900 U
PHENOL	1500 U	1600 U	1500 U	1600 U

U = Not detected at the reporting limit shown
B = Compound detected in method blank
L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample
J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 2D: Untreated/Treated SPLP Analytical Data (HWF Columns): EPA 8270D

Compound	HWF1 (15PV)				HWF2 (30PV)			
	Baseline µg/L		Treated µg/L		Baseline µg/L		Treated µg/L	
1,1'-BIPHENYL	0.098	UL	0.1	UL	0.098	UL	0.11	UL
1,2,4,5-TETRACHLOROBENZENE	0.098	U	0.1	U	0.098	U	0.11	U
2,2'-OXYBIS(1-CHLOROPROPANE)	0.15	ULL	0.16	ULL	0.15	ULL	0.17	ULL
2,3,4,6-TETRACHLOROPHENOL	0.49	U	0.52	U	0.49	U	0.57	U
2,4,5-TRICHLOROPHENOL	0.49	U	0.52	U	0.49	U	0.57	U
2,4,6-TRICHLOROPHENOL	0.49	U	0.52	U	0.49	U	0.57	U
2,4-DICHLOROPHENOL	0.98	U	1.0	U	0.98	U	1.1	U
2,4-DIMETHYLPHENOL	7.4	U	7.8	U	7.4	U	8.5	U
2,4-DINITROPHENOL	0.49	U	0.52	U	0.49	U	0.57	U
2,4-DINITROTOLUENE	0.098	U	0.10	U	0.098	U	0.11	U
2,6-DINITROTOLUENE	0.098	U	0.10	U	0.098	U	0.11	U
2-CHLORONAPHTHALENE	7.4	U	7.8	U	7.4	U	8.5	U
2-CHLOROPHENOL	0.49	U	0.52	U	0.49	U	0.57	U
2-METHYLNAPHTHALENE	**2**		**0.28**		**1.7**		**0.22**	J
2-NITROANILINE	0.15	U	0.16	U	0.15	U	0.17	U
2-NITROPHENOL	0.98	U	1	U	0.98	U	1.1	U
3,3'-DICHLOROBENZIDINE	0.098	UL	0.1	UL	0.098	UL	0.11	UL
3-NITROANILINE	19	U	20	U	19	U	22	U
4,6-DINITRO-2-METHYLPHENOL	0.74	U	0.78	U	0.74	U	0.85	U
4-BROMOPHENYL PHENYL ETHER	7.4	U	7.8	U	7.4	U	8.5	U
4-CHLORO-3-METHYLPHENOL	7.4	U	7.8	U	7.4	U	8.5	U
4-CHLOROANILINE	1.5	U	1.6	U	1.5	U	1.7	U
4-CHLOROPHENYL PHENYL ETHER	0.24	U	0.26	U	0.24	U	0.28	U
2-METHYLPHENOL	7.4	U	7.8	U	7.4	U	8.5	U
4-NITROANILINE	0.098	U	0.1	U	0.098	U	0.11	U
4-NITROPHENOL	0.49	U	0.52	U	0.49	U	0.57	U
ACENAPHTHENE	7.4	U	7.8	U	7.4	U	8.5	U
ACENAPHTHYLENE	7.4	U	7.8	U	7.4	U	8.5	U
ACETOPHENONE	7.4	U	7.8	U	7.4	U	8.5	U
ANTHRACENE	**0.12**	JL	**0.08**	JL	**0.11**	JL	**0.091**	JL
ATRAZINE	0.098	ULL	0.1	ULL	0.098	ULL	0.11	ULL
BENZALDEHYDE	7.4	ULL	7.8	ULL	7.4	ULL	8.5	ULL
BENZO(A)ANTHRACENE	0.098	ULL	0.1	ULL	0.098	ULL	0.11	ULL
BENZO(A)PYRENE	**0.081**	J	0.1	U	0.098	U	0.11	U
BENZO(B)FLUORANTHENE	**0.18**	JBLL	**0.17**	JBLL	**0.14**	JBLL	**0.18**	JBLL
BENZO(K)FLUORANTHENE	0.098	ULL	0.1	ULL	0.098	ULL	0.11	ULL
BENZO[G,H,I]PERYLENE	0.098	U	0.1	U	0.098	U	0.11	U

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Compound	HWF1 (15PV)				HWF2 (30PV)			
	Baseline µg/L		Treated µg/L		Baseline µg/L		Treated µg/L	
BIS(2-CHLOROETHOXY) METHANE	0.24	U	0.26	U	0.24	U	0.28	U
BIS(2-CHLOROETHYL) ETHER	0.098	ULL	0.076	JLL	0.098	ULL	0.11	ULL
BIS(2-ETHYLHEXYL) PHTHALATE	0.49	ULL	0.52	ULL	0.49	ULL	0.57	ULL
BUTYL BENZYL PHTHALATE	0.49	U	0.52	U	0.49	U	0.57	U
CAPROLACTAM	7.4	U	7.8	U	7.4	U	8.5	U
CHRYSENE	0.098	UL	0.1	UL	0.098	UL	0.11	UL
CARBAZOLE	7.4	U	7.8	U	7.4	U	8.5	U
CRESOLS, M & P	0.49	U	0.52	U	0.49	U	0.57	U
DIBENZO(A,H)ANTHRACENE	0.098	U	0.1	U	0.098	U	0.11	U
DIBENZOFURAN	**0.14**	JL	0.1	UL	**0.12**	JL	0.11	UL
DIETHYL PHTHALATE	7.4	U	7.8	U	7.4	U	8.5	U
DIMETHYL PHTHALATE	7.4	U	7.8	U	7.4	U	8.5	U
DI-N-BUTYL PHTHALATE	0.98	U	1	U	0.98	U	1.1	U
DI-N-OCTYLPHTHALATE	0.49	U	0.52	U	0.49	U	0.57	U
FLUORANTHENE	0.098	ULL	0.1	ULL	0.098	ULL	0.11	ULL
FLUORENE	7.4	U	7.8	U	7.4	U	8.5	U
HEXACHLOROBENZENE	0.098	ULL	0.1	ULL	0.098	ULL	0.11	ULL
HEXACHLOROBUTADIENE	0.098	U	0.1	U	0.098	U	0.11	U
HEXACHLOROCYCLOPENTADIENE	0.098	U	0.1	U	0.098	U	0.11	U
HEXACHLOROETHANE	0.098	UL	0.1	UL	0.098	UL	0.11	UL
INDENO(1,2,3-CD)PYRENE	**0.064**	J	0.1	U	0.098	U	0.11	U
ISOPHORONE	7.4	U	7.8	U	7.4	U	8.5	U
NAPHTHALENE	**0.84**		**0.51**		**0.73**		**0.43**	
NITROBENZENE	0.15	UL	0.16	UL	0.15	UL	0.17	UL
N-NITROSO-DI-N-PROPYLAMINE	0.098	UL	0.1	UL	0.098	UL	0.11	UL
N-NITROSODIPHENYLAMINE	0.098	ULL	0.1	ULL	0.098	ULL	0.11	ULL
PENTACHLOROPHENOL	0.49	ULL	0.52	ULL	0.49	ULL	0.57	ULL
PHENANTHRENE	0.56	LL	0.33	LL	0.54	LL	0.32	LL
PHENOL	7.4	U	7.8	U	7.4	U	8.5	U
PYRENE	**0.16**	JLL	**0.18**	JLL	0.21	LL	**0.16**	JLL

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 2E: Untreated/Treated Soils Analytical Data (HWF Columns): EPA 8270D_SIM

Compound	HWF1 (15PV)		HWF2 (30PV)	
	Baseline µg/kg	Treated µg/kg	Baseline µg/kg	Treated µg/kg
2-METHYLNAPHTHALENE	**1500**	**840**	**1300**	**1000**
ACENAPHTHENE	**560**	**740**	**500**	**800**
ACENAPHTHYLENE	210 U	210 U	200 U	210 U
ANTHRACENE	**990**	**1200**	**950**	**2000**
BENZO(A)ANTHRACENE	**1700**	**1800**	**1500**	**1800**
BENZO(A)PYRENE	**1200**	**1400**	**1100**	**1400**
BENZO(B)FLUORANTHENE	**650**	**760**	**560**	**760**
BENZO(K)FLUORANTHENE	210 U	210 U	200 U	210 U
BENZO[G,H,I]PERYLENE	**750**	**890**	**670**	**860**
CHRYSENE	**2600**	**2900**	**2600**	**3300**
DIBENZO(A,H)ANTHRACENE	210 U	**310 J**	**220 J**	**280** J
FLUORANTHENE	**580**	**570**	**440**	**600**
FLUORENE	**830**	**810**	**760**	**840**
INDENO(1,2,3-CD)PYRENE	**320 J**	**360 J**	**240 J**	**360** J
NAPHTHALENE	**450**	**260 J**	**400**	**280** J
PHENANTHRENE	**2200**	**2100**	**2100**	**2700**
PYRENE	**7000**	**12000**	**6100**	**7800**

U = Not detected at the reporting limit shown
B = Compound detected in method blank
L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample
J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 3A: Untreated/Treated Soils Analytical Data (SEE Columns): EPA 8260C

Compound	SEE1 (2PV)		SEE2 (6PV)	
	Baseline µg/kg	Treated µg/kg	Baseline µg/kg	Treated µg/kg
1,1,1-TRICHLOROETHANE	6.0 U	2.2 U	2.2 U	2.0 U
1,1,2,2-TETRACHLOROETHANE	6.0 U	2.2 U	2.2 U	2.0 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	6.0 U	2.2 U	2.2 U	2.0 U
1,1,2-TRICHLOROETHANE	6.0 U	2.2 U	2.2 U	2.0 U
1,1-DICHLOROETHANE	6.0 U	2.2 U	2.2 U	2.0 U
1,1-DICHLOROETHENE	6.0 U	2.2 U	2.2 U	2.0 U
1,1-DICHLOROPROPENE	6.0 U	2.2 U	2.2 U	2.0 U
1,2,3-TRICHLOROBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
1,2,3-TRICHLOROPROPANE	6.0 U	2.2 U	2.2 U	2.0 U
1,2,4-TRICHLOROBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
1,2,4-TRIMETHYLBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
1,2-DIBROMO-3-CHLOROPROPANE	6.0 U	2.2 U	2.2 U	2.0 U
1,2-DIBROMOETHANE	6.0 U	2.2 U	2.2 U	2.0 U
1,2-DICHLOROBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
1,2-DICHLOROETHANE	6.0 U	4.5 U	2.2 U	2.0 U
1,2-DICHLOROETHYLENE	12 U	2.2 U	4.4 U	4.0 U
1,2-DICHLOROPROPANE	6.0 U	2.2 U	2.2 U	2.0 U
1,3,5-TRICHLOROBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
1,3,5-TRIMETHYLBENZENE	**72**	2.2 U	**30**	2.0 U
1,3-DICHLOROBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
1,3-DICHLOROPROPANE	6.0 U	2.2 U	2.2 U	2.0 U
1,4-DICHLOROBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
2,2-DICHLOROPROPANE	6.0 U	**48**	2.2 U	2.0 U
2-BUTANONE	30 U	2.2 U	11 U	**53**
2-CHLOROTOLUENE	6.0 U	11 U	2.2 U	2.0 U
2-HEXANONE	30 U	2.2 U	11 U	9.9 U
4-CHLOROTOLUENE	6.0 U	11 U	2.2 U	2.0 U
4-ISOPROPYLTOLUENE	**93**	**250**	**39**	2.0 U
4-METHYL-2-PENTANONE	30 U	**3.7** J	11 U	9.9 U
ACETONE	**1300**	2.2 U	11 U	**300**
BENZENE	**10** J	2.2 U	2.2 U	2.0 U
BROMOBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
BROMOCHLOROMETHANE	6.0 U	2.2 U	2.2 U	2.0 U
BROMODICHLOROMETHANE	6.0 U	**190** E	2.2 U	2.0 U
BROMOFORM	6.0 U	2.2 U	2.2 U	2.0 U
BROMOMETHANE	12 U	2.2 U	4.4 U	4.0 U
CARBON DISULFIDE	6.0 U	2.2 U	2.2 U	**2.7** J

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Compound	SEE1 (2PV)		SEE2 (6PV)	
	Baseline µg/kg	Treated µg/kg	Baseline µg/kg	Treated µg/kg
CARBON TETRACHLORIDE	6.0 U	4.5 U	2.2 U	2.0 U
CHLOROBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
CHLOROETHANE	12 U	4.5 U	4.4 U	4.0 U
CHLOROFORM	6.0 U	2.2 U	2.2 U	2.0 U
CHLOROMETHANE	12 U	2.2 U	4.4 U	4.0 UL
CIS-1,2-DICHLOROETHENE	6.0 U	2.2 U	2.2 U	2.0 U
CIS-1,3-DICHLOROPROPENE	6.0 U	2.2 U	2.2 U	2.0 U
CYCLOHEXANE	**77**	2.2 U	2.2 U	2.0 U
DIBROMOCHLOROMETHANE	6.0 U	4.5 U	2.2 U	2.0 U
DIBROMOMETHANE	6.0 U	2.2 U	2.2 U	2.0 U
DICHLORODIFLUOROMETHANE	12 U	2.2 U	4.4 U	4.0 U
DIETHYL ETHER	6.0 U	2.2 U	2.2 U	2.0 U
DI-ISOPROPYL ETHER	6.0 U	2.2 U	2.2 U	2.0 U
ETHYLBENZENE	**96**	2.2 U	**27**	**0.89** J
HEXACHLOROBUTADIENE	6.0 U	2.2 U	2.2 U	2.0 U
ISOPROPYLBENZENE	**72**	**3.7** J	**30**	2.0 U
M-,P-XYLENE	**36**	2.7 U	**12**	**3.6** J
METHYL ACETATE	7.2 U	2.2 UL	2.7 U	2.4 U
METHYL TERT-BUTYL ETHER	6.0 UL	**8.9**	2.2 UL	2.0 U
METHYLCYCLOHEXANE	**290**	11 U	**100**	**4.6**
METHYLENE CHLORIDE	30 U	2.2 U	11 U	**9.2** J
NAPHTHALENE	**35**	2.2 U	**55**	2.0 U
N-BUTYLBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
N-PROPYLBENZENE	6.0 U	**2.1** J	2.2 U	2.0 U
O-XYLENE	**25**	2.2 U	2.2 U	2.0 U
SEC-BUTYLBENZENE	**70**	2.2 U	**29**	2.0 U
STYRENE	6.0 U	2.2 U	2.2 U	2.0 U
TERT-BUTYLBENZENE	6.0 U	2.2 U	2.2 U	2.0 U
TETRACHLOROETHENE	**27**	2.2 U	**9.3**	2.0 U
TETRAHYDROFURAN	60 U	22 U	22 U	20 U
TOLUENE	**13**	**6.2**	**23**	**2.2** J
TRANS-1,2-DICHLOROETHENE	6.0 U	2.2 U	2.2 U	2.0 U
TRANS-1,3-DICHLOROPROPENE	6.0 U	2.2 U	2.2 U	2.0 U
TRICHLOROETHENE	6.0 U	2.2 U	2.2 U	2.0 U
TRICHLOROFLUOROMETHANE	12 U	4.5 U	4.4 U	4.0 U
VINYL ACETATE	6.0 UL	2.2 UL	2.2 UL	2.0 UL
VINYL CHLORIDE	12 U	4.5 U	4.4 U	4.0 U
XYLENES (TOTAL)	**61**	**5.8** J	**12** J	**3.6** J

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 3B: Untreated/Treated SPLP Analytical Data (SEE Columns): EPA 8260C

Compound	SEE1 (2PV)		SEE2 (6PV)	
	Baseline µg/L	Treated µg/L	Baseline µg/L	Treated µg/L
1,1,1-TRICHLOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2-TETRACHLOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2-TRICHLOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,1-DICHLOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,1-DICHLOROETHENE	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-TRICHLOROPROPANE	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-TRICHLOROBENZENE	2.5 U	2.5 U	2.5 U	2.5 U
1,2-DIBROMO-3-CHLOROPROPANE	2.5 U	2.5 U	2.5 U	2.5 U
1,2-DIBROMOETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,2-DICHLOROBENZENE	2.5 U	2.5 U	2.5 U	2.5 U
1,2-DICHLOROETHANE	2.5 U	2.5 U	2.5 U	2.5 U
1,2-DICHLOROPROPANE	2.5 U	2.5 U	2.5 U	2.5 U
1,3-DICHLOROBENZENE	2.5 U	2.5 U	2.5 U	2.5 U
1,4-DICHLOROBENZENE	2.5 U	12 U	2.5 U	2.5 U
2-BUTANONE	12 U	12 U	12 U	12 U
2-HEXANONE	12 U	12 U	12 U	12 U
4-METHYL-2-PENTANONE	12 U	12 U	12 U	12 U
ACETONE	12 U	2.5 U	12 U	12 U
BENZENE	2.5 U	2.5 U	2.5 U	2.5 U
BROMOCHLOROMETHANE	2.5 U	2.5 U	2.5 U	2.5 U
BROMODICHLOROMETHANE	2.5 U	2.5 U	2.5 U	2.5 U
BROMOFORM	2.5 U	5.0 U	2.5 U	2.5 U
BROMOMETHANE	5.0 U	2.5 U	5.0 U	5.0 U
CARBON DISULFIDE	2.5 U	2.5 U	2.5 U	2.5 U
CARBON TETRACHLORIDE	2.5 U	2.5 U	2.5 U	2.5 U
CHLOROBENZENE	2.5 U	5.0 U	2.5 U	2.5 U
CHLOROETHANE	5.0 U	2.5 U	5.0 U	5.0 U
CHLOROFORM	2.5 U	5.0 U	2.5 U	2.5 U
CHLOROMETHANE	5.0 U	2.5 U	5.0 U	5.0 U
CIS-1,2-DICHLOROETHENE	2.5 U	2.5 U	2.5 U	2.5 U
CIS-1,3-DICHLOROPROPENE	2.5 U	2.5 U	2.5 U	2.5 U
CYCLOHEXANE	2.5 U	2.5 U	2.5 U	2.5 U
DIBROMOCHLOROMETHANE	2.5 U	5.0 U	2.5 U	2.5 U
DICHLORODIFLUOROMETHANE	5.0 U	2.5 U	5.0 U	5.0 U
ETHYLBENZENE	2.5 U	2.5 U	2.5 U	2.5 U
ISOPROPYLBENZENE	2.5 U	2.5 U	2.5 U	2.5 U

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Compound	SEE1 (2PV)		SEE2 (6PV)	
	Baseline µg/L	Treated µg/L	Baseline µg/L	Treated µg/L
M-,P-XYLENE	5.0 U	5.0 U	5.0 U	5.0 U
METHYL ACETATE	3.8 U	3.8 U	3.8 U	3.8 U
METHYL TERT-BUTYL ETHER	2.5 U	2.5 U	2.5 U	2.5 U
METHYLCYCLOHEXANE	2.5 U	2.5 U	2.5 U	2.5 U
METHYLENE CHLORIDE	**13** J	12 U	12 U	**170**
O-XYLENE	2.5 U	2.5 U	2.5 U	2.5 U
STYRENE	2.5 U	2.5 U	2.5 U	2.5 U
TETRACHLOROETHENE	2.5 U	2.5 U	2.5 U	2.5 U
TOLUENE	2.5 U	2.5 U	2.5 U	2.5 U
TRANS-1,2-DICHLOROETHENE	2.5 U	2.5 U	2.5 U	2.5 U
TRANS-1,3-DICHLOROPROPENE	2.5 U	2.5 U	2.5 U	2.5 U
TRICHLOROETHENE	2.5 U	2.5 U	2.5 U	2.5 U
TRICHLOROFLUOROMETHANE	5.0 U	5.0 U	5.0 U	5.0 U
VINYL CHLORIDE	5.0 U	5.0 U	5.0 U	5.0 U
XYLENES (TOTAL)	7.5 U	7.5 U	7.5 U	7.5 U

Table 3C: Untreated/Treated Soils Analytical Data (SEE Columns): EPA 8270D

Compound	SEE1 (2PV)		SEE2 (6PV)	
	Baseline µg/kg	Treated µg/kg	Baseline µg/kg	Treated µg/kg
1,1'-BIPHENYL	980 U	960 U	1000 U	1200 U
1,2,4-TRICHLOROBENZENE	980 U	960 U	1000 U	1200 U
1,2-DICHLOROBENZENE	980 U	960 U	1000 U	1200 U
1,2-DIPHENYLHYDRAZINE	2000 U	1900 U	2100 U	2300 U
1,3-DICHLOROBENZENE	980 U	960 U	1000 U	1200 U
1,4-DICHLOROBENZENE	980 U	960 U	1000 U	1200 U
2,2'-OXYBIS(1-CHLOROPROPANE)	980 U	960 U	1000 U	1200 U
2,4,5-TRICHLOROPHENOL	2400 U	2400 U	2600 U	2900 U
2,4,6-TRICHLOROPHENOL	980 U	960 U	1000 U	1200 U
2,4-DICHLOROPHENOL	980 U	960 U	1000 U	1200 U
2,4-DIMETHYLPHENOL	980 U	960 U	1000 U	1200 U
2,4-DINITROPHENOL	2400 U	2400 U	2600 U	2900 U
2,4-DINITROTOLUENE	980 U	960 U	1000 U	1200 U
2,6-DICHLOROPHENOL	980 U	960 U	1000 U	1200 U
2,6-DINITROTOLUENE	980 U	960 U	1000 U	1200 U
2-CHLORONAPHTHALENE	980 U	960 U	1000 U	1200 U
2-CHLOROPHENOL	980 U	960 U	1000 U	1200 U

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Compound	SEE1 (2PV)		SEE2 (6PV)	
	Baseline µg/kg	Treated µg/kg	Baseline µg/kg	Treated µg/kg
2-METHYLPHENOL	980 U	960 U	1000 U	1200 U
2-NITROANILINE	2400 U	2400 U	2600 U	2900 U
2-NITROPHENOL	980 U	960 U	1000 U	1200 U
3,3'-DICHLOROBENZIDINE	980 U	960 U	1000 U	1200 U
3-NITROANILINE	2400 U	2400 U	2600 U	2900 U
4,6-DINITRO-2-METHYLPHENOL	2400 U	2400 U	2600 U	2900 U
4-BROMOPHENYL PHENYL ETHER	980 U	960 U	1000 U	1200 U
4-CHLORO-3-METHYLPHENOL	980 U	960 U	1000 U	1200 U
4-CHLOROANILINE	980 U	960 U	1000 U	1200 U
4-CHLOROPHENYL PHENYL ETHER	980 U	960 U	1000 U	1200 U
4-NITROANILINE	2400 U	2400 U	2600 U	2900 U
4-NITROPHENOL	2400 U	2400 U	2600 U	2900 U
BENZIDINE	4400 U	4400 U	4800 U	5300 U
BENZOIC ACID	2400 U	2400 U	2600 U	2900 U
BENZYL ALCOHOL	2000 U	1900 U	2100 U	2300 U
BIS(2-CHLOROETHOXY) METHANE	980 U	960 U	1000 U	1200 U
BIS(2-CHLOROETHYL) ETHER	980 U	960 U	1000 U	1200 U
BIS(2-ETHYLHEXYL) PHTHALATE	980 U	960 U	460 J	1200 U
BUTYL BENZYL PHTHALATE	980 U	960 U	1000 U	1200 U
CAPROLACTAM	980 U	960 U	1000 U	1200 U
CARBAZOLE	980 U	960 U	1000 U	1200 U
CRESOLS, M & P	980 U	960 U	1000 U	1200 U
DIBENZOFURAN	980 U	960 U	1000 U	1200 U
DIETHYL PHTHALATE	980 U	960 U	1000 U	1200 U
DIMETHYL PHTHALATE	980 U	960 U	1000 U	1200 U
DI-N-BUTYL PHTHALATE	980 U	960 U	1000 U	1200 U
DI-N-OCTYLPHTHALATE	980 U	960 U	1000 U	1200 U
HEXACHLOROBENZENE	980 U	960 U	1000 U	1200 U
HEXACHLOROBUTADIENE	980 U	960 U	1000 U	1200 U
HEXACHLOROETHANE	980 U	960 U	1000 U	1200 U
ISOPHORONE	980 U	960 U	1000 U	1200 U
NITROBENZENE	980 ULL	960 ULL	1000 ULL	1200 U
N-NITROSO-DI-N-PROPYLAMINE	980 U	960 U	1000 U	1200 U
N-NITROSODIPHENYLAMINE	980 U	960 U	1000 U	1200 U
PENTACHLOROPHENOL	2400 U	2400 U	2600 U	2900 U
PHENOL	980 U	960 U	1000 U	1200 U

U = Not detected at the reporting limit shown
B = Compound detected in method blank
L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample
J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 3D: Untreated/Treated SPLP Analytical Data (SEE Columns): EPA 8270D

Compound	SEE1 (2PV)				SEE2 (6PV)			
	Baseline µg/L		Treated µg/L		Baseline µg/L		Treated µg/L	
1,1'-BIPHENYL	0.17	U	0.11	U	**0.13**	J	0.1	UL
1,2,4,5-TETRACHLOROBENZENE	0.17	U	0.11	U	0.11	U	0.1	U
2,2'-OXYBIS(1-CHLOROPROPANE)	0.25	UL	0.16	UL	0.16	UL	0.16	ULL
2,3,4,6-TETRACHLOROPHENOL	0.83	U	0.54	U	0.54	U	0.52	U
2,4,5-TRICHLOROPHENOL	0.83	U	0.54	U	0.54	U	0.52	U
2,4,6-TRICHLOROPHENOL	0.83	U	0.54	U	0.54	U	0.52	U
2,4-DICHLOROPHENOL	1.7	U	1.1	U	1.1	U	1.0	U
2,4-DIMETHYLPHENOL	12	U	8.2	U	8.2	U	7.8	U
2,4-DINITROPHENOL	0.83	U	0.54	U	0.54	U	0.52	U
2,4-DINITROTOLUENE	0.17	U	0.11	U	0.11	U	0.10	U
2,6-DINITROTOLUENE	0.17	U	0.11	U	0.11	U	0.10	U
2-CHLORONAPHTHALENE	12	U	8.2	U	8.2	U	7.8	U
2-CHLOROPHENOL	0.83	U	0.54	U	0.54	U	0.52	U
2-METHYLNAPHTHALENE	1.5	L	0.68	L	1.6	L	0.1	U
2-NITROANILINE	0.25	UL	0.16	UL	0.16	UL	0.16	U
2-NITROPHENOL	1.7	U	1.1	U	1.1	U	1	U
3,3'-DICHLOROBENZIDINE	0.17	UL	0.11	UL	0.11	UL	0.1	ULL
3-NITROANILINE	32	U	21	U	21	U	20	U
4,6-DINITRO-2-METHYLPHENOL	1.2	U	0.82	U	0.82	U	0.78	U
4-BROMOPHENYL PHENYL ETHER	12	U	8.2	U	8.2	U	7.8	U
4-CHLORO-3-METHYLPHENOL	12	U	8.2	U	8.2	U	7.8	U
4-CHLOROANILINE	2.5	U	1.6	U	1.6	U	1.6	U
4-CHLOROPHENYL PHENYL ETHER	0.42	U	0.27	U	0.27	U	0.26	U
2-METHYLPHENOL	12	U	8.2	U	8.2	U	7.8	U
4-NITROANILINE	0.17	U	0.11	U	0.11	U	0.1	U
4-NITROPHENOL	0.83	U	0.54	U	0.54	U	0.52	U
ACENAPHTHENE	**2.7**	J	**1.8**	J	8.2	U	7.8	U
ACENAPHTHYLENE	12	U	8.2	U	8.2	U	7.8	U
ACETOPHENONE	12	U	8.2	U	8.2	U	7.8	U
ANTHRACENE	**0.12**	JL	**0.11**	JL	**0.11**	JL	**0.071**	J
ATRAZINE	0.17	U	0.11	U	0.11	U	0.1	U
BENZALDEHYDE	12	U	8.2	U	8.2	U	**1.8**	J
BENZO(A)ANTHRACENE	0.17	UL	0.11	UL	0.11	UL	0.1	UL
BENZO(A)PYRENE	0.17	U	0.11	U	0.11	U	0.1	U
BENZO(B)FLUORANTHENE	0.17	U	0.11	U	0.11	U	0.1	ULL
BENZO(K)FLUORANTHENE	0.17	U	0.11	U	0.11	U	0.1	U
BENZO[G,H,I]PERYLENE	**0.12**	J	**0.075**	J	**0.082**	J	0.1	U

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Compound	SEE1 (2PV)				SEE2 (6PV)			
	Baseline µg/L		Treated µg/L		Baseline µg/L		Treated µg/L	
BIS(2-CHLOROETHOXY) METHANE	0.42	U	0.27	U	0.27	U	0.26	U
BIS(2-CHLOROETHYL) ETHER	0.17	U	0.11	U	0.11	U	0.1	ULL
BIS(2-ETHYLHEXYL) PHTHALATE	0.83	UL	0.54	UL	0.54	UL	0.52	ULL
BUTYL BENZYL PHTHALATE	0.83	U	0.54	U	0.54	U	0.52	U
CAPROLACTAM	12	U	8.2	U	8.2	U	7.8	U
CHRYSENE	0.17	UL	0.11	UL	0.11	UL	0.1	UL
CARBAZOLE	12	U	8.2	U	8.2	U	7.8	U
CRESOLS, M & P	0.83	U	0.54	U	0.54	U	0.52	U
DIBENZO(A,H)ANTHRACENE	0.17	UL	0.11	UL	0.3	L	0.1	U
DIBENZOFURAN	**0.14**	J	**0.11**	J	**0.15**	J	0.1	UL
DIETHYL PHTHALATE	12	U	8.2	U	8.2	U	7.8	U
DIMETHYL PHTHALATE	12	U	8.2	U	8.2	U	7.8	U
DI-N-BUTYL PHTHALATE	1.7	U	1.1	U	1.1	U	1	U
DI-N-OCTYLPHTHALATE	0.83	U	0.54	U	0.54	U	0.52	U
FLUORANTHENE	0.17	UL	0.11	UL	0.11	UL	0.1	U
FLUORENE	12	U	8.2	U	8.2	U	7.8	U
HEXACHLOROBENZENE	0.17	U	0.11	U	0.11	U	0.1	U
HEXACHLOROBUTADIENE	0.17	U	0.11	U	0.11	U	0.1	U
HEXACHLOROCYCLOPENTADIENE	0.17	U	**0.11**	U	0.11	U	0.1	U
HEXACHLOROETHANE	0.17	U	0.11	U	0.11	U	0.1	U
INDENO(1,2,3-CD)PYRENE	**0.54**		**0.35**		**0.35**		0.1	U
ISOPHORONE	12	U	8.2	U	8.2	U	7.8	U
NAPHTHALENE	**0.68**		**0.26**		**0.7**		0.1	U
NITROBENZENE	0.25	U	0.16	U	0.16	U	0.16	U
N-NITROSO-DI-N-PROPYLAMINE	0.17	U	0.11	U	0.11	U	0.1	ULL
N-NITROSODIPHENYLAMINE	0.17	U	0.11	U	0.11	U	0.1	U
PENTACHLOROPHENOL	0.83	U	0.54	U	0.54	U	0.52	ULL
PHENANTHRENE	0.52	L	0.48	L	0.49	L	0.47	LL
PHENOL	12	U	8.2	U	8.2	U	7.8	U
PYRENE	**0.17**	JL	**0.18**	JL	**0.16**	JL	**0.13**	J

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 3E: Untreated/Treated Soils Analytical Data (HWF Columns): EPA 8270D_SIM

Compound	SEE1 (2PV)		SEE2 (6PV)	
	Baseline µg/kg	Treated µg/kg	Baseline µg/kg	Treated µg/kg
2-METHYLNAPHTHALENE	**1700**	**620**	**1800**	94 U
ACENAPHTHENE	**530**	**490**	**560**	**60 J**
ACENAPHTHYLENE	**130 J**	97 U	**150 J**	94 U
ANTHRACENE	**650**	**650**	**830**	**170 J**
BENZO(A)ANTHRACENE	**1500**	**1600**	**1800**	**300**
BENZO(A)PYRENE	**1600**	**1300**	**1600**	**300**
BENZO(B)FLUORANTHENE	**1100 L**	**780 L**	**970 L**	**200**
BENZO(K)FLUORANTHENE	**300**	**160 J**	**260**	94 U
BENZO[G,H,I]PERYLENE	**1600**	**1300**	**1500**	**180 J**
CHRYSENE	**3200**	**2800**	**2800**	**540**
DIBENZO(A,H)ANTHRACENE	**360**	**300**	**350**	**48 J**
FLUORANTHENE	**330**	**390**	**360**	**100 J**
FLUORENE	**760**	**660**	**910**	**100 J**
INDENO(1,2,3-CD)PYRENE	**660**	**450**	**520**	**74 J**
NAPHTHALENE	**390**	**110 J**	**450**	94 U
PHENANTHRENE	**1700**	**1600**	**2000**	**440**
PYRENE	**9700**	**7200**	**9900**	**1200**

U = Not detected at the reporting limit shown
B = Compound detected in method blank
L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample
J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 4A: HWF Flush Water Analysis summary data: EPA 8260C

Compound	First Flush µg/L		Final Flush µg/L	
1,1,1-TRICHLOROETHANE	0.50	U	0.50	U
1,1,2,2-TETRACHLOROETHANE	0.50	U	0.50	U
1,1,2-TRICHLOROETHANE	0.50	U	0.50	U
1,1-DICHLOROETHANE	0.50	U	0.50	U
1,1-DICHLOROETHENE	0.50	U	0.50	U
1,1-DICHLOROPROPENE	0.50	U	0.50	U
1,2,3-TRICHLOROBENZENE	0.50	U	0.50	U
1,2,3-TRICHLOROPROPANE	14		9.4	
1,2,4-TRICHLOROBENZENE	0.50	U	0.50	U
1,2,4-TRIMETHYLBENZENE	0.21	J	0.50	U
1,2-DIBROMO-3-CHLOROPROPANE	1.0	U	1.0	U
1,2-DIBROMOETHANE	0.50	U	0.50	U
1,2-DICHLOROBENZENE	0.39	J	0.19	J
1,2-DICHLOROETHANE	2.2		3.0	
1,2-DICHLOROETHYLENE	1.0	U	1.0	U
1,2-DICHLOROPROPANE	0.50	U	0.50	U
1,3,5-TRICHLOROBENZENE	0.50	U	0.50	U
1,3,5-TRIMETHYLBENZENE	0.50	U	0.50	U
1,3-DICHLOROBENZENE	0.50	U	0.50	U
1,3-DICHLOROPROPANE	0.50	U	0.50	U
1,4-DICHLOROBENZENE	0.50	U	0.50	U
2,2-DICHLOROPROPANE	0.50	U	0.50	U
2-BUTANONE	11		9.4	
2-CHLOROTOLUENE	0.50	U	0.50	U
2-HEXANONE	2.5	U	2.5	U
4-CHLOROTOLUENE	0.50	U	0.50	U
4-METHYL-2-PENTANONE	2.5	U	2.5	U
ACETONE	110		40	
BENZENE	2.5	U	2.5	U
BROMOBENZENE	0.50	U	0.50	U
BROMOCHLOROMETHANE	0.50	U	0.50	U
BROMODICHLOROMETHANE	0.50	U	0.50	U
BROMOFORM	0.50	U	0.50	U
BROMOMETHANE	1.0	U	1.0	U
CARBON DISULFIDE	0.25	J	0.50	J
CARBON TETRACHLORIDE	0.50	U	0.50	U
CHLOROBENZENE	0.50	U	0.50	U
CHLOROETHANE	1.0	U	1.0	U

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Compound	First Flush µg/L		Final Flush µg/L	
CHLOROFORM	2.9		4.2	
CHLOROMETHANE	1.0	U	1.0	U
CIS-1,2-DICHLOROETHENE	0.50	U	0.50	U
CIS-1,3-DICHLOROPROPENE	0.50	U	0.50	U
CYCLOHEXANE	0.50	U	0.50	U
DIBROMOCHLOROMETHANE	0.50	U	0.50	U
DIBROMOMETHANE	0.50	U	0.50	U
DICHLORODIFLUOROMETHANE	1.0	U	1.0	U
DIETHYL ETHER	0.50	U	0.50	U
DI-ISOPROPYL ETHER	0.50	U	0.50	U
ETHYLBENZENE	2.5	U	2.5	U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.50	U	0.50	U
HEXACHLOROBUTADIENE	0.75	U	0.75	U
ISOPROPYLBENZENE	0.5	U	0.5	U
M- AND P-XYLENE	1.0	U	1.0	U
METHYL ACETATE	0.75	U	0.75	U
METHYL TERT-BUTYL ETHER	0.50	U	0.50	U
METHYLCYCLOHEXANE	0.50	U	0.50	U
METHYLENE CHLORIDE	2.5	U	2.5	U
NAPHTHALENE	15		6.5	
N-BUTYLBENZENE	0.50	U	0.50	U
N-PROPYLBENZENE	0.50	U	0.50	U
O-XYLENE	0.50	U	0.26	J
4-ISOPROPYLTOLUENE	0.50	U	0.50	U
SEC-BUTYLBENZENE	0.50	U	0.50	U
STYRENE	0.50	U	0.50	U
TERT-BUTYLBENZENE	0.50	U	0.50	U
TETRACHLOROETHENE	0.50	U	0.50	U
TETRAHYDROFURAN	5.0	U	5.0	U
TOLUENE	0.40	J	0.30	J
TRANS-1,2-DICHLOROETHENE	0.50	U	0.50	U
TRANS-1,3-DICHLOROPROPENE	0.50	U	0.50	U
TRICHLOROETHENE	0.50	U	0.50	U
TRICHLOROFLUOROMETHANE	1.0	U	1.0	U
VINYL ACETATE	0.50	U	0.50	U
VINYL CHLORIDE	1.0	U	1.0	U

U = Not detected at the reporting limit shown
B = Compound detected in method blank
L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample
J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 4B: HWF Flush Water Analysis summary data: EPA 8270D

Compound	First Flush µg/L		Final Flush µg/L	
1,1'-BIPHENYL	7.5	U	7.5	U
1,2,4-TRICHLOROBENZENE	7.5	U	7.5	U
1,2-DICHLOROBENZENE	7.5	U	7.5	U
1,2-DIPHENYLHYDRAZINE	15	U	15	U
1,3-DICHLOROBENZENE	7.5	U	7.5	U
1,4-DICHLOROBENZENE	7.5	U	7.5	U
2,2'-OXYBIS(1-CHLOROPROPANE)	7.5	U	7.5	U
2,4,5-TRICHLOROPHENOL	19	U	19	U
2,4,6-TRICHLOROPHENOL	7.5	U	7.5	U
2,4-DICHLOROPHENOL	7.5	U	7.5	U
2,4-DIMETHYLPHENOL	7.5	U	7.5	U
2,4-DINITROPHENOL	19	U	19	U
2,4-DINITROTOLUENE	7.5	U	7.5	U
2,6-DICHLOROPHENOL	7.5	U	7.5	U
2,6-DINITROTOLUENE	7.5	U	7.5	U
2-CHLORONAPHTHALENE	7.5	U	7.5	U
2-CHLOROPHENOL	7.5	U	7.5	U
2-METHYLPHENOL	7.5	U	7.5	U
2-NITROANILINE	19	U	19	U
2-NITROPHENOL	7.5	U	7.5	U
3,3'-DICHLOROBENZIDINE	7.5	U	7.5	U
3-NITROANILINE	7.5	U	19	U
4,6-DINITRO-2-METHYLPHENOL	19	U	19	U
4-BROMOPHENYL PHENYL ETHER	19	U	7.5	U
4-CHLORO-3-METHYLPHENOL	7.5	U	7.5	U
4-CHLOROANILINE	7.5	U	7.5	U
4-CHLOROPHENYL PHENYL ETHER	7.5	U	7.5	U
4-NITROANILINE	7.5	U	19	U
4-NITROPHENOL	19	U	19	U
BENZIDINE	19	U	38	ULL
BENZOIC ACID	38	ULL	19	U
BENZYL ALCOHOL	19	U	15	U
BIS(2-CHLOROETHOXY) METHANE	15	U	7.5	U
BIS(2-CHLOROETHYL) ETHER	5.6	J	7.5	U
BIS(2-ETHYLHEXYL) PHTHALATE	14		7.5	U
BUTYL BENZYL PHTHALATE	7.5	U	7.5	U
CAPROLACTAM	7.5	U	1.6	JL
CARBAZOLE	7.5	UL	7.5	U

U = Not detected at the reporting limit shown

B = Compound detected in method blank

L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample

J = Estimated concentration, below the reporting limit but above the method detection limit.

Compound	First Flush µg/L		Final Flush µg/L	
CRESOLS, M & P	7.5	U	7.5	U
DIBENZOFURAN	7.5	U	7.5	U
DIETHYL PHTHALATE	7.5	U	7.5	U
DIMETHYL PHTHALATE	7.5	U	7.5	U
DI-N-BUTYL PHTHALATE	7.5	U	7.5	U
DI-N-OCTYLPHTHALATE	7.5	U	7.5	U
HEXACHLOROBENZENE	7.5	U	7.5	U
HEXACHLOROBUTADIENE	7.5	U	7.5	U
HEXACHLOROETHANE	7.5	U	7.5	U
ISOPHORONE	7.5	U	7.5	U
NITROBENZENE	7.5	ULL	7.5	ULL
N-NITROSO-DI-N-PROPYLAMINE	7.5	U	7.5	U
N-NITROSODIPHENYLAMINE	7.5	U	7.5	U
PENTACHLOROPHENOL	19	U	19	U
PHENOL	7.5	U	7.5	U

U = Not detected at the reporting limit shown
B = Compound detected in method blank
L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample
J = Estimated concentration, below the reporting limit but above the method detection limit.

Table 4C: HWF Flush Water Analysis summary data: EPA 8270D_SIM

Compound	First Flush µg/L		Final Flush µg/L	
2-METHYLNAPHTHALENE	**18**		0.10	U
ACENAPHTHENE	**1.1**		**0.89**	
ACENAPHTHYLENE	0.10	U	0.10	U
ANTHRACENE	**0.73**		**0.33**	
BENZO(A)ANTHRACENE	0.10	U	**0.11**	J
BENZO(A)PYRENE	0.10	U	0.10	U
BENZO(B)FLUORANTHENE	**0.13**	J	**0.10**	J
BENZO[G,H,I]PERYLENE	0.10	U	0.10	U
BENZO(K)FLUORANTHENE	0.10	U	0.10	U
CHRYSENE	0.10	U	0.10	U
DIBENZO(A,H)ANTHRACENE	0.10	U	0.10	U
FLUORANTHENE	**0.21**		**0.15**	J
FLUORENE	**1.5**		**1.0**	
INDENO(1,2,3-CD)PYRENE	0.10	U	0.10	U
NAPHTHALENE	**22**		**3.1**	
PHENANTHRENE	**3.9**		**1.4**	
PYRENE	**0.59**		**0.72**	

U = Not detected at the reporting limit shown
B = Compound detected in method blank
L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample
J = Estimated concentration, below the reporting limit but above the method detection limit.

Attachment 1

KEMRON'S TREATABILITY STUDY FINAL REPORT

U = Not detected at the reporting limit shown
B = Compound detected in method blank
L = Compound did not meet DoD criteria in the corresponding Laboratory Control Sample
J = Estimated concentration, below the reporting limit but above the method detection limit.

TERRATHERM
ENSAFE BETHPAGE, NEW YORK SITE
TREATABILITY STUDY
FINAL REPORT
KEMRON Project number: SH0582

July 14, 2015

Prepared for:

TerraTherm, Inc.
151 Suffolk Lane
Gardner, MA 01440

Prepared by:

1359-A Ellsworth Industrial Blvd
Atlanta, GA 30318
404-636-0928 (Phone)
404-636-7162 (Fax)

Submitted By:

Mark Clark
Technical Manager

Reviewed By:

Tommy A. Jordan, P.G.
Program Manager

Table of Contents

1.0 INTRODUCTION 1
2.0 MATERIAL RECIEPT, HOMOGENIZATION, AND CHARACTERIZATION 1
3.0 THERMAL TREATMENT EVALUATIONS 3
3.1 SEE Testing 3
3.1.1 2PV SEE Testing 3
3.1.2 6 PV SEE Testing 4
3.2 Hot Water Flushing 5
3.2.1 15 and 30 PV 55°C Hot Water Flush 5

List of Tables

Table 1 – Untreated Material Physical Properties Characterization
Table 2 – Untreated NAPL Characterization Testing
Table 3 – Summary of SEE Temperature Data
Table 4 – Summary of SEE Testing
Table 5 – Summary of HWF Testing

List of Figures

FIGURE 1 – 2PV SEE Test Temperature Graph
FIGURE 2 – 6PV SEE Test Temperature Graph
FIGURE 3 – 15PV HWF Test Temperature Graph
FIGURE 4 – 30 PV HWF Test Temperature Graph

List of Attachments

Appendix A – Treatability Study Work Plan
Appendix B – Material Chain of Custody
Appendix C – Untreated Physical Properties Testing Data Sheets
Appendix D – Thermal Treatment Data Sheets
Appendix E – Post Treatment Physical Properties, Material pH and Moisture Content, Testing Data Sheets
Appendix F – Photographic Log

Acronyms

ASTM	American Society of Testing and Materials
˚C	Degrees Celsius
COCs	Contaminants of Concern
EPA	U.S. Environmental Protection Agency
HWF	Hot Water Flush
ISTD	In-Situ Thermal Desorption
KEMRON	Kemron Environmental Services
Kg	Kilogram
LNAPL	Light Non-Aqueous Phase Liquid
mg/Kg	Milligrams per Kilogram
ml	Milliliter
NAPL	Non-Aqueous Phase Liquid
PAH	PolyAromatic Hydrocarbons
psi	Pounds Per Square Inch
lb/ft^3	Pounds Per Cubic Foot
PV	Pore Volume
SEE	Steam Enhanced Extraction
s.u.	Standard Units
SVOC	Semi Volatile Organic Compounds
TSWP	Treatability Study Work Plan
VOC	Volatile Organic Compounds

1.0 INTRODUCTION

KEMRON Environmental Services, Inc. (KEMRON) is pleased to present TerraTherm with the results of thermal testing performed on materials from the Naval Weapons Industrial Reserve Plant Bethpage, New York site. The bench-scale treatability study was performed on impacted site material collected from the site. The site material was identified as impacted with #6 fuel oil, predominantly polycyclic aromatic hydrocarbons (PAHs) present as viscous light non-aqueous phase liquid (LNAPL).

The treatability study was conducted to determine the characteristics of the NAPL over a varying range of temperatures, evaluate the treatment effectiveness of Steam Enhanced Extraction (SEE), and Hot Water Flushing (HWF) thermal treatments at removing NAPL and reducing total concentrations of PAHs and Total Petroleum Hydrocarbons (TPH) in the site material, and to understand the leaching potential of contaminants after thermal treatment. Treatability testing was conducted in accordance with the Treatability Study Work Plan (TSWP) dated May 13, 2015. A copy of the SOW was prepared prior to initiating testing of the site materials and is included in **Appendix A**. Testing protocol as outlined in the SOW, as well as any modifications or changes were established from direct communications between KEMRON, and TerraTherm.

All thermal treatment simulations as well as physical properties testing were performed by KEMRON's Atlanta, Georgia laboratory. NAPL characterization was conducted by PTS laboratories, and all analytical testing was conducted by Katahdin Laboratories which was directly subcontracted and managed by Resolution Consultants. As such, the results and discussions of analytical testing are not included in this report.

2.0 MATERIAL RECIEPT, HOMOGENIZATION, AND CHARACTERIZATION

On June 5, 2015 KEMRON received two 5-gallon containers of site soil as well as two 4-ounce sample jars of NAPL from the site monitoring well MW-2. A copy of the material chain of custody is presented in **Appendix B**. Immediately following sample receipt, KEMRON logged the sample into a sample tracking database and placed the material in a 4-degree Celsius (°C) walk-in cooler for storage. Photographs of the as-received materials are included in **Appendix F**.

Prior to testing, KEMRON homogenized the untreated site soil material from both 5-gallon buckets to ensure a uniform material for testing. Homogenization was performed by placing the contents of the shipping containers into a pre-cleaned plastic mixing pan and gently blending by hand using a stainless steel spoons until visually homogenous. During homogenization, KEMRON removed approximately 2,330 grams (g) of oversized debris, greater than 0.5 inches in diameter, from the site soil. This represents less than 0.5% of the entire mass of the sample. Removal of oversized material is in accordance with certain ASTM and EPA testing requirements. Note that homogenization was conducted on the chilled site material to reduce potential volatilization of organic constituents. Photographs of the homogenized material are included in **Appendix F**.

KEMRON conducted the following characterization testing on the untreated site material in accordance with the referenced test methods:

Parameter	Method
Moisture Content	ASTM D2216
Moisture Content @ 300C	ASTM D2216 Mod.
Bulk Density	ASTM D7263
Specific Gravity	ASTM D854
Flash Point	ASTM D3278
Porosity	Calculated

Additionally, aliquots of the homogenized site material were forwarded to Katahdin for analytical characterization including Total PAHs, Total VOCs, Synthetic Precipitation Leaching Procedure (SPLP) PAHs and SPLP VOCs. Samples of the NAPL material were also forwarded to PTS laboratories for NAPL Density, viscosity, and surface tension conducted at temperatures including ambient, 50°C and 90°C. Copies of the untreated material physical properties testing data sheets conducted by KEMRON as well as untreated NAPL testing data reports from PTS are included in **Appendix C.**

The results of physical properties characterization testing are presented in **Table 1**. Laboratory data sheets are provided in **Appendix C.** The results of physical characterization testing performed on the untreated soil indicated that the site material had a natural ASTM moisture content of 9.96 percent (%) utilizing a drying temperature of approximately 110°C, a bulk unit weight (density) of 129 pounds per cubic foot (pcf), a specific gravity of 2.42, and a flashpoint of 125 degrees Fahrenheit. Based on the moisture, density and specific gravity, KEMRON calculated that the site material had a porosity of 22.0%. It was determined following review of the untreated material data as well as visual observations that the porosity of the site material utilizing the approximate 110°C moisture content data may not accurately reflect the porosity of the site material. Actual NAPL material was observed in the interstitial spaces of the 110°C moisture content residual, and KEMRON recommended conducting an additional moisture content testing using a drying temperature of 300°C to further remove interstitial NAPL liquid material to reflect a more accurate material porosity. Moisture content testing at a temperature of 300°C resulted in an aqueous content of 13.5%, and a porosity using this modified data of 24.4%.

Table 2 summarizes the results of testing conducted by PTS laboratories on the site NAPL material. A review of results indicates that the NAPL material exhibited a specific gravity and density of less than 1.0 at all three temperatures. The interfacial / surface tension was measured at 75°F, at 122°F, and 151°F resulting in of 35.7, 30.6, and 29.1 dynes/cm, respectively. The testing revealed a flashpoint of 105°F for the NAPL. The viscosity of the NAPL material was 122,000 centistokes at an ambient temperature of 76°F, a result which may indicate non-Newtonian flow, and greatly reduced viscosities when heated with a low viscosity of 98.7 centistokes at a temperature of 194°F (90°C).

3.0 THERMAL TREATMENT EVALUATIONS

The treatment evaluations of the site materials were performed to evaluate the effectiveness of thermal treatments at reducing total concentrations of the contaminants of concern (COCs) from the site material. The thermal evaluations were performed in accordance with **Section 4.0** of the TSWP. Any changes or deviations to the TSWP will be discussed in this section of the report.

Treatment simulations that were evaluated included two Hot Water Flushing (HWF) evaluations conducted at a water temperature of approximately 55°C, and two SEE treatment simulations with a target soil temperature of approximately 100°C. Complete thermal treatment data and monitoring sheets are included in **Appendix D** of this report. All data sheets for post treatment testing performed by KEMRON including material pH, and moisture content evaluations are included in **Appendix E**. Photographs of thermal testing and materials are included in **Appendix F**.

3.1 SEE Testing

KEMRON performed two individual SEE treatment simulations on the site soil in accordance with **Section 4.0** of the TSWP. Testing was performed by compacting aliquots of the site soil into stainless steel cylindrical reactors to the predetermined soil density and the pore volume of each sample was calculated according to the moisture content, volume and density of soil present in the reactors. Water was passed through the test cylinders in the form of steam at two quantities including 2PV (two pore volumes) and 6PV (six pore volumes). Once the soil reached the approximate treatment temperature of 100°C, steam was introduced into the soil reactor. When approximately one half of a PV had passed through the reactor, KEMRON began pressure cycling as outlined in the TSWP.

Test data, including information regarding total test time, total duration of steam injection, pressurization cycles performed, pressurization times, maximum soil temperature, pressure and temperature increases experienced during each cycle, and collected effluent pH is summarized in **Tables 3 and 4**.

3.1.1 2PV SEE Testing

Approximately 1,295 grams of site soil was compacted into the test reactor to a density similar to that determined during untreated soil characterization, and the sample pore volume was calculated based on the soil porosity and the volume of soil in the test reactor. The test cylinder was attached to the treatment system and testing was initiated on June 22, 2015. A total of 320.02 ml of water, based on the calculated pore volume of the soil material in the test reactor, was passed through the test cylinder in the form of steam. Review of the testing data indicates that the site soil reached a temperature of 95.1°C after approximately 2.5 hours of heating. The

steam valve was opened and steam began flowing into the treatment reactor. Steam was passed through the sample for 3.2 hours prior to beginning pressure cycling. Review of **Table 3** shows that over the course of testing, a total of 5 pressure cycles were applied to the test system. The pressurization times ranged from 46 to 98 minutes which were longer than anticipated. Note that Cycle 5, which took only 46 minutes, was shortened due to the depletion of all of the water in the steam generator. During the pressurization cycles the soil experienced pressure increases ranging from 2.1 to 5.4 PSIG, and temperature increases ranging from 8.3°C to 3.5°C. Both the pressure and temperature increases are directly correlated to the pressurization cycles.

The total duration of the 2PV SEE test was 22.17 hours, and steam was injected into the soil for 9.62 hours of that duration. KEMRON collected a total of 320 ml of effluent from the SEE test. The condensate had a slight brown color and had a distinct petroleum odor and had a material pH of 6.85 standard units. A graphical presentation of temperature monitoring activities is shown in **Figure 1**. Figure 1 shows the process components including steam generator, steam oven, soil, and soil oven temperatures collected from the thermocouple dataloggers.

3.1.2 6 PV SEE Testing

KEMRON compacted 1,352 grams of the untreated site material into the cylindrical reactor to the approximate untreated soil density and was attached to the treatment system, and the soil pore volume was calculated based on the soil porosity and the volume of soil present in the reactor. A total of 951 ml of de-ionized water, calculated based on the 6PV target, was placed into the steam generator. Testing was initiated on June 24, 2015 by heating the steam generator and the soil reactor to the target temperature of approximately 100°C. Review of the 6PV SEE testing data shows that a total of 2.35 hours were required to heat the soil to the target temperature. The steam influent valve was then opened and steam was allowed to pass into the soil reactor. After an additional 78 minutes, KEMRON had collected the required 0.5PV of effluent and pressure cycling was initiated. A total of 5 pressure cycles were achieved on Day 1 of the treatment simulation at which time the shutoff valves located on either end of the soil reactor was closed and heating was suspended overnight. On Day 2 the soil and steam heating commenced and once the appropriate soil and steam temperatures were achieved, pressure cycling was resumed. An additional 10 pressure cycles were conducted. The data presented in **Table 3** shows that the 6PV SEE test experienced 15 cycles of pressurization. The pressurization times ranged from 25 to 88 minutes, and pressure increases ranged from 5.0 to 7.6 PSIG. Temperature increases of 7.9 to 11.9°C were accomplished from pressure cycling.

The total duration of the 6PV SEE testing was 46.3 hours and steam was introduced into the soil material for 13.88 hours. A total of 955 ml of condensate was collected during testing. The collected condensate was tan brown in color with a distinct layer of LNAPL on the surface of the condensate. Additionally, the condensate had a distinctive chemical and petroleum odor and had a material pH of 6.67 standard units. Temperature monitoring activities using thermocouples and multi-channel dataloggers are included in **Figure 2**.

3.2 Hot Water Flushing

Hot water flushing was performed on the site material in accordance with the protocol outlined in **Section 4.0** of the TSWP. The two tests were performed using feed water heated to a temperature of approximately 55 °C with pore volume water introductions equal to 15 and 30PV. Note that the quantities of water necessary to achieve the targeted PV values were calculated based on the volume of the soil material inside the test reactors utilizing the modified moisture content determined from untreated moisture testing at 300°C. The heated flush water was injected into the soil reactor at a rate of approximately 10PV/6 hours. Tap water exhibiting a material pH of 6.9 standard units (s.u.) was heated to the appropriate target temperature using a laboratory heating magnetic stir plate. The soil was compacted into a stainless steel cylindrical treatment column which was placed into a laboratory oven and heated. The heated water was then pumped through the soil from the top of the cylinder to the bottom, at a rate equal to approximately 4.5 milliliters per minute (ml/min) which equals to 10 PV per work day, approximately 6 hours. Note that in order to complete the 15 PV HWF test in a single day, the heated water feed rate was increased to approximately 7.5 ml/min. The effluent water and any off-gases were passed through a cold water condenser and collected in batches of approximately 1,000ml, and composited into a single container for each test conducted. Following the introduction of the appropriate quantity of hot water KEMRON performed pH testing on the effluent water from each evaluation.

A summary of information collected during the HWF testing is presented in **Table 5**. This table presents the total time that heated water was passed through the site soil, the minimum, maximum and average temperature of the soil material during flushing, and the pH of the composited effluent water following testing.

3.2.1 15 and 30 PV 55°C Hot Water Flush

KEMRON conducted both the 15 and 30 PV HWF evaluations simultaneously using a single heating oven with two separate treatment systems. Each test cylinder was charged with an aliquot of the site soil which was compacted into the test reactor to the approximate density determined during untreated soil material characterization, and the pore volume of each soil was calculated based on the soil porosity and the volume of soil in each test reactor. The reactors were then connected to the treatment system consisting of a heated water vessel, peristaltic pump for transfer of the heated water into the reactor, and an effluent / off-gas collection system including a cold water condenser and condensate collection vessel. Prior to soil heating and water introduction, KEMRON performed a leak test on both systems by pressurizing the systems to approximately 5.0 psi using breathing quality compressed air. Over a 10 minute pressurization period KEMRON did not observe any drop in pressure and the systems were determined to be leak free.

Testing was initiated on 6/15/2015 by beginning heating of the feed water and the test soil. The 15PV HWF test was completed by injecting a total of 2,644 ml of heated water over a period of 333 minutes into the test reactor, an average water injection rate of 7.94 milliliters per minute (ml/min). The injection rate was checked periodically throughout the testing to maintain a fairly consistent flow rate. For the 30PV HWF simulation a total of 4,902 ml of heated water was injected into the reactor over a period of 3 days using a peristaltic pump. Over the course of the

3-day test KEMRON did observe slight variations in the hot water injection rate. Specifically, on day one 1,409 ml of water was injected over a period of 305 minutes, an injection rate of 4.62 ml/min, on day two 1,765 ml of heated water was injected over a period of 410 minutes, an injection rate of 4.3 ml/min, and on day three the remaining 1,728 ml of flush water was injected for 325 minutes, an average flow rate of 5.3 ml/min. The injection rate was checked periodically throughout the testing to maintain a fairly consistent flow rate. During periods when water was not being pumped through the system, the feed water was not heated and the soil reactor was isolated by closing valves on both ends of the soil reactor, and the oven temperature was reduced. Graphical presentations of temperature monitoring activities for the two HWF tests are presented in **Figures 3 and 4**. During the HWF testing KEMRON did not observe any visual evidence of NAPL present in the collected effluent waters.

Tables

TERRATHERM
ENSAFE BETH PAGE
KEMRON PROJECT No. SH0582

TABLE 1

UNTREATED PHYSICAL PROPERTIES TESTING

TESTING PARAMETER	TEST METHOD	UNIT	SAMPLE
			Site4TS-NAPL (Soil)
Moisture Content	ASTM D2216		
ASTM Moisture Content		%	9.96
Percent Solids		%	90.95
Modified Moisture Content*	ASTM D2216 Mod.*		
ASTM Moisture Content		%	13.50
Percent Solids		%	88.10
Bulk Unit Weight	ASTM D7263	pcf	129.6
Specific Gravity	ASTM D854		2.42
Flash Point	ASTM D3278	°F	125.0
Porosity	ASTM D7263 X1 (Calculated)	%	22.0
Porosity Modified	ASTM D7263 X1 Mod (Calculated)	%	24.4

Notes:
% = Percent
pcf = pounds per cubic foot
°F = Degrees Fahrenheit
*Oven temperature increased to 300°C to remove NAPL from pore space
Modified Porosity was calculated using the 300C moisture content value.

TERRATHERM
ENSAFE BETH PAGE
KEMRON PROJECT No. SH0582

TABLE 2

NAPL PHYSICAL PROPERTIES TESTING

TESTING PARAMETER	TEST METHOD	UNIT	SAMPLE
			Site4TS-NAPL MW-02
Specific Gravity	API RP40		
76°F			0.9881
122 °F			0.9836
194 °F			0.9778
Density	ASTMD1481		
76°F (26.1 C)		g/cc	0.9854
122 °F (50 C)		g/cc	0.9719
194 °F (90 C)		g/cc	0.9439
Interfacial/Surface Tension	ASTM D971	Dynes/cm	
75°F (23.9 C)			35.7
122°F (50 C)			30.6
151°F (66.1 C)			29.1
Flash Point	ASTM D3278	°F	105
Viscosity	ASTM D445		
Centistokes			
79°F			122000*
122 °F			1030
194 °F			98.7
Centipoise			
79°F			120000
122 °F			1000
194 °F			93.1

Notes:
*High viscosity at ambient temperature may indicate non-Newtonian flow;
actual viscosity at ambient temperature may be lower than that measured by glass capillary viscom
g/cc = grams per cubic centimeter
Dynes/cm = Dynes per centimeter
°F = Degrees Farenheit
C= Celsius

TERRATHERM
ENSAFE BETH PAGE
KEMRON PROJECT No. SH0582

TABLE 3

SUMMARY OF SEE TEMPERATURE MONITORING

Parameter	Sample ID									
	SITE4TS-SEE1 - 2PV					SITE4TS-SEE2 - 6PV				
	Pressurization Time (min)	Max Temp (^oC)	Pressure Increase (PSIG)	Temp Increase (^oC)	Depressurization Time (min)	Pressurization Time (min)	Max Temp (^oC)	Pressure Increase (PSIG)	Temp Increase (^oC)	Depressurization Time (min)
Pressure Cycle 1	80	105.5	5.2	6.6	10	88	108.3	6.1	8.3	10
Pressure Cycle 2	98	106.6	5.4	8.2	10	78	108.7	6.4	9.6	10
Pressure Cycle 3	82	106.3	5.3	8.3	11	51	108.8	6.2	9.9	16
Pressure Cycle 4	77	105.9	5.3	7.6	10	49	109.9	6.7	11.2	11
Pressure Cycle 5	46	101.9	2.1(3)	3.5	10	57	109.8	6.6	10.9	9
Pressure Cycle 6						48	109.8	6.8	10.4	10
Pressure Cycle 7						37	108.4	5.8	8.7	10
Pressure Cycle 8						51	110.3	7.0	11.1	10
Pressure Cycle 9						43	109.3	6.4	10.1	12
Pressure Cycle 10						41	108.8	6.1	9.7	10
Pressure Cycle 11						43	109.2	6.4	10.0	14
Pressure Cycle 12						52	110.9	7.6	11.9	11
Pressure Cycle 13						41	109.5	6.6	10.6	10
Pressure Cycle 14						45	110.6	7.3	10.8	13
Pressure Cycle 15						25	106.9	5.0	7.9	10
Total Duration of Testing (1)	22.17 Hours					46.3 Hours				
Total Time During Steam Injection (2)	9.62 Hours					13.88 Hours				
Final Soil Moisture Content (%)	6.68					7.18				
Collected Effluent pH (s.u.)	6.85					6.67				

Notes

(1) - The total duration of testing was determined from the time heating was first initiated until the sample reached ambient temperature when testing was completed.

(2) - This value represents the actual amount of time the soil reactor was in contact with steam, including times during pressurization.

(3) - pressure cycle 5 had lower pressure increase due to steam box being empty and no longer producing steam.

TERRATHERM
ENSAFE BETH PAGE
KEMRON PROJECT No. SH0582

Table 4

SUMMARY OF SEE THERMAL TESTING

Test Parameter	Unit	Sample ID	
		Site4TS-SEE1 (2PV)	Site4TS-SEE2 (6PV)
Sample Density	lbs/ft^3	128.0	129.7
Sample Porosity	%	25.3	24.3
Initial Moisture Content	%	9.96	9.96
Treatment Temperature	°C	100.0	100.0
Length of Treatment*	Hours	22.17	46.30
Intial Weight of Soil	g	1,295.5	1,352.0
Final Weight of Soil	g	1,323.5	1,350.5
Change in Weight	g	+ 28.0	- 1.5
Final Moisture Content	%	6.68	7.18
Actual PV Injected		1.99	5.99
Condensate pH	s.u.	6.85	6.67
Total Condensate Collected	g	318.52	948.7
	mL	320.0	955.0

Notes:
lbs/ft^3= pounds per cubic foot
%= percent
°C= degrees celsius
g= grams
mL= milliliters
s.u. = standard units
*Length of treatment determined from time initial heating started until sample reached ambient temperature when testing was completed

Applied Technologies Group,
KEMRON Environmental Services, Inc.

TERRATHERM
ENSAFE BETH PAGE
KEMRON PROJECT No. SH0583

Table 5

Summary of Hot Water Flush Temperature Monitoring

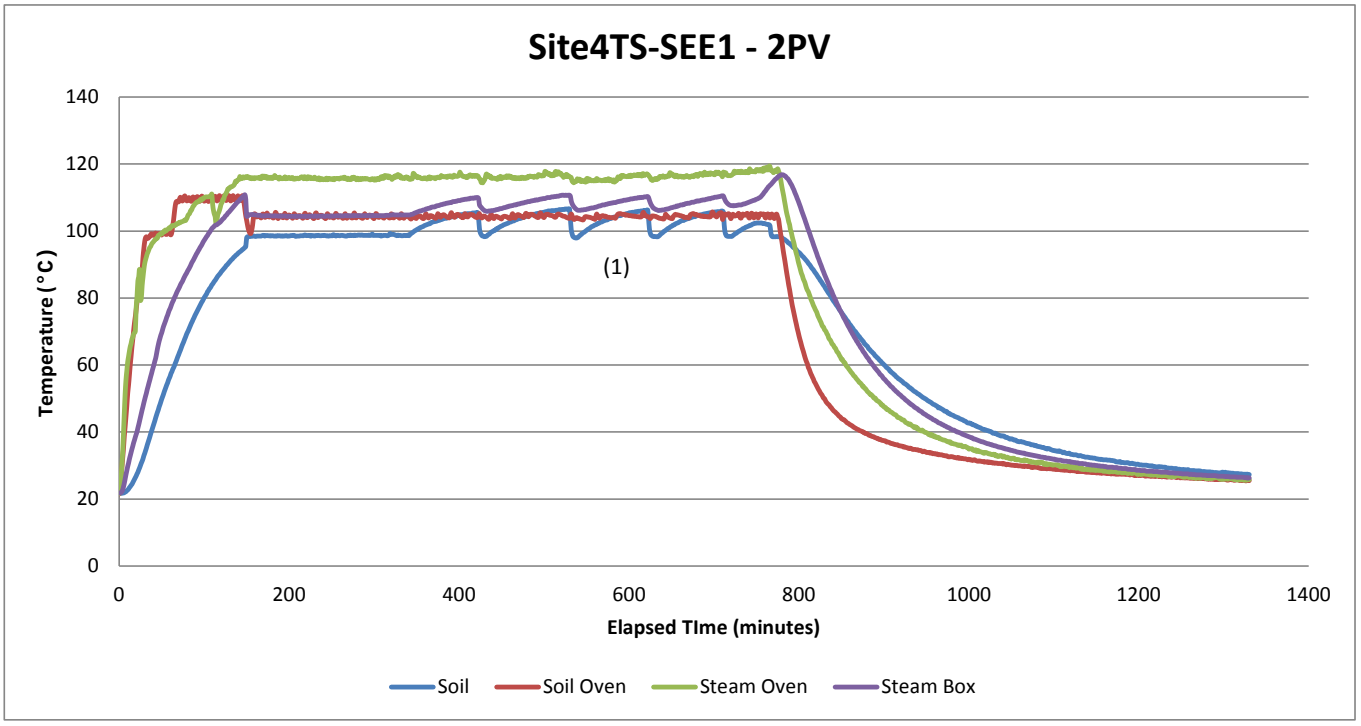
Sample	Time at Temperature (min)	Soil Temperature During Treatment			Final Soil Moisture	Effluent pH
		Minimum (°C)	Maximum (°C)	Average (°C)	(%)	(s.u.)
15 PV Water Flush	333	52.9	55.3	54.6	8.64	5.99
30 PV Water Flush						
Interval 1	305	54.2	56.5	55.8		
Interval 2	410	54.0	56.3	55.7	10.10	6.60
Interval 3	325	53.7	56.1	55.3		

Figures

TERRATHERM
ENSAFE BETH PAGE
KEMRON PROJECT No. SH0582

Figure 1

Site4TS-SEE1
Temperature Monitoring Graph

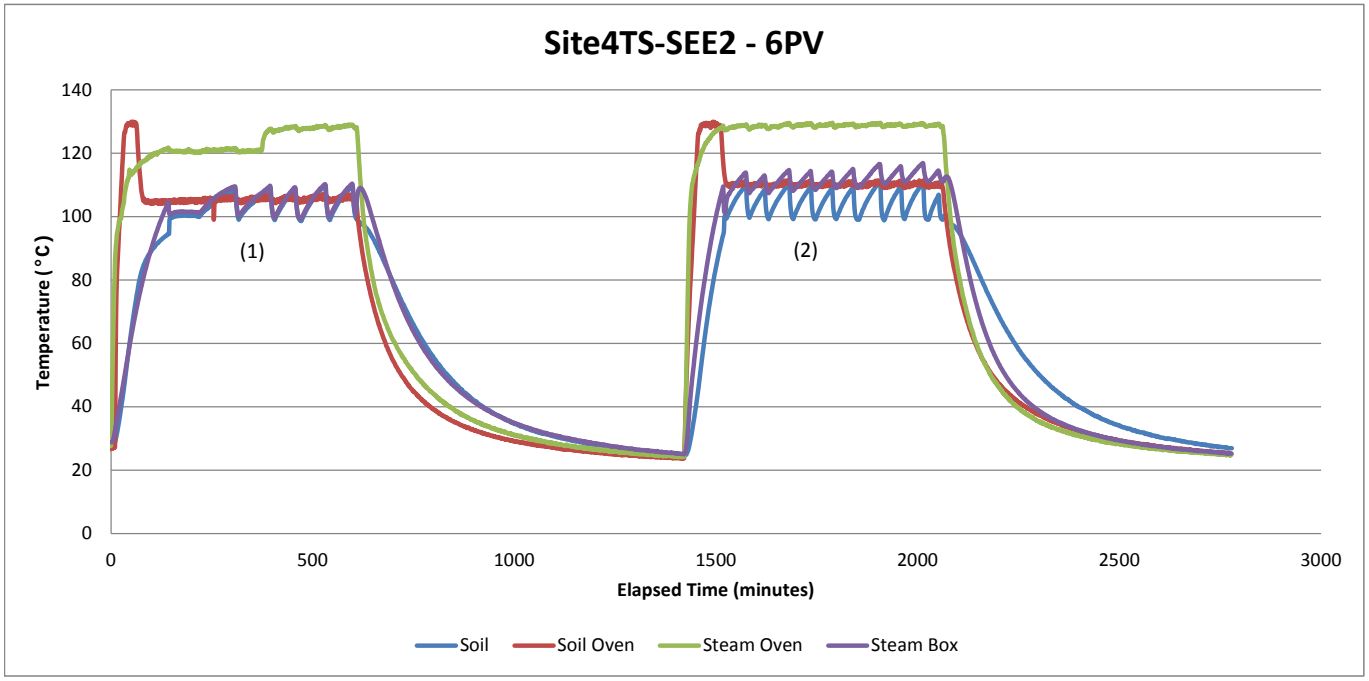


(1) - Pressure cycles 1 through 5

TERRATHERM
ENSAFE BETH PAGE
KEMRON PROJECT No. SH0582

FIGURE 2

Site4TS-SEE2
Temperature Monitoring Graph

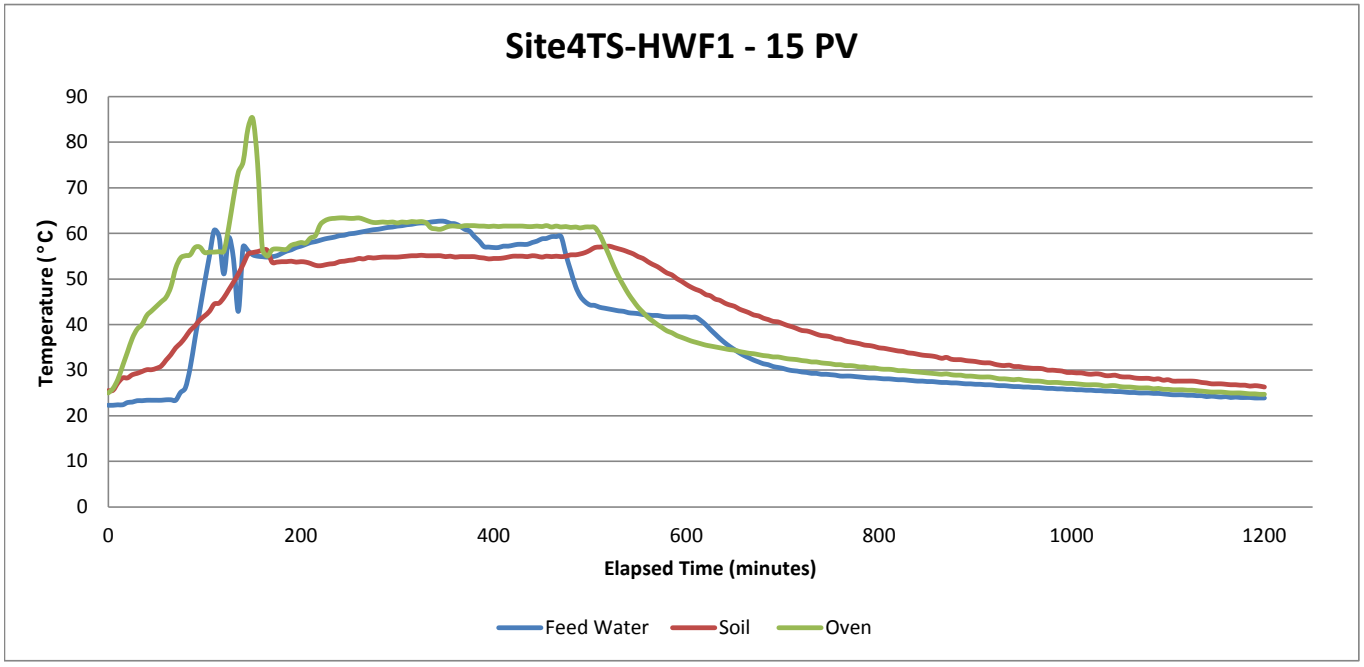


(1) - Pressure cycles 1 through 5
(2) - Pressure cycles 6 through 15

TERRATHERM
ENSAFE BETH PAGE
KEMRON PROJECT No. SH0582

Figure 3

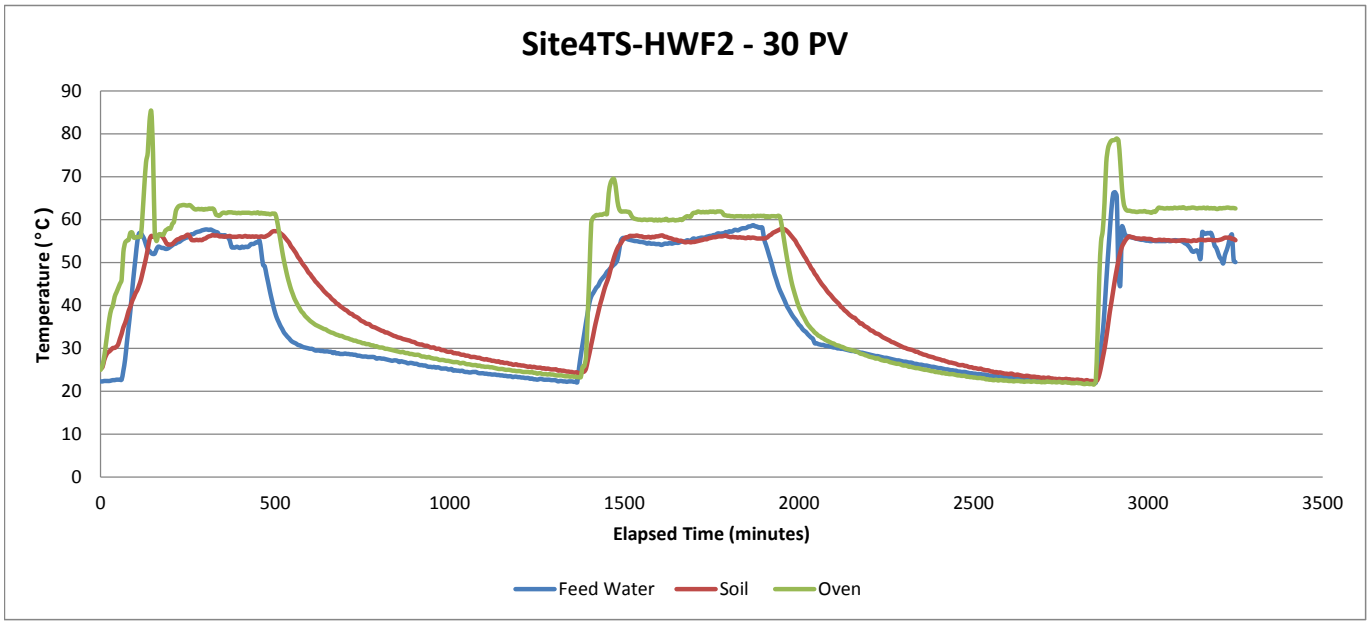
Site4TS-HWF1
Temperature Monitoring Graph



TERRATHERM
ENSAFE BETH PAGE
KEMRON PROJECT No. SH0582

Figure 4

Site4TS-HWF2
Temperature Monitoring Graph



Appendix A: Treatability Work Plan

DRAFT WORK PLAN

Thermal Treatability Study
NWIRP Site #4
Bethpage, NY
Resolution Consultants, Inc.

Prepared by:

TerraTherm, Inc.
151 Suffolk Lane
Gardner, MA 01440
978-730-1200

Kemron Environmental Services
1359-A Ellsworth Industrial Blvd
Atlanta, GA 30318
404-636-0928

13 May 2015

I. Table of Contents

1. Introduction 3
2. Site Geology & Background 3
3. Sample Collection, Shipping & Storage 4
4. Analytical Testing of the Untreated Materials 5
5. LNAPL Generation 6
6. Thermal Treatment Testing 7
a. SEE Tests 8
b. HWF Tests 12
7. Analytical Testing of Thermally Treated Materials 13
8. Reporting 17

1. Introduction

A bench-scale treatability study will be performed on contaminated soil from Site 4 of the Naval Weapons Industrial Reserve Plant, Bethpage located in Bethpage New York:

- Coarse Sand

Site 4 soils are contaminated with the following:

- #6 Fuel Oil, present as light non-aqueous phase liquid (LNAPL)
    - Chemicals of Concern include Polycyclic Aromatic Hydrocarbons (PAHs).

It should be noted that LNAPL is thought to be present in a solidified (or, at a minimum, very viscous) form in the impacted soil.

The objectives of the treatability study are as follows:

#1: Understand LNAPL characteristics (density, viscosity, surface tension) over a range of temperatures, as applicable

#2: Determine interim removal rates of PAHs from bench-scale thermal simulations

#3: Determine extent of PAH removal from bench-scale thermal simulations

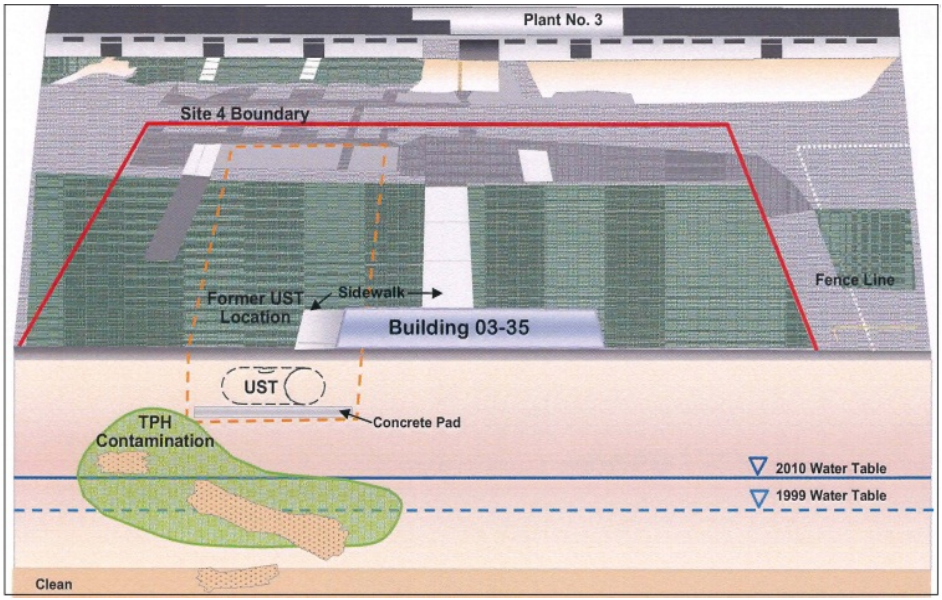
#4: Understand the leaching potential of PAHs following the bench-scale thermal simulations

The following sections discuss the bench-scale testing that will be completed to evaluate the objectives presented above. Additional details are presented in the tables attached to this plan. The following acronyms defined here are referred to in the remainder of this document:

- Steam Enhanced Extraction (SEE)
- Hot Water Flush (HWF)

2. Site Geology & Background

Site 4 was impacted by a release of No. 6 Fuel Oil from underground storage tanks between 1940s and 1982. The release resulted in petroleum-contaminated soil and semi-solid petroleum product at a depth of approximately 20 to 71 ft bgs. Free product is not readily water soluble, lighter than water, generally very viscous and is mostly adsorbed onto site soils.



General site geology at the site includes the following:

- Gravel fill material at ground surface
- Fine to coarse sand with trace clay, gravel and silt to ~80 ft bgs (treatment from 20 – 71 ft bgs)

3. Sample Collection, Shipping & Storage

Resolution Consultants will collect impacted soil that will be used for the bench test in the field. The soil will be homogenized prior to sending to KEMRON. In addition, Resolution Consultants will be sending the (homogenized) soil for a field baseline chemical analysis.

It is possible that LNAPL may be mobile enough to collect a sample from existing wells on site. If this is the case, product may be collected and shipped directly to PTS for analysis.

It should be noted that all sample collection, transport/shipping, labeling, receiving, storage, and preparation will be performed in accordance with the following Standard Operating Procedures (SOPs) supplied by Resolution Consultants to TerraTherm via email on May 4, 2015 (and thus provided by TerraTherm to KEMRON via email on May 5, 2015). These procedures are generally considered good laboratory practice. Any exceptions to these procedures will be outlined in this Work Plan.

- 3-02 Logbooks
- 3-03 Recordkeeping, Sample Labeling, and Chain of Custody
- 3-04 Sample Handling Storage and Shipping
- 3-06 Equipment Decontamination
- 3-16 Soil and Rock Classification

4. Analytical Testing of the Untreated Soil Material

As the first step of this treatability study, untreated soil characterization will be performed to provide a baseline for evaluating the effectiveness of contaminant removal for the various thermal treatment simulations included in this study and to provide physical/geotechnical parameters to prepare, in part, the necessary calculations for thermal testing protocols. Chemical baseline testing will be performed on each thermal test chamber (i.e. 2 SEE columns and 2 HWF columns).

The following testing will be performed on the untreated soil provided for the study, as shown in Table 1. It should be noted that for all chemical VOC/SVOC testing, the laboratory will provide sample chromatograms/total ion chromatograms.

In addition to the untreated soil testing performed at KEMRON, a “field baseline” will also be submitted by Resolution Consultants. If VOCs and/or metals are not significantly detected in the field baseline, VOCs and/or metals analyses may be omitted from the thermal treatability study.

Table 1. Characterization of untreated materials

	Number of Samples	Matrix	Method	# analysis / sample	Total # of samples	Analytical Lab
SVOCs: PAHs only	4	Soil	EPA SW846 8270D	1	4	Katahdin
SPLP SVOCs (PAHs only)	4	Soil	EPA SW846 1312/8270D	1	4	Katahdin
VOCs (if needed)	4	Soil	EPA 8260C	1	4	Katahdin
SPLP VOCs (if needed)	4	Soil	EPA 1312/8270D	1	4	Katahdin
TAL Metals (if needed)	4	Soil	EPA 6010C/7471B	1	4	Katahdin
SPLP Metals (if needed)	4	Soil	EPA 1312/6010C/7471B	1	4	Katahdin
Bulk Density	1	Soil	ASTM D7263	1	1	KEMRON
Solid Specific Gravity	1	Soil	ASTM D854	1	1	KEMRON
Moisture Content	1	Soil	ASTM D2216	1	1	KEMRON
Porosity	1	Soil	Calculation	1	1	KEMRON

5. LNAPL Generation

A sufficient amount of site soil contaminated with solidified LNAPL will be provided to ensure that LNAPL quantities generated from the following procedure, or similar, (performed by KEMRON in Atlanta GA) are sufficient for physical property testing stated later in this section:

- Necessary quantities (as estimated and provided for by Resolution Consultants) of site soil contaminated with solidified LNAPL will be heated to temperatures no greater than 100°C unless authorized by TerraTherm/Resolution Consultants. KEMRON will provide observations of LNAPL production and TerraTherm/Resolution Consultants will determine whether increasing temperatures to facilitate LNAPL release is required.
- During heating, materials will be agitated by physical means, i.e., stirring
- The observed phase separation will occur
- Liquefied LNAPL will be removed by decanting to achieve the final quantities required for testing, i.e., 2L

Materials will be shipped to PTS for analysis.

6. LNAPL Testing

LNAPL recovered from the site soil will be subjected to the following testing to observe heating effects on this material:

1. LNAPL will be tested at ambient temperatures, 50°C and 90°C; and the following will be measured at each temperature:

- Density
- Viscosity

2. LNAPL will be tested for the following at ambient temperatures and 50°C.

- Surface Tension

Note, accurate measurements at 50°C may not be attainable; therefore, a slightly lower temperature may be reported instead. Testing will include air/LNAPL, water/LNAPL, and water/air as a reference. Currently tap water will be used for the water source unless site groundwater is provided.

Density, viscosity and surface tension will be performed by PTS Laboratories in Santa Fe Springs under the direction of KEMRON. The data collected will directly contribute to full-scale expectations when heating LNAPL, i.e., magnitude of viscosity reductions and recoverability of the product.

3. Flash Point

Flash point will be tested by KEMRON, unless LNAPL is mobile enough to be collected from wells onsite and shipped directly to PTS for analysis. In this case, PTS will perform the flash point analysis.

Table 1. Characterization of LNAPL

	Number of Samples	Matrix	Method	# analysis / sample	Total # of samples	Analytical Lab
Density @ 3 temps (ambient, 50C, 90C)	1	NAPL	ASTM D7263 mod.	3	3	PTS Laboratories
Viscosity @ 3 temps (ambient, 50C, 90C)	1	NAPL	ATG-SOP-039	3	3	PTS Laboratories
Surface Tension @ 3 temps (ambient, 50C, 90C)	1	NAPL	ASTM D971	3	3	PTS Laboratories
Flash Point	1	NAPL	ASTM D3278	1	1	KEMRON (or PTS)

7. Thermal Treatment Testing

The heating study includes one heating method as described below. This heating method is included based on an understanding of the site geology/hydrogeology and represents simulations of the most likely full-scale in-ground treatment options.

An overview of the thermal testing is shown in Table 2.

Table 2. Overview of thermal treatability testing

Test	Notes	Duration	Samples treated	Total # of thermal tests
15PV Hot Water Flush @ 55°C		Approx. 1 day	• Coarse Sand	1
30PV Hot Water Flush @ 55°C		Approx. 3 days	• Coarse Sand	1
SEE- 2PV Flush		Approx. 1-3 days	• Coarse Sand	1
SEE- 6PV Flush		Approx. 3-5 days	• Coarse Sand	1

a. SEE Tests

Two Steam Enhanced Extraction (SEE) tests will be performed on the homogenized soil sample: 2x pore volume injection and 6x pore volume injection. Steam Enhanced Extraction (SEE) testing will be conducted using cylinder shaped reactors.

To facilitate the pore volume calculations, the porosity of the test sample should be measured. Total wet mass and volume of material will be recorded prior to testing.

Steam is generated by placing a box reactor containing the appropriate quantity of water calculated based on the pore volumes of steam to be passed through the soil into an oven separate from the soil test oven. This oven will be set to a temperature of approximately 110-115°C.

See Figure 1 for a schematic of the SEE treatment system, and Figure 2 for a photograph of the cylinder situated in an oven. Note that Figure 1 shows a tedlar bag collection for potential off-gas monitoring; however, off-gas monitoring is not planned for this project.

The SEE treatment cylinder is comprised of the following:

a) 2 end caps with ports to pass fluids through the test material
b) Thermal coupler ports along the length of the column for temperature monitoring

The SEE treatment column is vertical while packing so that the effluent side of the column is facing downward. The addition of clean sand at the top of the reactor, i.e., the steam inlet side, is used to ensure a completely filled reactor. A completely filled reactor is considered an industry standard for flow-through tests. The clean sand is prepared by sieving through a #60 sieve to obtain “coarse sand”. The sand will be washed with a 10%

nitric acid solution, followed by a DI water rinse. The sand will be dried at 110°C until placed in the reactors.

To begin, the column/cylinder is vertically situated in the oven with the bottom valve open and the top valve closed. The temperature of the oven containing the column/cylinder is turned to 95°C approximately 1 hour before testing is to begin. It is important to not dry the sample out at this point.

Once the soil has reached 95°C, the temperature of the oven is turned to 100°C and steam addition begins by opening the top steam inlet valve. When adding steam, steam breakthrough should occur following the addition of 0.5 pore volumes of steam as water or less. There will be observable steam in the effluent stream.

After the observed steam breakthrough occurs, the steam pressure cycling is performed by allowing the top steam inlet valve to remain open, and closing the effluent on/off valve for a period of time (approximately 10-20 minutes), until the pressure and temperature (can be measured by temperature only) in the entire steel column has stabilized:

i. at approximately 5-10 psig; and
ii. at approximately 105-110°C.

Once the steady state is achieved:

i. the effluent valve is slowly opened to allow a controlled release of pressure;
ii. the column depressurizes;
iii. steam flows out of the bottom of the column for a minimum of 10 minutes into the condensing system;
iv. the pressure in the column drops to near atmospheric pressure;
v. the temperature drops to near 100°C; and
vi. a steady state is achieved, i.e, steady temperature and pressure.

To initiate a new pressure cycle, the effluent valve is closed again, and the process above is repeated. Each pressure cycle is estimated to last approximately 20-40 minutes.

Once the project specific prescribed volume of steam (2 pore volumes for the first test, and 6 pore volumes for the second test) is added over the specified duration the sample testing is completed. Following the testing, the valves on both ends of the column are closed, and the sample is allowed to cool to room temperature. The final weight and volume of the treated test residuals is measured and recorded prior to post-test sampling and analysis (take care to include the same end caps and valves as used before the SEE testing so the difference in weight is equal to a difference in sample weight).

Throughout the entire duration of SEE testing (i.e., from ambient temperatures to reaching treatment temperatures to cooling back to ambient temperature), the temperature of the soil is continuously monitored. Temperature monitoring is recorded at a minimum of one minute intervals using thermocouples with a data logger (or equivalent unit).

During the initial steam breakthrough and during the second half of the pressure cycling, effluents should be observed in the collection system:

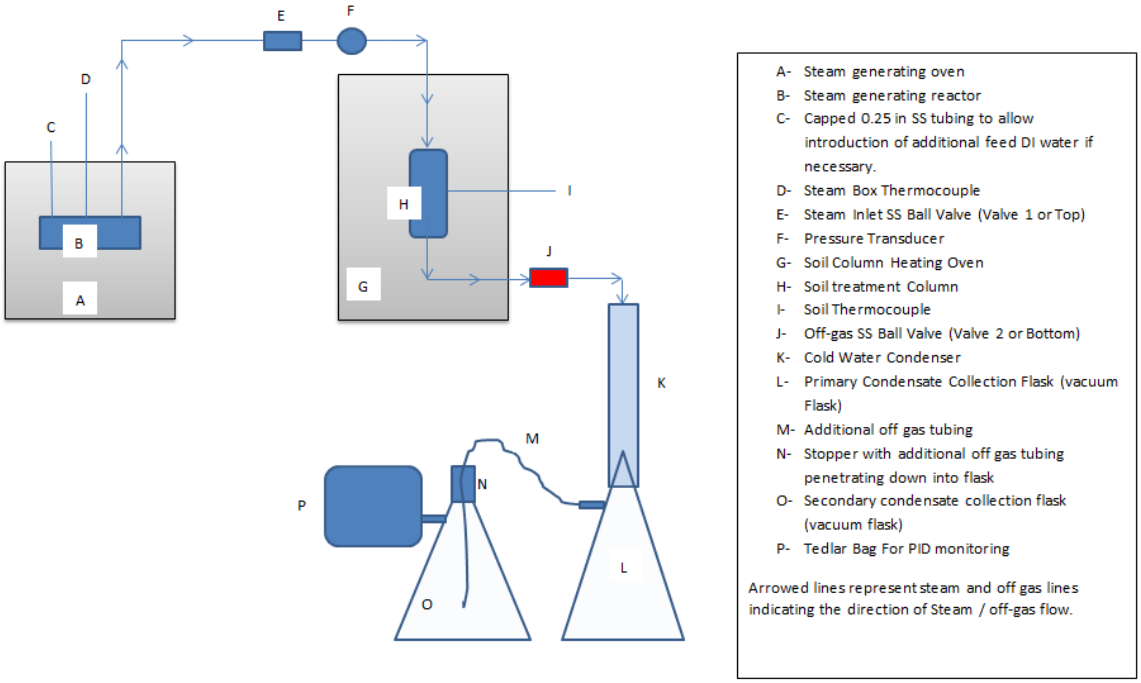
I. Steam will be observed in the condenser during steam breakthrough after the initial introduction of steam into the system
II. Steam and condensate/NAPL will be observed during the pressure release phase of pressure cycling (i.e., second half of pressure cycling)
III. The volume of aqueous condensate collected will be monitored as a check on the pore volume requirements stated in the Objectives for the test (2 PV for the first test, 6 PV for the second test).

Quality Control / Corrective Action Indicators include:

- Close monitoring of temperature to ensure expected temperatures are achieved and maintained;
- Notice any unusual spikes in temperature which may indicate the sample has dried out (i.e., all moisture removed) and requires correction (i.e. repeating testing);
- Ensure that the steam generated for injection is indeed steam and not hot water; and
- Ensure that steam is exiting the reactor not hot water which would also require correction

At the conclusion of each thermal evaluation, the following will be completed:

- The sample reactor will be removed from the oven, sealed, and chilled to 4°C prior to homogenizing;
- Samples will be homogenized and subsampled for parameters listed in Table 3;
- The effluent liquids from the evaluation will be collected and weighed. Any organic phase present in the effluent will be separated and quantified apart from the aqueous phase. Effluent liquids and any NAPL present will be measured, weighed, and pH will be recorded.



Note that the arrowed lines representing steam introduction and off-gas transfer will be wrapped in electric heat tape to keep the vapors in the vapor state, thus reducing the potential for condensing in the lines. NOTE: for this project, no off-gas monitoring will be conducted.

Figure 1. SEE treatment schematic

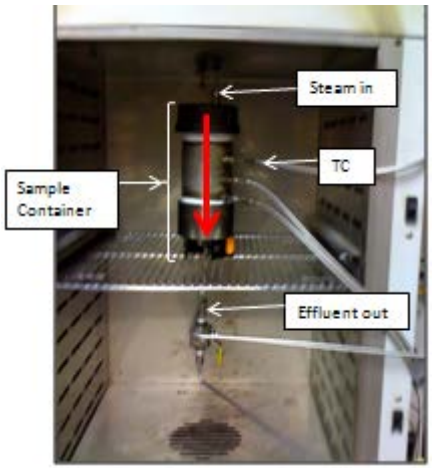


Figure 2. Photograph of SEE treatment reactor in oven

b. HWF Tests

Hot water flushing at 55°C will be evaluated as treatment for the site material. Two different pore volume (PV) flushes will be evaluated: 15PV and 30PV. Hot water flushing rate will equal approximately 10 pore volumes per day in a 6-hour day.

The test sample preparation and equipment setup for the hot water flushing is very similar to the SEE testing. A stainless steel cylinder measuring 3 inches in diameter and 6 inches in length will contain the soil. A pre-cleaned and covered beaker will be placed on a heating / magnetic stirring plate to heat the water. The hot water flushing will be introduced from the top of the cylinder. This will ensure hot water contact with the entire sample and will allow for more accurate flow control.

A large glass beaker will be placed on a heating / magnetic stir plate and filled with the appropriate quantity of de-ionized water. The water will be heated to the operating temperature. The starting pH of the flush water will be confirmed to be near neutral and recorded on the data sheet. A thermocouple will be placed into the water heating reactor to ensure the appropriate water temperature is utilized. The saturated and spiked soil cylinder reactor will be placed into the same heating oven and connected to the treatment system (similar to SEE testing).

Once the soil in the reactor and the water reactor reaches the operating temperature (55°C), the air inlet and off-gas valves will be opened and a peristaltic pump will pump water from the water reactor into the soil cylinder reactor at a rate equal to 10 pore volumes (PV) of hot water per 6 hour day (1.666 PV/hour). For the 15PV test, the goal will be to complete the flushing in one day. For the 30 PV test, it is expected that the flushing will extend over multiple days. At the end of each 6 hour working day the valves will be closed and water injection and heating will be terminated. The next working day testing will commence again. This will be continued until a total of 30 PV of hot water has been passed through the system.

Off-gases and the hot water will be passed through a cold water condensing system and collected in a flush water collection flask. No off-gas monitoring is planned at this time.

At the conclusion of each thermal evaluation, the following will be completed:

- The sample reactor will be removed from the oven, sealed, and chilled to 4°C prior to homogenizing;
- Samples will be homogenized and subsampled for parameters listed in Table 3
- The effluent liquids from the evaluation will be collected and weighed. Any organic phase present in the effluent will be separated and quantified apart from the aqueous phase. Effluent liquids will be subjected to chemical analysis for the parameters listed in Table 3B.

8. Analytical Testing of Thermally Treated Materials

Tables 3A and 3B present an overview of the analyses planned for the thermally treated materials. Table 4 presents the required sample containers, sample volumes, and preservatives.

Each sample will be labeled with the prefix “Site4TS-*-**”. The first asterisk will be used to identify the initial test and filled in with one of the following abbreviations.

- Field Baseline — FB
- Steam Enhanced Extraction — SEE1 or SEE2 (Note: SEE1 = 2PV, SEE2 = 6PV)
- Hot Water Flush — HWF1 or HWF2 (Note: HWF1 = 15PV, HWF2= 30PV)

The double asterisk will be used to identify the individual components of the test according to the following abbreviations.

- Baseline — B
- Post Treatment — PT
- Leachate — L (Note: for HWF2 test [30PV], “first flush” and “final flush” will be collected as L1 and L2, respectively)

Table 3A. Analytical characterization of thermally treated materials (soil)

	VOCs 8260C	SVOCs 8270D	TAL Metals 6010C/7471B	SPLP VOCs 1312/8260C	SPLP SVOCs 1312/8270D	SPLP Metals 1312/6010C/ 7470A	Moisture Content (ASTM D2216)
Hot Water Flushing/Low Temperature Steam Extraction Test							
HWF 15PV Flush Baseline	X[2]	X		X[2]	X		
HWF 30PV Flush Baseline	X[2]	X		X[2]	X		
HWF 15PV Flush Final	X[2]	X	X[3]	X[2]	X	X[3]	X
HWF 15PV Flush Final	X[2]	X	X[3]	X[2]	X	X[3]	X
Aqueous Trip Blank[1]	XX[2]			XX[2]			
Total	**6**	**6**	**4**	**6**	**6**	**4**	
High Temperature Steam Extraction Test							
SEE 2PV Flush Baseline	X[2]	X		X[2]	X		
SEE 6PV Flush Baseline	X[2]	X		X[2]	X		
SEE 2 PV Flush Final	X[2]	X	X[3]	X[2]	X	X[3]	X
SEE 6PV Flush Final	X[2]	X	X[3]	X[2]	X	X[3]	X
Aqueous Trip Blank[1]	XX[2]	XX	XX	XX[2]	XX	XX	
Total	**6**	**6**	**4**	**6**	**6**	**4**	**4**

Notes:

VOC - volatile organic compound
SVOC - semivolatile organic compound
TAL - target analyte list
SPLP - Synthetic Precipitation Leaching Procedure

[1] Trip blanks (VOCs only) are required to be sent with every shipment to the laboratory. The number of trip blanks shown in this table is an estimate and may vary depending on frequency and timing of shipments to the laboratory.

[2] VOC analysis may be omitted based on the results of the field baseline sample. If VOCs are not significantly detected, the analysis will be omitted.

[3] Metals analysis may be omitted based on the results of the field baseline sample. If Metals are not significantly detected, the analysis will be omitted.

Table 3B. Analytical characterization of thermally treated materials (Aqueous)

	VOCs 8260C	SVOCs 8270D	TAL Metals 6010/7470A	pH (KEMRON)
Leachate Samples				
HWF 15PV Flush Column 1				X
HWF 30PV Flush Column 2-- First	X	X	X	X
HWF 30PV Flush Column 2-- Final	X	X	X	X
SEE 2PV Flush Column 1				X
SEE 6PV Flush Column 2				X
Total[1]	**2**	**2**	**2**	**6**

Notes:
VOC - volatile organic compound
SVOC - semivolatile organic compound
TAL - target analyte list
[1] Trip blanks are required for every shipment to the laboratory. Trip blanks are not shown for the leachate samples because it is assumed they will be submitted with the soil samples. The number of trip blanks shown in this table is an estimate and may vary depending on frequency and timing of shipments to the laboratory.

Table 4. Sample Containers, Preservation, and Sample Volumes (provided by Katahdin Analytical)

Matrix	Analytical Group	Analytical and Preparation Method/SOP Reference	Containers	Sample volume	Preservation Requirements	Maximum Holding Time
Soil	VOCs	SW-846 5035, 8260B	3 X40-ml VOA vials	5 g	5 ml reagent water, cool to ≤ 6 °C	48 hours to freezing, 14 days to analysis
			1 X 2-oz wide-mouth jar for percent moisture only if VOA only sample	5 g	Cool to ≤ 6 °C	
			1 X 40-ml VOA vial	5 g	5 ml methanol, cool to ≤ 6 °C	
	SVOCs	SW-846 3540C or 3550C, 8270D, 8270D_SIM	1 X 4-oz wide-mouth jar	30 g	Cool to ≤ 6 °C	14 days to extraction, 40 days to analysis
	Metals	SW-846 3050B, 6010C		2 g	None	6 months to analysis
		SW-846 3050B, 6020A		2 g	None	
		SW-846 7471A		0.6 g	Cool to ≤ 6 °C	28 days to analysis
Water	VOCs	SW-846 5030B, 8260B	3 X 40-milliliter (mL) VOA vials	40 milliliter (mL)	HCl to pH < 2, cool to ≤ 6 ºC.	14 days to analysis
	SVOCs	SW-846 3510C or 3520C, 8270D, 8270D_SIM	2 X 1- liter (L) amber glass bottles **	1000 mL	Cool to ≤ 6 °C	7 days to extraction 40 days to analysis
	Metals	SW846 3010A, 6010C, 6020A	1 X 250-mL polyethylene bottle	50 mL	HNO_3 to pH<2	6 months to analysis
				50 mL		
		SW7470A		25 mL		28 days to analysis

** = 2L of sample may not be possible to obtain in some cases. KEMRON/TerraTherm will work with the analytical laboratory to determine the absolute minimum sample volume required (usually 1L) to obtain meaningful results without highly elevated reporting lismit.

9. Reporting

Before initiating the bench-scale testing, a kick-off meeting will occur between Resolution Consultants, TerraTherm and KEMRON where an outline of the study parameters will be provided.

During the study, various data tables will be provided, i.e., untreated and treated analytical and physical property testing.

Upon completion of the study, a Treatability Study Report will be prepared by Kemron to present the results. Reference will be made where appropriate to the testing protocols as presented in the work plan. The attachments to the report will include data summary tables, thermal worksheets, thermal temperature logs, photos, analytical and physical property testing reports and complete data attachments.

The project completion schedule goal is to have the Treatability study completed in a matter of a few weeks. Expedited turnaround time is authorized for all analytical samples.

Mobilization and Field Sample Collection	4 days	Thu 5/28/15	Tue 6/2/15
Completion of Bench Test	10 days	Wed 6/3/15	Tue 6/16/15
Lab Analysis/Results - Expedited TAT	5 days	Wed 6/17/15	Tue 6/23/15
Internal Draft Bench Test Summary Report Submitted to Navy	12 days	Wed 6/17/15	Thu 7/2/15

Appendix B: Material Chain of Custody

SAMPLE CHAIN-OF-CUSTODY RECORD
TREATABILITY STUDIES

KEMRON ENVIRONMENTAL SERVICES

KEMRON ENVIRONMENTAL SERVICES, INC.
1359-A Ellsworth Industrial Boulevard
ATLANTA, GEORGIA 30318
(404) 636-0928 FAX (404) 636-7162
WWW.KEMRON.COM

CLIENT PROJECT NAME: Bethpage Thermal Study

CLIENT PROJECT #:

CLIENT CONTACT: Jeff Parillo

KEMRON PROJECT MANAGER: Tommy Jordan

PHONE#: EXT

EMAIL: Jparillo@ensafe.com

REPORT TO: Alyson Fortune, TerraTherm

PHONE: (978) 730-1241

afortune@terratherm.com

SAMPLED BY: PRINTED NAME

SAMPLED BY: SIGNATURE

ANALYSIS

KEMRON JOB NUMBER	CLIENT SAMPLE ID	SAMPLE DATE/TIME	SAMPLE PRESERVATIVE (IF APPLICABLE)	# / SIZE CONTAINERS	SEE Testing (2PV, 6PV)	Hot water flush (15PV, 30PV)	Flash Point Testing	
	Site4TS-NAPL	6/4/15	None	(2)-5 gallon Buckets	X	X		
	Site4TS-NAPL	6/4/15	None	(2)-4 oz. jars			X	

SAMPLES RELINQUISHED BY:	DATE/ TIME	SAMPLES RECEIVED BY:	DATE/ TIME
		James Moyer	6/5/15

COMMENTS/SPECIAL INSTRUCTIONS:

Refer to TerraTherm SOW for project scope details

Appendix C: Untreated Physical Properties Testing Data Sheets

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-NAPL
TESTING DATE:	06/09/15
TESTED BY:	JDM
TRACKING CODE:	A114_MC

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.3054	g	1.2979	g	1.3055	g
3. WT WET SOIL + TARE	14.7506	g	13.3660	g	13.5545	g
4. WT DRY SOIL + TARE	13.5782	g	12.2633	g	12.4147	g
5. WT WATER, Ww	1.1724	g	1.1027	g	1.1398	g
6. WT DRY SOIL, Ws	12.2728	g	10.9654	g	11.1092	g
7. ASTM MOISTURE CONTENT	9.55	%	10.06	%	10.26	%
8. PERCENT SOLIDS	91.28	%	90.86	%	90.69	%
9. AVERAGE ASTM MOISTURE CONTENT	9.96	%				
10. AVERAGE PERCENT SOLIDS	90.95	%				

UNIT WEIGHT DETERMINATION

DATA SHEET
ASTM D7263

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-NAPL
TESTING DATE:	6/9/15
TESTED BY:	JDM
TRACKING CODE:	A114_UW

UNIT WEIGHT (DENSITY)							
1. SAMPLE NO.	A		B		C		
2. WT OF MOLD (tare weight)	18.30	g	18.30	g	18.30	g	
3. WT OF MOLD + SOIL	446.00	g	446.00	g	445.00	g	
4. WT OF WET SOIL, W	427.70	g	427.70	g	426.70	g	
5. DIAMETER OF SPECIMEN, D	2.00	in	2.00	in	2.00	in	
6. HEIGHT OF SPECIMEN, H	4.00	in	4.00	in	4.00	in	
7. VOLUME OF SPECIMEN	12.57	in^3	12.57	in^3	12.57	in^3	
8. BULK UNIT WEIGHT	129.7	pcf	129.7	pcf	129.4	pcf	
9. BULK SPECIFIC GRAVITY	2.1		2.1		2.1		
10. AVERAGE BULK UNIT WEIGHT	129.6	pcf					
11. AVERAGE BULK SPECIFIC GRAVITY	2.1						

SOLID SPECIFIC GRAVITY

ASTM D 854
DATA SHEET

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
TESTING DATE:	6/9/2015
TESTED BY:	JDM
TRACKING CODE:	A114_GS
SAMPLE NO:	Site4TS-NAPL

SOLID SPECIFIC GRAVITY	
1. SAMPLE NUMBER	Site4TS-NAPL
2. FLASK NUMBER	1
3. TEMPERATURE	19.0 °C
4. WT. FLASK & WATER	184.55 g
5. WT. WATER, FLASK & SOIL	204.55 g
6. WT OF SOIL	20.00 g
7. CALIBRATION WATER & FLASK	355.28 g
8. DEAIRED SAMPLE	367.01 g
9. SPECIFIC GRAVITY	2.42
10. CORRECTION FACTOR K	1.0002
11. Gs @ 20 °C	2.42

TOTAL POROSITY

Report Form

By Calculation

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-NAPL
TESTING DATE:	6/9/2015
TESTED BY:	JDM
TRACKING CODE:	A114_POR

Total porosity and Pore Volume Calculation	
SAMPLE No.	Site4TS-NAPL
1. Bulk Density	129.6 lbs/ft^3
2. Moisture Content	9.96 %
3. Specific Gravity	2.42 -
4. Dry Density	117.9 lbs/ft^3
6. Weight of Solids$_{(1)}$	1.8888 g
7. Volume of Solids$_{(1)}$	0.7805 cm^3
8. Volume of Voids$_{(1)}$	0.2195 cm^3
9. Total Porosity (*n*)	**22.0 %**

(1) caculated for one cubic centimeter

FLASH POINT TESTING

SUMMARY OF RESULTS

PROJECT:	Ensafe Beth Page	TESTING DATE:	7/1/2015
PROJECT No.:	SH0582	TESTED BY:	JDM
SAMPLE No.:	SITE4TS-NAPL (Soil)	TRACKING CODE:	A114_FlashPoint
TESTING METHOD:	ASTM D3278		

TESTING PARAMETER AND RESULTS		
QUANTITY OF MATERIAL	5.00	**g**
LENGTH OF TEST	2.0	**min.**
TEST TEMPERATURE	125.00	**°F**
RESULTS (FLASH/NO FLASH)	FLASH	

MOISTURE CONTENT DETERMINATION MODIFIED

REPORT FORM

ASTM D 2216 MOD

PROJECT:	Terra Therm Ensafe Beth Paqe
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-HWF1-PT
TESTING DATE:	06/17/15
TESTED BY:	TAJ
TRACKING CODE:	A121_MC Mod

MOISTURE CONTENT (Dry & Wet Basis)							
1. MOISTURE TIN NO.	A		B		C		
2. WT MOISTURE TIN (tare weight)	63.908	g	65.346	g	65.583	g	
3. WT WET SOIL + TARE	77.353	g	77.415	g	77.832	g	
4. WT DRY SOIL + TARE	75.722	g	75.979	g	76.404	g	
5. WT WATER, Ww	1.6317	g	1.4357	g	1.4277	g	
6. WT DRY SOIL, Ws	11.8135	g	10.6324	g	10.8213	g	
7. ASTM MOISTURE CONTENT	13.81	%	13.50	%	13.19	%	
8. PERCENT SOLIDS	87.86	%	88.10	%	88.34	%	
9. AVERAGE ASTM MOISTURE CONTENT	13.50	%					
10. AVERAGE PERCENT SOLIDS	88.10	%					

TOTAL POROSITY

Report Form

By Calculation

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-NAPL
TESTING DATE:	6/9/2015
TESTED BY:	JDM
TRACKING CODE:	A121_POR Mod

Total porosity and Pore Volume Calculation	
SAMPLE No.	Site4TS-NAPL
1. Bulk Density	129.6 lbs/ft^3
2. Moisture Content	13.50 %
3. Specific Gravity	2.42 -
4. Dry Density	114.2 lbs/ft^3
6. Weight of Solids$_{(1)}$	1.8299 g
7. Volume of Solids$_{(1)}$	0.7562 cm^3
8. Volume of Voids$_{(1)}$	0.2438 cm^3
9. Total Porosity (*n*)	**24.4 %**

(1) caculated for one cubic centimeter

Modified Porosity calculation conducted using a moisture content performed at drying temperature of 300C.

8100 Secura Way • Santa Fe Springs, CA 90670
Telephone (562) 347-2500 • Fax (562) 907-3610

June 22, 2015

Tommy Jordan, P.G.
KEMRON Environmental Services, Inc.
1359-A Ellsworth Industrial Blvd. NW
Atlanta, GA 30318

Re: PTS File No: 45328
Physical Properties Data
Bethpage Thermal Study

Dear Mr. Jordan:

Please find enclosed report for Physical Properties analyses conducted upon NAPL samples received from your Bethpage Thermal Study project. All analyses were performed by applicable ASTM, EPA, or API methodologies. The samples are currently in storage and will be retained for thirty days past completion of testing at no charge. Please note that the samples will be disposed of at that time. You may contact me regarding storage, disposal, or return of the samples.

PTS Laboratories Inc. appreciates the opportunity to be of service. If you have any questions or require additional information, please contact Morgan Richards at (562) 347-2509.

Sincerely,
PTS Laboratories, Inc.

Michael Mark Brady, P.G.
Laboratory Director

Encl.

PTS Laboratories

Project Name: **Bethpage Thermal Study** **PTS File No:** **45328**
Project Number: **N/A** **Client:** **KEMRON Environmental Services, Inc.**

TEST PROGRAM - 20150605

FLUID ID	Date	Time	Fluid Type	Fluid Properties Pkg.	Fluid Cleaning	Interfacial Tension Oil/Air at 50ºC		Comments
			Method:	ASTM D1481, 445, 971	Proprietary	ASTM D971		
Date Received: 20150605								
SITE4TS-NAPL MW-02	**20150603**	**N/A**	**NAPL**	**X**	**X**	**X**		
TOTALS:	**2 jars**			**1**	**1**	**1**		**2**

Laboratory Test Program Notes

Standard TAT for basic analysis is 15 business days.

Fluid Properties Package - LNAPL & Water: Includes dynamic viscosity and fluid density at three temperatures (70, 100 and 130°F), surface tension for each fluid, and interfacial tensions (three phase pairs; oil/water, oil/air, and water/air (at ambient laboratory temperature)).

If no groundwater received, use filtered SFS tap water for interfacial tension testing.

Per client request run Viscosity/Density measurements at Ambient, 50°C and 90°C. Additional costs will apply

Temperatures dependent on fluid matrix, high temperatures may not be possible.

PTS Laboratories

PTS File No: 45328
Client: KEMRON Environmental Services, Inc.
Report Date: 06/22/15

VISCOSITY, DENSITY, and SPECIFIC GRAVITY DATA

(METHODOLOGY: ASTM D445, ASTM D1481, API RP40)

Project Name: Bethpage Thermal Study
Project No: N/A

SAMPLE ID	MATRIX	TEMPERATURE, °F	SPECIFIC GRAVITY	DENSITY, g/cc	VISCOSITY	
					centistokes	centipoise
SITE4TS-NAPL MW-02	NAPL	76	0.9881	0.9854	122000*	120000
		122	0.9836	0.9719	1030	1000
		194	0.9778	0.9439	98.7	93.1

Note: High viscosity at ambient temperature may indicate non-Newtonian flow; actual viscosity at ambient temperature may be lower than that measured by glass capillary viscometer.

QUALITY CONTROL DATA

Date: 06/19/15
FLUID TYPE: Cannon® CVS S3
TEMPERATURE, °F: 70
DENSITY, MEASURED: 0.8664
DENSITY, PUBLISHED: 0.8655
RPD: 0.10
VISCOSITY, MEASURED: 4.87
VISCOSITY, PUBLISHED: 4.79
RPD: 1.82
CVS Lot #: 14201

CVS = Certified Viscosity Standard

PTS Laboratories

PTS File No: 45328
Client: KEMRON Environmental Services, Inc.
Report Date: 06/22/15

INTERFACIAL / SURFACE TENSION DATA

(METHODOLOGY: DuNuoy Method - ASTM D971)

Project Name: Bethpage Thermal Study
Project No: N/A

PHASE PAIR		TEMPERATURE, °F	INTERFACIAL TENSION, Dynes/centimeter
SAMPLE ID / PHASE	SAMPLE ID / PHASE		
SITE4TS-NAPL MW-02 / NAPL	Air	122	30.6

QUALITY CONTROL DATA

Date: 06/22/15
PHASE PAIR: DIWATER / AIR
TEMPERATURE, °F: 75
IFT, MEASURED: 70.2
IFT, PUBLISHED: 72.2
RPD: -2.74

PTS Laboratories, Inc.

CHAIN OF CUSTODY RECORD

PAGE OF

COMPANY: KEMRON Environmental Services, Inc.

ADDRESS: 1359-A Ellsworth Industrial Blvd. | CITY: Atlanta, GA | ZIP CODE: 30318

PROJECT MANAGER: Tommy A. Jordan | email: tjordan@kemron.com

PROJECT NAME: Bethpage Thermal Study | PHONE NUMBER: 404-636-0928

PROJECT NUMBER | FAX NUMBER

SITE LOCATION

SAMPLER SIGNATURE

PO#

TURNAROUND TIME: 24 HOURS ☐ 5 DAYS ☐ 72 HOURS ☐ NORMAL ☐

OTHER: _____

SAMPLE INTEGRITY (CHECK): INTACT ✓ TEMP(F) 70.1

PTS QUOTE NO.

PTS FILE: 45328

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	DEPTH, FT	NUMBER OF SAMPLES	SOIL PROPERTIES PACKAGE	HYDRAULIC CONDUCTIVITY PACKAGE	PORE FLUID SATURATIONS PACKAGE	TCEQ/TNRCC PROPERTIES PACKAGE	CAPILLARITY PACKAGE	FLUID PROPERTIES PACKAGE	PHOTOLOG: CORE PHOTOGRAPHY	VAPOR TRANSPORT PACKAGE	POROSITY: TOTAL, AIR FILLED, WATER FILLED	POROSITY: EFFECTIVE, ASTM D425M	SPECIFIC GRAVITY, ASTM D854	BULK DENSITY (DRY), API RP40 or ASTM D2937	AIR PERMEABILITY, API RP40	HYDRAULIC CONDUCTIVITY, EPA9100/API RP40 or D5084	GRAIN SIZE DISTRIBUTION, ASTM D422 or 4464M	TOC: WALKLEY-BLACK	ATTERBERG LIMITS, ASTM D4318	VAPOR INTRUSION PACKAGE	FREE PRODUCT MOBILITY PACKAGE			COMMENTS
SITE4TS-NAPL MW-02	6/3/15	—	—	2																						

1. RELINQUISHED BY	2. RECEIVED BY	3. RELINQUISHED BY	4. RECEIVED BY
COMPANY	COMPANY PTS LABS	COMPANY	COMPANY
DATE TIME	DATE 6/5/15 TIME 11:00	DATE TIME	DATE TIME

8100 Secura Way • Santa Fe Springs, CA 90670
Telephone (562) 347-2500 • Fax (562) 907-3610

July 13, 2015

Tommy Jordan, P.G.
KEMRON Environmental Services, Inc.
1359-A Ellsworth Industrial Blvd. NW
Atlanta, GA 30318

Re: PTS File No: 45328
Physical Properties Data
Bethpage Thermal Study

Dear Mr. Jordan:

Please find enclosed report for Physical Properties analyses conducted upon NAPL samples received from your Bethpage Thermal Study project. All analyses were performed by applicable ASTM, EPA, or API methodologies. The samples are currently in storage and will be retained for thirty days past completion of testing at no charge. Please note that the samples will be disposed of at that time. You may contact me regarding storage, disposal, or return of the samples.

PTS Laboratories Inc. appreciates the opportunity to be of service. If you have any questions or require additional information, please contact Morgan Richards at (562) 347-2509.

Sincerely,
PTS Laboratories, Inc.

Michael Mark Brady, P.G.
Laboratory Director

Encl.

PTS Laboratories

Project Name: **Bethpage Thermal Study** **PTS File No:** **45328**
Project Number: **N/A** **Client:** **KEMRON Environmental Services, Inc.**

TEST PROGRAM - 20150624

FLUID ID	Date	Time	Fluid Type	Fluid Properties Pkg.	Fluid Cleaning	Interfacial Tension Oil/Air at 50ºC	Interfacial Tension Oil/Air at 65.5ºC	Comments
			Method:	TM D1481, 445, 9	Proprietary	ASTM D971	ASTM D971	
Date Received: 20150605								
SITE4TS-NAPL MW-02	**20150603**	**N/A**	**NAPL**	**X**	**X**	**X**	**X**	
TOTALS:	**2 jars**			**1**	**1**	**1**	**1**	**2**

Laboratory Test Program Notes

Standard TAT for basic analysis is 15 business days.

Fluid Properties Package - LNAPL & Water: Includes dynamic viscosity and fluid density at three temperatures (70, 100 and 130°F), surface tension for each fluid, and interfacial tensions (three phase pairs; oil/water, oil/air, and water/air (at ambient laboratory temperature)).

If no groundwater received, use filtered SFS tap water for interfacial tension testing.

Per client request run Viscosity/Density measurements at Ambient, 50°C and 90°C. Additional costs will apply

Temperatures dependent on fluid matrix, high temperatures may not be possible.

Add Oil/Air Interfacial Tension measurement at 150°F per T. Jordan/Kemron 20150624.

PTS File No: 45328
Client: KEMRON Environmental Services, Inc.
Report Date: 07/13/15

PTS Laboratories

INTERFACIAL / SURFACE TENSION DATA

(METHODOLOGY: DuNuoy Method - ASTM D971)

Project Name: Bethpage Thermal Study
Project No: N/A

PHASE PAIR		TEMPERATURE, °F	INTERFACIAL TENSION, Dynes/centimeter
SAMPLE ID / PHASE	SAMPLE ID / PHASE		
SITE4TS-NAPL MW-02 / NAPL	Air	75	35.7
SITE4TS-NAPL MW-02 / NAPL	Air	151	29.1

Note 1: Sample SITE4TS-NAPL MW-02 at 75°F, surface tension rupture is exceptionally sluggish due to high viscosity of the oil.
Note 2: Sample SITE4TS-NAPL MW-02 at 151°F, surface tension rupture is sluggish due to high viscosity of the oil.

QUALITY CONTROL DATA

Date:	07/08/15	Date:	07/09/15
PHASE PAIR:	DIWATER / AIR	PHASE PAIR:	DIWATER / AIR
TEMPERATURE, °F:	76	TEMPERATURE, °F:	74
IFT, MEASURED:	72.5	IFT, MEASURED:	71.9
IFT, PUBLISHED:	72.1	IFT, PUBLISHED:	72.2
RPD:	0.56	RPD:	-0.52

PTS Laboratories, Inc.

CHAIN OF CUSTODY RECORD

PAGE OF

COMPANY: KEMRON Environmental Services, Inc.

ADDRESS: 1359-A Ellsworth Industrial Blvd. | CITY: Atlanta, GA | ZIP CODE: 30318

PROJECT MANAGER: Tommy A. Jordan | email: tjordan@kemron.com

PROJECT NAME: Bethpage Thermal Study | PHONE NUMBER: 404-636-0928

PROJECT NUMBER | FAX NUMBER

SITE LOCATION

SAMPLER SIGNATURE

PO#

TURNAROUND TIME: 24 HOURS ☐ 5 DAYS ☐ 72 HOURS ☐ NORMAL ☐

OTHER: _____

SAMPLE INTEGRITY (CHECK): INTACT ✓ TEMP(F) 70.1

PTS QUOTE NO.

PTS FILE: 45328

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	DEPTH, FT	NUMBER OF SAMPLES	SOIL PROPERTIES PACKAGE	HYDRAULIC CONDUCTIVITY PACKAGE	PORE FLUID SATURATIONS PACKAGE	TCEQ/TNRCC PROPERTIES PACKAGE	CAPILLARITY PACKAGE	FLUID PROPERTIES PACKAGE	PHOTOLOG: CORE PHOTOGRAPHY	VAPOR TRANSPORT PACKAGE	POROSITY: TOTAL, AIR FILLED, WATER FILLED	POROSITY: EFFECTIVE, ASTM D425M	SPECIFIC GRAVITY, ASTM D854	BULK DENSITY (DRY), API RP40 or ASTM D2937	AIR PERMEABILITY, API RP40	HYDRAULIC CONDUCTIVITY, EPA9100/API RP40 or D5084	GRAIN SIZE DISTRIBUTION, ASTM D422 or 4464M	TOC: WALKLEY-BLACK	ATTERBERG LIMITS, ASTM D4318	VAPOR INTRUSION PACKAGE	FREE PRODUCT MOBILITY PACKAGE			COMMENTS
SITE4TS-NAPL MW-02	6/3/15	—	—	2																						

1. RELINQUISHED BY	2. RECEIVED BY	3. RELINQUISHED BY	4. RECEIVED BY
COMPANY	COMPANY PTS LABS	COMPANY	COMPANY
DATE TIME	DATE 6/5/15 TIME 11:00	DATE TIME	DATE TIME

FLASH POINT TESTING

SUMMARY OF RESULTS

PROJECT:	Ensafe Beth Page	TESTING DATE:	7/1/2015
PROJECT No.:	SH0582	TESTED BY:	JDM
SAMPLE No.:	SITE4TS-NAPL (NAPL)	TRACKING CODE:	A114_FlashPoint
TESTING METHOD:	ASTM D3278		

TESTING PARAMETER AND RESULTS		
QUANTITY OF MATERIAL	2	**ml**
LENGTH OF TEST	2.0	**min.**
TEST TEMPERATURE	105	**°F**
RESULTS (FLASH/NO FLASH)	FLASH	

Appendix D:

Thermal Treatment Data Sheets

TOTAL POROSITY

Report Form

By Calculation

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-SEE1
TESTING DATE:	6/22/2015
TESTED BY:	JDM
TRACKING CODE:	A136_SEE

Total porosity and Pore Volume Calculation	
SAMPLE No.	Site4TS-SEE1
1. Bulk Density	128.0 lbs/ft^3
2. Moisture Content	13.50 %
3. Specific Gravity	2.42 -
4. Dry Density	112.8 lbs/ft^3
6. Weight of Solids$_{(1)}$	1.8073 g
7. Volume of Solids$_{(1)}$	0.7468 cm^3
8. Volume of Voids$_{(1)}$	0.2532 cm^3
9. Total Porosity (*n*)	**25.3 %**
10. Reactor Sample Volume	**632.0 cc**
11. Pore Volume	**160.01 cc**

1 Calculated for 1 cubic centimeter

KEMRON ENVIRONMENTAL SERVICES

THERMAL DESORPTION DATA

PROJECT:	Ensafe Beth Page	TESTING DATE:	6/22/2015
PROJECT No:	SH0582	TESTED BY:	JDM
MATERIAL TYPE:	`	TRACKING CODE:	A136_SEE

SET-UP, MONITORING, and TESTING INFORMATION

SAMPLE No.	Site4TS-SEE1	
WEIGHT OF PAN (tare weight)	3945.5	g
WEIGHT OF UNTREATED SOIL + TARE	5241	g
WEIGHT OF UNTREATED SOIL	1295.50	g
WEIGHT OF TREATED SOIL + TARE	5269	g
WEIGHT OF TREATED SOIL	1323.50	g
WEIGHT LOSS	-28.00	g
LENGTH OF TREATMENT	2PV	`

Sample Porosity 25.30%

Sample Dimension Diameter 3.093 in Height: 5.132 in

Pore Volume 160.01 cc

Target Moisture Removal: 320.02 cc

VISUAL OBSERVATIONS - BEFORE TREATMENT

Pressure check: Maintained 5.1 psi for 10 minutes

Steambox Tare: 5472.5g

Initial steambox weight: 5792.5g

VISUAL OBSERVATIONS - DURING TREATMENT

No NAPL observed in condensate or condenser

Condensate light yellow in color with no visable NAPL

Strong hydrocarbon smell detected

VISUAL OBSERVATIONS - AFTER TREATMENT

Condensate Collected:

318.52g condensate collected

320.0 ml of condensate collected

Final Steambox weight: 5473.5g

Condensate pH: 6.85

Soil still "coated" with NAPL, very "sticky"

THERMAL DESORPTION DATA

PROJECT:	Ensafe Beth Page	TESTING DATE:	6/22/2015
PROJECT No:	SH0582	TESTED BY:	JDM
MATERIAL TYPE:		TRACKING CODE:	A136_SEE

	Day	Time	Temps				Comments
			Steam Box °C	Steam Oven °C	Soil °C	Soil Oven °C	
1	6/22/2015	749	21.6	21.8	21.7	21.6	ovens on, data logggers started, influent valve closed, effluent valve open
2		759	59.9	29.4	22.6	51.2	
3		804	67.2	34.6	24.4	64.8	
4		811	85.6	41.5	28.3	81.4	
5		820	90.8	50.3	34.2	97.9	
6		827	96.0	57.7	40.5	99.1	
7		832	97.3	61.3	43.7	99.4	
8		846	100.5	94.8	54.7	99.4	
9		856	102.1	81.2	61.3	108.9	
10		908	103.3	87.2	68.9	109.4	
11		914	106.2	90.3	72.5	109	
12		927	109.8	96.5	79.3	109.8	
13		937	110.4	100.3	83.5	110.1	
14		943	102.0	101.9	85.9	109.3	
15		954	110.9	104.5	89.4	109.3	
16		1005	114.3	107.7	92.5	109.3	
17		1017	116.2	110.8	95.0	106.6	influent valve opened, steam obvserved in condenser
18		1024	115.9	104.9	98.5	99.6	
19		1047	115.5	104.6	98.5	104.5	
20		1113	116.0	104.4	98.6	103.8	
21		1128	116.3	104.5	98.8	105.3	33g condensate collected
22		1139	115.8	104.5	98.6	103.7	
23		1156	115.7	104.4	98.6	104.4	
24		1212	115.8	104.5	98.6	103.7	
25		1219	115.5	104.8	98.7	104.5	

THERMAL DESORPTION DATA

PROJECT: Ensafe Beth Page
PROJECT No: SH0582
MATERIAL TYPE:

TESTING DATE: 6/22/2015
TESTED BY: JDM
TRACKING CODE: A136_SEE

	Day	Time	Temps Steam Box °C	Steam Oven °C	Soil °C	Soil Oven °C	Comments
26		1245	115.7	104.6	98.8	104.7	70 g condensate collected
27		1305	116.6	104.7	98.6	104.3	
28		1331	115.3	104.8	98.9	103.9	1/2 PV collected, effluent valve valve closed, pressure cycle started
29		1451	116.7	110.0	105.5	103.9	effluent valve opened, 5.2 psig
30		1501	116.5	106.0	98.4	104.2	effluent valve closed
31		1639	116.5	110.7	106.6	103.9	effluent valve oepned, 5.4 psig
32		1649	115.5	106.4	98	104	effluent valve closed, 190.77g collected
33		1811	116.9	110.3	106.3	104.3	effluent valve open, 5.3 psig
34		1822	115.7	106.2	98.3	104.1	effluent valve closed, 234.57g collected
35		1939	116.9	110.5	105.9	103.6	effluent valve open, 5.3 psig
36		1949	116.6	107.6	98.4	103.8	effluent valve closed
37		2035	119.2	113.8	101.9	104.2	effluent valve open, 2.1 psig, steam box empty
38		2045	118.7	116.0	98.3	104	ovens off, valves closed, condensate stored in cooler, 321.17g collected
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

TOTAL POROSITY

Report Form

By Calculation

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-SEE2
TESTING DATE:	6/23/2015
TESTED BY:	JDM
TRACKING CODE:	A137_SEE

Total porosity and Pore Volume Calculation	
SAMPLE No.	Site4TS-SEE2
1. Bulk Density	129.7 lbs/ft^3
2. Moisture Content	13.50 %
3. Specific Gravity	2.42 -
4. Dry Density	114.3 lbs/ft^3
6. Weight of Solids$_{(1)}$	1.8313 g
7. Volume of Solids$_{(1)}$	0.7567 cm^3
8. Volume of Voids$_{(1)}$	0.2433 cm^3
9. Total Porosity (*n*)	**24.3 %**
10. Reactor Sample Volume	**651.6 cc**
11. Pore Volume	**158.5 cc**

1 Calculated for 1 cubic centimeter

KEMRON ENVIRONMENTAL SERVICES

THERMAL DESORPTION DATA

PROJECT:	Ensafe Beth Page	TESTING DATE:	6/23/2015
PROJECT No:	SH0582	TESTED BY:	JDM
MATERIAL TYPE:	`	TRACKING CODE:	A137_SEE

SET-UP, MONITORING, and TESTING INFORMATION

SAMPLE No.	Site4TS-SEE2	
WEIGHT OF PAN (tare weight)	3756.5	g
WEIGHT OF UNTREATED SOIL + TARE	5108.5	g
WEIGHT OF UNTREATED SOIL	1352.00	g
WEIGHT OF TREATED SOIL + TARE	5107	g
WEIGHT OF TREATED SOIL	1350.50	g
WEIGHT LOSS	1.50	g
LENGTH OF TREATMENT	6PV	`

Sample Porosity 24.3

Sample Dimension Diameter 3.083 Height: 5.325

Pore Volume 158.5 cc

Target Moisture Removal: 951cc

VISUAL OBSERVATIONS - BEFORE TREATMENT

Pressure check: Maintained 6.2 for 10 minutes

Steam box Tare: 5472.5g

Steam box Wt.: 6473.5g

VISUAL OBSERVATIONS - DURING TREATMENT

NAPL observed in conderser after approx. 3PV of condensate collected.
Small layer of LNAPL began forming in collection flask after approx. 4.5PV of steam
LNAPL brown in color
Condensate dark yellow in color
Strong hydorcarbon smell detected
Oil like bubbles present within yellow layer of condensate

VISUAL OBSERVATIONS - AFTER TREATMENT

Condensate Collected:
948.7g condensate collected
955.0 mL condensate collected
Final Steam box wt.: 5506.5g
Condensate pH: 6.67
Unable to separate LNAPL and condensate layers for mass determination
Soil appreared to have less NAPL present, still "sticky" with NAPL

KEMRON ENVIRONMENTAL SERVICES

THERMAL DESORPTION DATA

PROJECT: Ensafe Beth Page
PROJECT No: SH0582
MATERIAL TYPE:

TESTING DATE: 6/23/2015
TESTED BY: JDM
TRACKING CODE: A137_SEE

	Day	Time	Temps				Comments
			Steam Oven °C	Steam Box °C	Soil °C	Soil Oven °C	
1	6/24/2015	759	27.6	28.8	26.7	26.8	ovens on, influent valve closed, effluent valve open
2	6/24/2024	810	85.8	32.5	29.4	27.2	
3	6/24/2024	816	95.7	37.0	33.5	86.1	
4	6/24/2024	825	99.5	43.5	40.7	109.1	
5	6/24/2024	831	104.2	47.8	45.9	123.3	
6	6/24/2024	843	112.3	57.0	58.2	129.1	
7	6/24/2024	852	113.9	63.9	66.6	129.5	
8	6/24/2024	901	115.2	70.0	74.6	129.5	
9	6/24/2024	917	117.1	79.0	83.6	106.5	
10	6/24/2024	924	117.6	82.8	86.2	105.0	
11	6/24/2024	937	119.1	87.8	88.8	104.6	
12	6/24/2024	944	119.6	91.9	90.1	104.8	
13	6/24/2024	958	120.3	97.0	92.1	105.1	
14	6/24/2024	1007	121.0	100.1	93.2	104.3	
15	6/24/2024	1021	121.6	104.4	94.6	104.9	lnfluent valve opened
16	6/24/2024	1127	120.2	101.4	100.3	105.5	
17	6/24/2024	1138	120.4	101.1	100.0	104.7	1/2 pv collected, effluent valve closed, pressure cycle started
18	6/24/2024	1306	121.5	109.5	108.3	106.3	effluent valve open, 6.1 psig
19	6/24/2024	1316	120.3	100.3	99.1	105.1	effluent valve closed
20	6/24/2024	1434	127.7	109.7	108.7	105.2	effluent valve open, 6.4 psig
21	6/24/2024	1444	126.8	99.7	98.9	104.6	effluent valve closed
22	6/24/2024	1535	128.4	109.2	108.8	105.2	vlave open, 6.2 psig
23	6/24/2024	1551	127.3	99.3	98.7	105.3	effluent valve closed, 294.36g collected
24	6/24/2024	1650	128.8	110.3	109.9	107.1	effluent valve open, 6.7 psig
25	6/24/2015	1701	127.4	99.9	98.9	105.0	effluent valve closed

KEMRON ENVIRONMENTAL SERVICES

THERMAL DESORPTION DATA

PROJECT: Ensafe Beth Page
PROJECT No: SH0582
MATERIAL TYPE:

TESTING DATE: 6/23/2015
TESTED BY: JDM
TRACKING CODE: A137_SEE

	Day	Time	Temps				Comments
			Steam Oven °C	Steam Box °C	Soil °C	Soil Oven °C	
26	6/24/2015	1758	129.0	110.4	109.8	106.7	effluent valve opened, 6.6 psig
27	6/24/2024	1807	127.7	100.8	99.3	105.7	effluent vlaves closed, ovens off, 429.46g collected
28	6/25/2015	741	24.2	25.0	24.8	24.3	oven on
29	6/25/2015	751	81.2	33.6	26.8	63.9	
30	6/25/2015	807	113.4	56.1	38.7	106.5	
31	6/25/2015	821	119.4	71.0	52.7	128.5	
32	6/25/2015	839	123.8	86.3	69.8	129.4	
33	6/25/2015	847	125.3	91.8	75.7	128.1	
34	6/25/2015	856	126.8	98.0	82.5	128.3	
35	6/25/2015	910	127.7	105.6	90.7	126.9	
36	6/25/2015	917	128.7	109.5	95	116.8	influent valve opened
37	6/25/2015	924	127.4	103.4	99.4	110.1	effluent vlave closed, pressure cycle started
38	6/25/2015	1012	128.8	113.8	109.8	110.6	effluent vlave open, 6.8 psig
39	6/25/2015	1022	127.4	107.6	99.7	109.9	effluent vlave closed, pressure cycle started
40	6/25/2015	1059	128.5	112.9	108.4	110.1	effluent valve opened, 5.8 psig
41	6/25/2015	1109	127.8	107.4	99.2	109.2	effluent valve closed, 549.56g collected
42	6/25/2015	1200	129.2	114.6	110.3	111.1	effluent valve open, 7.0 psig
43	6/25/2015	1210	128.2	108.2	99.2	110.2	effluent vlave closed, pressure cycle started
44	6/25/2015	1253	129.4	114.3	109.3	110.8	effluent valve oepned, 6.4 psig
45	6/25/2015	1305	128.3	108.5	99.1	110.2	effluent vlave closed, pressure cycle started
46	6/25/2015	1346	129.3	114.2	108.38	111.1	effluent valve opened 6.1 psig
47	6/25/2015	1356	128.1	109.1	99.2	109.9	effluent valve closed, 709.46g collected, NAPL observed in flask
48	6/25/2015	1439	129.2	115.0	109.2	111.1	effluent valve oepned, 6.4 psig
49	6/25/2015	1453	128.5	109.2	99	109.5	effluent vlave closed, pressure cycle started
50	6/25/2015	1545	129.2	116.5	110.9	110.3	effluent valve opened, 7.6 psig

KEMRON ENVIRONMENTAL SERVICES

L DESORPTION DATA

PROJECT:	Ensafe Beth Page	TESTING DATE:	6/23/2015
PROJECT No:	SH0582	TESTED BY:	JDM
MATERIAL TYPE:		TRACKING CODE:	A137_SEE

	Day	Time	Temps				Comments
			Steam Oven °C	Steam Box °C	Soil °C	Soil Oven °C	
51	6/25/2015	1556	128.3	110.3	98.9	109.5	effluent valve closed, 820.36g collected
52	6/25/2015	1637	129.0	115.8	109.5	110.2	efflent valve opened, 6.6 psig
53	6/25/2015	1647	128.4	111.0	99.2	109.5	effluent valve closed, 863.76g collected
54	6/25/2015	1732	129.1	116.9	110.6	110.1	effluent valve open, 7.3 psig
55	6/25/2015	1745	128.6	111.1	99.0	109.3	efflent valve closed, 916.76g collected
56	6/25/2015	1810	129.2	114.5	106.9	109.8	effluent valve open, 5.0 psig
57	6/25/2015	1820	128.4	111.1	99.0	109.5	Valves closed, ovens off 948.96g collected
58							
59							
60							
61							
62							
63							
64							
65							
66							
67							
68							
69							
70							
71							
72							
73							
74							
75							

TOTAL POROSITY

Report Form

By Calculation

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-HWF1
TESTING DATE:	6/15/2015
TESTED BY:	TAJ
TRACKING CODE:	A134_POR

Total porosity and Pore Volume Calculation	
SAMPLE No.	
1. Bulk Density	126.9 lbs/ft^3
2. Moisture Content	13.50 %
3. Specific Gravity	2.42 -
4. Dry Density	111.8 lbs/ft^3
6. Weight of Solids$_{(1)}$	1.7918 g
7. Volume of Solids$_{(1)}$	0.7404 cm^3
8. Volume of Voids$_{(1)}$	0.2596 cm^3
9. Total Porosity (*n*)	**26.0 %**
10. Reactor Sample Volume	**678.1 cc**
11. Pore Volume	**176.0 cc**

1 Calculated for 1 cubic centimeter

KEMRON ENVIRONMENTAL SERVICES

THERMAL DESORPTION DATA

PROJECT:	Ensafe Beth Paqge	TESTING DATE:	6/15/2015
PROJECT No:	SH05282	TESTED BY:	TAJ
MATERIAL TYPE:		TRACKING CODE:	A134_HW

SET-UP, MONITORING, and TESTING INFORMATION

SAMPLE No.	Site4TS- HWF1	
WEIGHT OF PAN (tare weight)	3776.5	g
WEIGHT OF UNTREATED SOIL + TARE	5154.5	g
WEIGHT OF UNTREATED SOIL	1378.00	g
WEIGHT OF TREATED SOIL + TARE	5224	g
WEIGHT OF TREATED SOIL	1447.50	g
WEIGHT LOSS	-69.50	g
LENGTH OF TREATMENT	15 PV	`

Sample Porosity 26.00%

Sample Dimensions Diameter: 3.083 Height: 5.3543

Pore Volume: 176.1 cc

Target Flush Volume: 2641.5 cc

VISUAL OBSERVATIONS - BEFORE TREATMENT

Pressure check: Maintain 5.2 psi for 10 minutes

Feed water pH= 6.9

VISUAL OBSERVATIONS - DURING TREATMENT

VISUAL OBSERVATIONS - AFTER TREATMENT

Treated soil, black and heavy petroleum odor

Averagte rate 7.5 mL/min

No free water present, visible NAPL at surface (picture)

Testing duration: 333 minutes

Total flush 2507 g recovered in flush

Product has light sheen on soil grains

KEMRON ENVIRONMENTAL SERVICES

THERMAL DESORPTION DATA

PROJECT: Ensafe Beth Page
PROJECT No: SH0582
MATERIAL TYPE:

TESTING DATE: 6/15/2015
TESTED BY: TAJ
TRACKING CODE: A134_HW

	Day	Time	Temps			Flow Rate	Comments
			Feed Water °C	Soil °C	Oven °C		
1	6/15/2015	0859	23.5		33.3		
2		0929	30.3		55.3		started heating feed water
3							
4							
5							
6							
7							
8							
9							
10		1006	58.1	44.5	61.4		
11		1022	57.4	49.0	75.2		
12		1034	55.4	53.7	85.6		replace thermocouple for soil
13		1045	54.9	56.8	52.8		started flsuhing
14		1108	56.1	53.7	56.3	4.5mL/min	raised oven 2°C, flow rate @ 4.5mL/min, rate increased
16		1121	57.2	53.8	58.0	5.2mL/min	rate was increased
17		1133	58.0	53.3	59.2	8.4mL/min	
18		1155	59.1	53.2	63.2	7.8mL/min	
19		1224	60.2	54.4	63.4	6.8mL/min	
20		1300	61.5	55.0	62.5	7.2mL/min	leave flow alone!
21		1330	62.3	55.1	62.5	7.6mL/min	
22		1345	62.7	55.1	60.9		changed flask
23		1512	57.8	55.0	61.5	11mL/min	reduced flow
24		1555	56.7	54.9	61.4		flask overfilled and lost some
25		1612	46.6	55.5	61.3		stopped test, no more flush coming out. Total tare= 1533g, 2507g flushed, pH= 5.99 for flush. Total tare 1533g, 2507g flushed.

TOTAL POROSITY

Report Form

By Calculation

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-HWF2
TESTING DATE:	6/15/2015
TESTED BY:	TAJ
TRACKING CODE:	A135_POR

Total porosity and Pore Volume Calculation	
SAMPLE No.	
1. Bulk Density	128.7 lbs/ft^3
2. Moisture Content	13.50 %
3. Specific Gravity	2.42 -
4. Dry Density	113.4 lbs/ft^3
6. Weight of Solids$_{(1)}$	1.8172 g
7. Volume of Solids$_{(1)}$	0.7509 cm^3
8. Volume of Voids$_{(1)}$	0.2491 cm^3
9. Total Porosity (*n*)	**24.9 %**
10. Reactor Sample Volume	**653.0 cc**
11. Pore Volume	**162.7 cc**

1 Calculated for 1 cubic centimeter

THERMAL DESORPTION DATA

PROJECT:	Ensafe Beth Page	TESTING DATE:	6/15/2015
PROJECT No:	SH0582	TESTED BY:	TAJ
MATERIAL TYPE:		TRACKING CODE:	A135_HW

SET-UP, MONITORING, and TESTING INFORMATION

SAMPLE No.	Site4TS- HWF2	
WEIGHT OF PAN (tare weight)	3899	g
WEIGHT OF UNTREATED SOIL + TARE	5245	g
WEIGHT OF UNTREATED SOIL	1346.00	g
WEIGHT OF TREATED SOIL + TARE	5341	g
WEIGHT OF TREATED SOIL	1442.00	g
WEIGHT LOSS	-96.00	g
LENGTH OF TREATMENT	30 PV	`

Sample Porosity: 24.90%

Sample Dimensions Diameter: 3.071 in Height: 5.3847 in

Pore Volume: 162.7 cc

Target Flush Volume: 4,902 cc

VISUAL OBSERVATIONS - BEFORE TREATMENT

Pressure check: Maintained 5.7 psi for 10 minutes

Feed Water pH = 6.85

Hot plate setting: 155°C

VISUAL OBSERVATIONS - DURING TREATMENT

6/16/2015: No product being flushed out. Clean flush water

Tubing @ parastaltic pump started leaking, lost about 50 mL (guess)

VISUAL OBSERVATIONS - AFTER TREATMENT

Day 1, 1409.2g of flush collected @ 4.97 mL/min, rate average

Day 2, 1765.13g of collected @ 4.59mL/min rate averate

HWF2-L2 pH= 6.60

KEMRON ENVIRONMENTAL SERVICES

THERMAL DESORPTION DATA

PROJECT: Ensafe Beth Page
SH0582
MATERIAL TYPE:

TESTING DATE: 6/15/2015
TESTED BY: TAJ
TRACKING CODE: A135_HW

	Day	Time	Temps			Flow Rate	Comments
			Feed Water °C	Soil °C	Oven °C		
1	6/15/2015	0859	22.7	30.2			
2		0925	25.6	35.5	55.3		started heating feed water
3		1006	56.7	44.5	61.4		
4		1022	55.3	49.0	75.2		
5		1034	53.0	53.7	85.6		
6		1100	53.5	56.4	56.4		Started water flush
7		1121	53.2	55.0	58.0	4.0mL/min	water collected with flask, turned up flow rate
8		1133	53.5	54.1	59.3		
9		1156	54.6	55.3	63.3		
10		1225	55.8	56.5			
11		1301	57.3	55.2	62.4	6.0mL/min	turned flow down a little
12		1331	57.5	56.1	62.5	3.4mL/min	
13		1346	57.1	56.3	60.8		
14		1511	53.6	56.0	61.6	4.5mL/min	
15		1556	52.7	56.1	61.5		
16		1604	49.3	56.1	61.5		turned off flushing pumps, 1634 cc of tap water collected, valves closed; (283 minutes of flushing, tare = 516.66, tare + water#1 = 1642.0, tare + water #2 = 800.5g, total flush collected =1409.2g, pH= 6.17 for HWF2-LI
17							
18							
19							
20							
21							
22							
23							
24							
25							

KEMRON ENVIRONMENTAL SERVICES

THERMAL DESORPTION DATA

PROJECT:	Ensafe Beth Page	TESTING DATE:	6/15/2015
PROJECT No:	SH0582	TESTED BY:	TAJ
MATERIAL TYPE:	0	TRACKING CODE:	A135_HW

			Temps				
	Day	Time	Feed Water °C	Soil °C	Oven °C	Flow Rate	Comments
26	6/16/2015	0718	31.8	24.2	25.6		oven on, feed water heating, verifying flow rate @ 4.2ml/min
27		0755	43.7	35.0	60.8		
28		0825	47.3	45.1	61.3		oven temperature was raised a bit.
29		0847	49.4	51.0	69.5		
30		0900	51.6	53.7	63.2	4.6	confirmed 4.6ml/min
31		0905	54.1	54.4	62.1	4.6	valved opened for flushing
32		0930	55.2	56.1	61.8		flushing started and drip
33		1010	54.7	56.0	60.0		running smoothly
34		1056	54.3	56.2	60.0	2.5	flow rate was increased
35		1131	54.4	55.5	59.9	4.2	
36		1324	56.4	55.7	61.7	4.4	collected first flask, flask # total 1548.5g, tare 516.44g, 1032.06 g collected.
37		1435	57.6	55.9	60.7		
38		1554	58.0	55.5	60.9		384 minutesof untreated; stopped test for the day, flask #2, 1258.0, tare 524.93g, collected 733.07 g. clear, slightly tinted (v. slightly) yellow/brown color, no pro9duct sheen observed, no pH required on sample stored in coller as "Day 2"
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

KEMRON ENVIRONMENTAL SERVICES

THERMAL DESORPTION DATA

PROJECT:	Ensafe Beth Page	TESTING DATE:	6/15/2015
PROJECT No:	SH0582	TESTED BY:	TAJ
MATERIAL TYPE:	0	TRACKING CODE:	A135_HW

			Temps				
	Day	Time	Feed Water °C	Soil °C	Oven °C	Flow Rate	Comments
51	6/17/2015	0747	22.0	22.3	21.8		started day 2 heating
52		0850	64.2	49.6	78.7		removed feed water from heat to cool
53		0905	58.4	54.2	64.9	4.6 mL/min	started heating, water started dripping from pressure build up
54		0915	56.2	55.7	62.2		
55		0929	55.8	55.9	62		Flush began, NAPL observed in flush
56		1020	55.1	55.6	61.9		
57		1037	55.0	55.2	61.8	4.5 m/min	
58		1126	55.1	55.1	62.6		looks good!
59		1235	52.8	55.2	62.6		Removed 1st flask, tare = 524.93g, total + tare = 1628.5g
60		1355	51.0	55.6	62.7		Probe was barely in water and affecting temperature reading.
61		1426	50.1	55.2	62.6		stopped test, tare = 531.0g, total + tare =1137.5
62							
63							
64							
65							
66							
67							
68							
69							
70							
71							
72							
73							
74							
75							

Appendix E:

Treatment Physical Properties Testing Data Sheets

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-SEE1-PT
TESTING DATE:	07/06/15
TESTED BY:	JDM
TRACKING CODE:	A136_MC

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.2921	g	1.2934	g	1.2886	g
3. WT WET SOIL + TARE	20.7666	g	22.6899	g	17.4596	g
4. WT DRY SOIL + TARE	19.4949	g	21.4971	g	16.3817	g
5. WT WATER, Ww	1.2717	g	1.1928	g	1.0779	g
6. WT DRY SOIL, Ws	18.2028	g	20.2037	g	15.0931	g
7. ASTM MOISTURE CONTENT	6.99	%	5.90	%	7.14	%
8. PERCENT SOLIDS	93.47	%	94.43	%	93.33	%
9. AVERAGE ASTM MOISTURE CONTENT	6.68	%				
10. AVERAGE PERCENT SOLIDS	93.74	%				

MATERIAL pH

EPA METHOD 9045
DATA SHEET

PROJECT:	ENSAFE Beth Page
PROJECT No.:	SH0582
TESTING DATE:	6/17/2015
TESTED BY:	LC
TRACKING CODE:	A136_pH

KEMRON SAMPLE No.	MATERIAL pH
1. Site 4TS - SEE1 - 2PV	
2. Post Treatment Condensate	6.85
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
AVERAGE:	6.85

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-SEE2-PT
TESTING DATE:	07/06/15
TESTED BY:	JDM
TRACKING CODE:	A137_MC

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.2924	g	1.2935	g	1.2940	g
3. WT WET SOIL + TARE	27.5806	g	24.3909	g	22.5001	g
4. WT DRY SOIL + TARE	25.7750	g	22.9651	g	21.0053	g
5. WT WATER, Ww	1.8056	g	1.4258	g	1.4948	g
6. WT DRY SOIL, Ws	24.4826	g	21.6716	g	19.7113	g
7. ASTM MOISTURE CONTENT	7.38	%	6.58	%	7.58	%
8. PERCENT SOLIDS	93.13	%	93.83	%	92.95	%
9. AVERAGE ASTM MOISTURE CONTENT	7.18	%				
10. AVERAGE PERCENT SOLIDS	93.30	%				

MATERIAL pH

EPA METHOD 9045
DATA SHEET

PROJECT:	ENSAFE Beth Page
PROJECT No.:	SH0582
TESTING DATE:	6/17/2015
TESTED BY:	LC
TRACKING CODE:	A137_pH

KEMRON SAMPLE No.	MATERIAL pH
1. Site 4TS - SEE2 - 6PV	
2. Post Treatment Condensate	6.67
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
AVERAGE:	6.67

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-HWF1-PT
TESTING DATE:	06/17/15
TESTED BY:	TAJ
TRACKING CODE:	A134_MC

MOISTURE CONTENT (Dry & Wet Basis)						
1. MOISTURE TIN NO.	A		B		C	
2. WT MOISTURE TIN (tare weight)	1.2905	g	4.3065	g	1.3088	g
3. WT WET SOIL + TARE	14.8693	g	19.6308	g	12.2654	g
4. WT DRY SOIL + TARE	13.8748	g	18.2780	g	11.4217	g
5. WT WATER, Ww	0.9945	g	1.3528	g	0.8437	g
6. WT DRY SOIL, Ws	12.5843	g	13.9715	g	10.1129	g
7. ASTM MOISTURE CONTENT	7.90	%	9.68	%	8.34	%
8. PERCENT SOLIDS	92.68	%	91.17	%	92.30	%
9. AVERAGE ASTM MOISTURE CONTENT	8.64	%				
10. AVERAGE PERCENT SOLIDS	92.05	%				

MATERIAL pH

EPA METHOD 9045
DATA SHEET

PROJECT:	ENSAFE Beth Page
PROJECT No.:	SH0582
TESTING DATE:	6/17/2015
TESTED BY:	LC
TRACKING CODE:	A134_pH

KEMRON SAMPLE No.	MATERIAL pH
1. Site 4TS - HWF 2 - 15PV	
2. Post Treatment Condensate	5.99
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
AVERAGE:	5.99

MOISTURE CONTENT DETERMINATION

REPORT FORM
ASTM D 2216

PROJECT:	Ensafe Beth Page
PROJECT No.:	SH0582
SAMPLE No.:	Site4TS-HWF2-PT
TESTING DATE:	06/17/15
TESTED BY:	MAC
TRACKING CODE:	A135_MC

MOISTURE CONTENT (Dry & Wet Basis)							
1. MOISTURE TIN NO.	A		B		C		
2. WT MOISTURE TIN (tare weight)	1.2900	g	1.3000	g	1.2900	g	
3. WT WET SOIL + TARE	29.7000	g	25.0200	g	33.0300	g	
4. WT DRY SOIL + TARE	27.1300	g	22.8400	g	30.0800	g	
5. WT WATER, Ww	2.5700	g	2.1800	g	2.9500	g	
6. WT DRY SOIL, Ws	25.8400	g	21.5400	g	28.7900	g	
7. ASTM MOISTURE CONTENT	9.95	%	10.12	%	10.25	%	
8. PERCENT SOLIDS	90.95	%	90.81	%	90.71	%	
9. AVERAGE ASTM MOISTURE CONTENT	10.10	%					
10. AVERAGE PERCENT SOLIDS	90.82	%					

MATERIAL pH

EPA METHOD 9045
DATA SHEET

PROJECT:	ENSAFE Beth Page
PROJECT No.:	SH0582
TESTING DATE:	6/17/2015
TESTED BY:	LC
TRACKING CODE:	A135_pH

KEMRON SAMPLE No.	MATERIAL pH
1. Site 4TS - HWF 2 - 30PV	
2. Post Treatment Condensate	6.60
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
AVERAGE:	6.60

Appendix F:

Photographic Log

TerraTherm
Ensafe Beth Page Thermal Study
KEMRON Project No. SH0582

Untreated Material Homogenization

Site 4TS – NAPL, Bucket 1 of 2 “As Received”
Visual NAPL staining is significant with areas of concentrated NAPL

Site 4TS – NAPL, Bucket 2 of 2 “As Received”

Visual NAPL staining is significant with areas of concentrated NAPL

Site 4TS – NAPL “Homogenized”

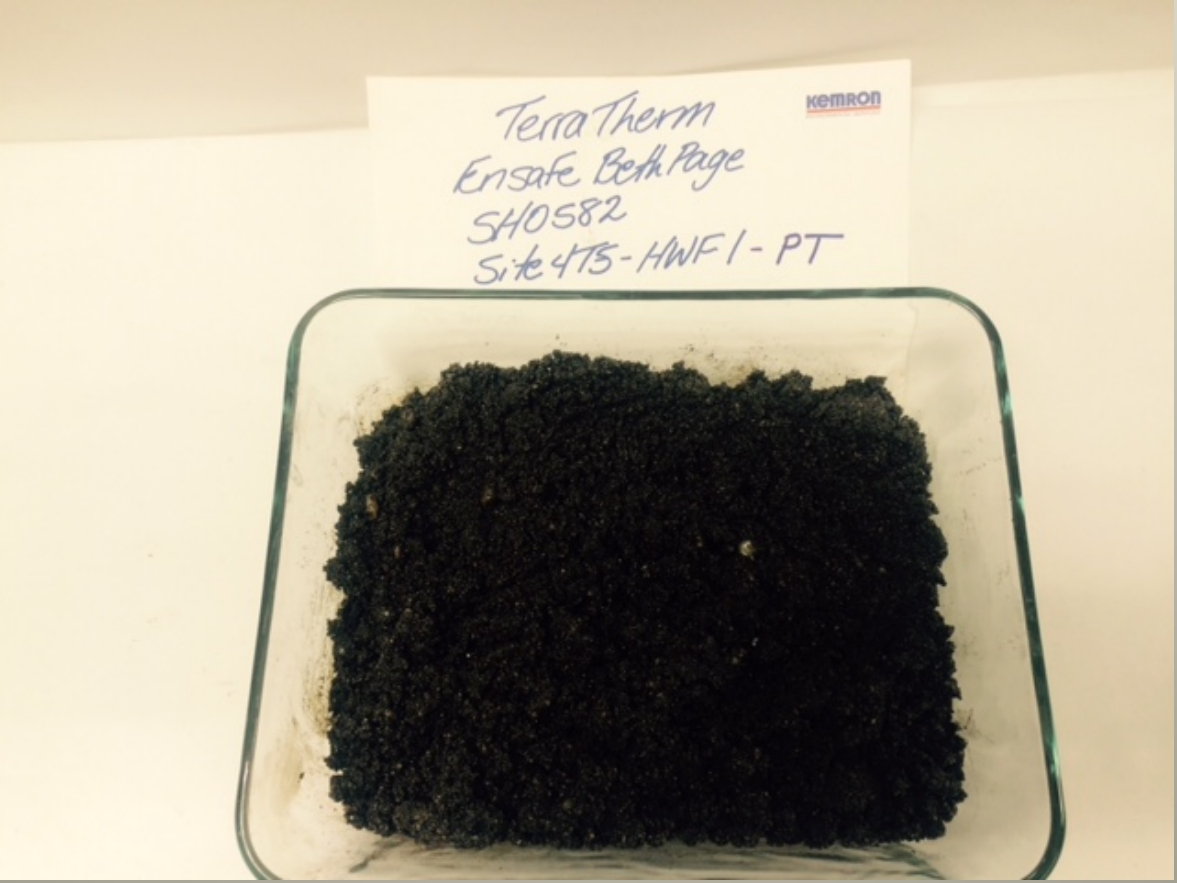
2,330g of oversized debris removed. NAPL distribution is visually uniform.

Hot Water Flushing Testing

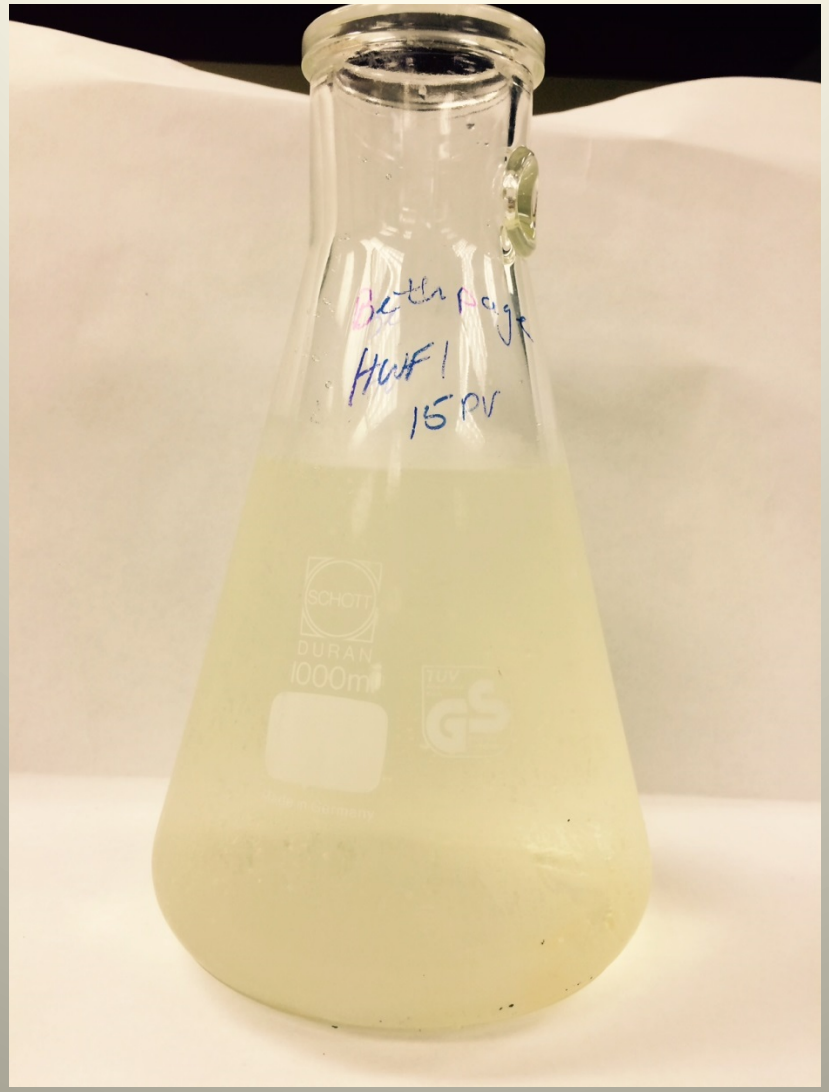
Hot Water Flush 15PV

Picture of soil after removing the reactor cap. A “bubble” of NAPL is noticeable near the center of the soil column. Soil is noticeably impacted with NAPL after treatment.

Hot Water Flush 15PV

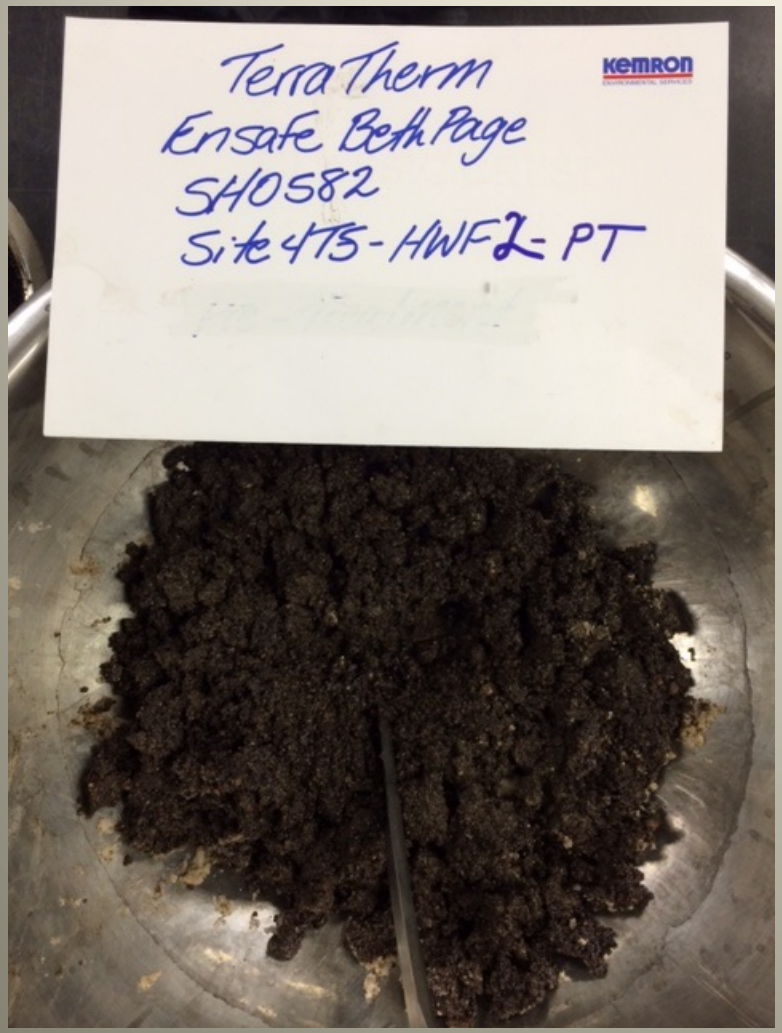


Site 4TS-HWF1-PT
Homogenized post treated soil

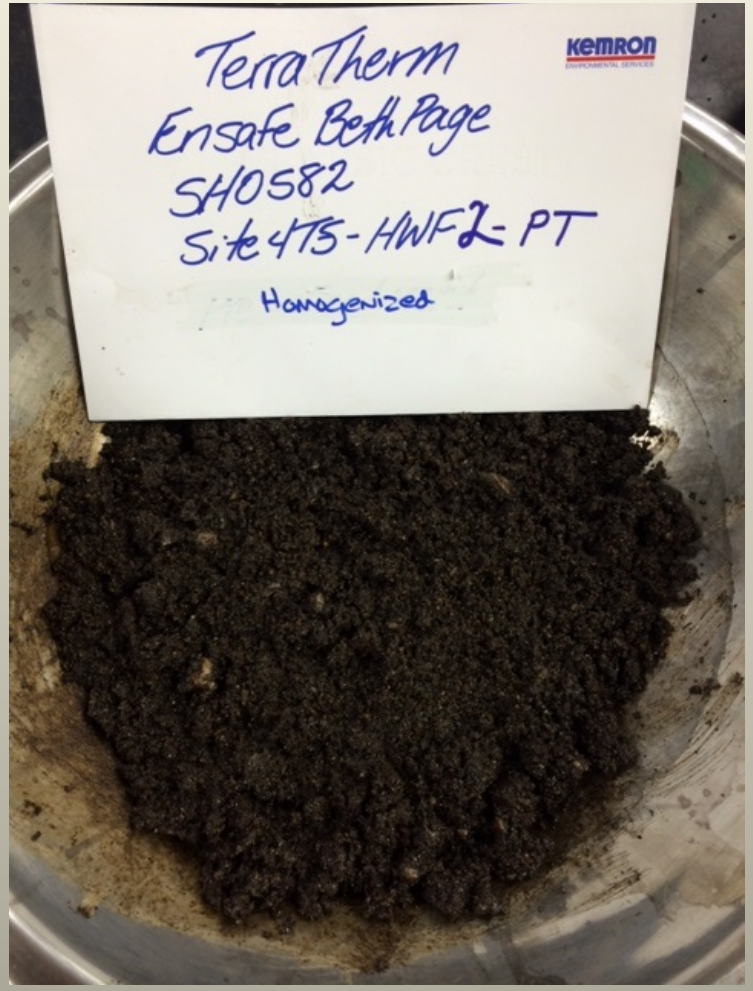


Site 4TS-HWF1 (15PV)
Condensate
No NAPL observed. Slight yellow color. Strong petroleum odor

KEMRON
ENVIRONMENTAL SERVICES



30PV Hot Water Flush
Post-Treatment
"Pre-Homogenization"
No visible reduction in NAPL impact.
White granules are non-impacted clean sand from test reactor.

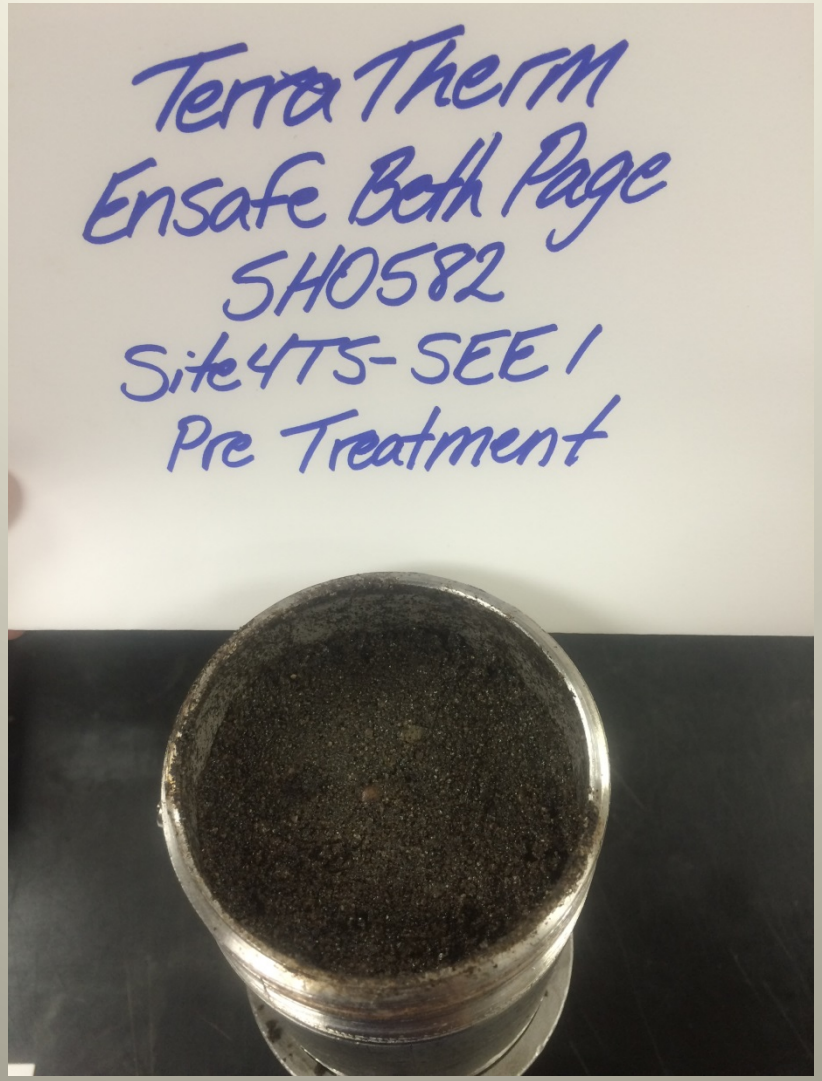


30 PV Hot Water Flush
Post-Treatment
“Homogenized”

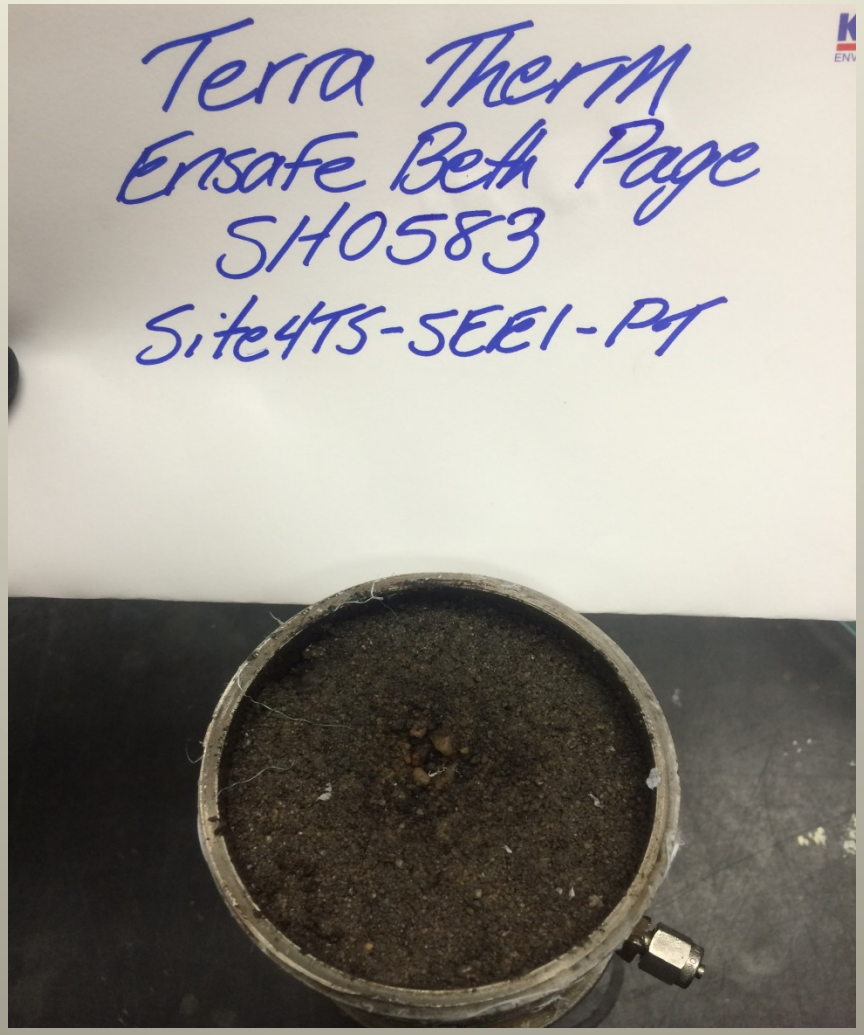
Hot Water Flush 30PV

Empty test reactor after testing. Significant staining and adherence of NAPL impacted soil on the inside of the top cap (left) and sides of the cylinder (right). Note the white sand layer on the bottom of the cylinder (right) shows no staining.

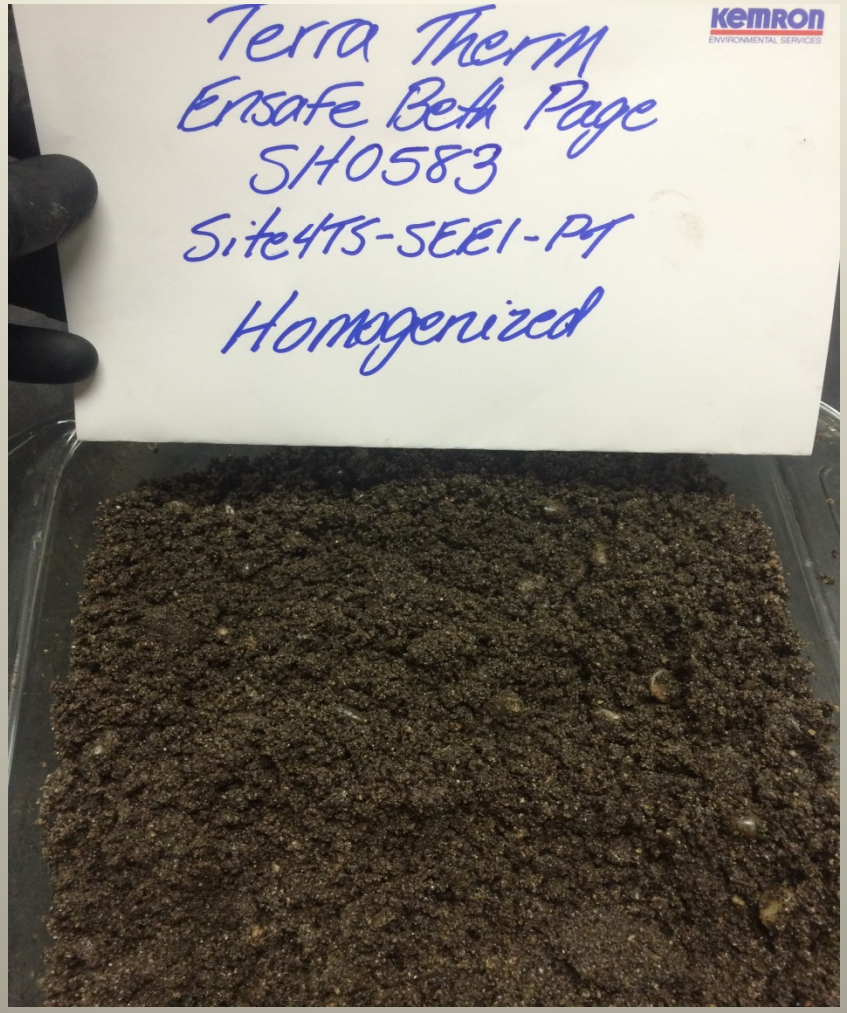
Steam Enhanced Extraction (SEE) Testing



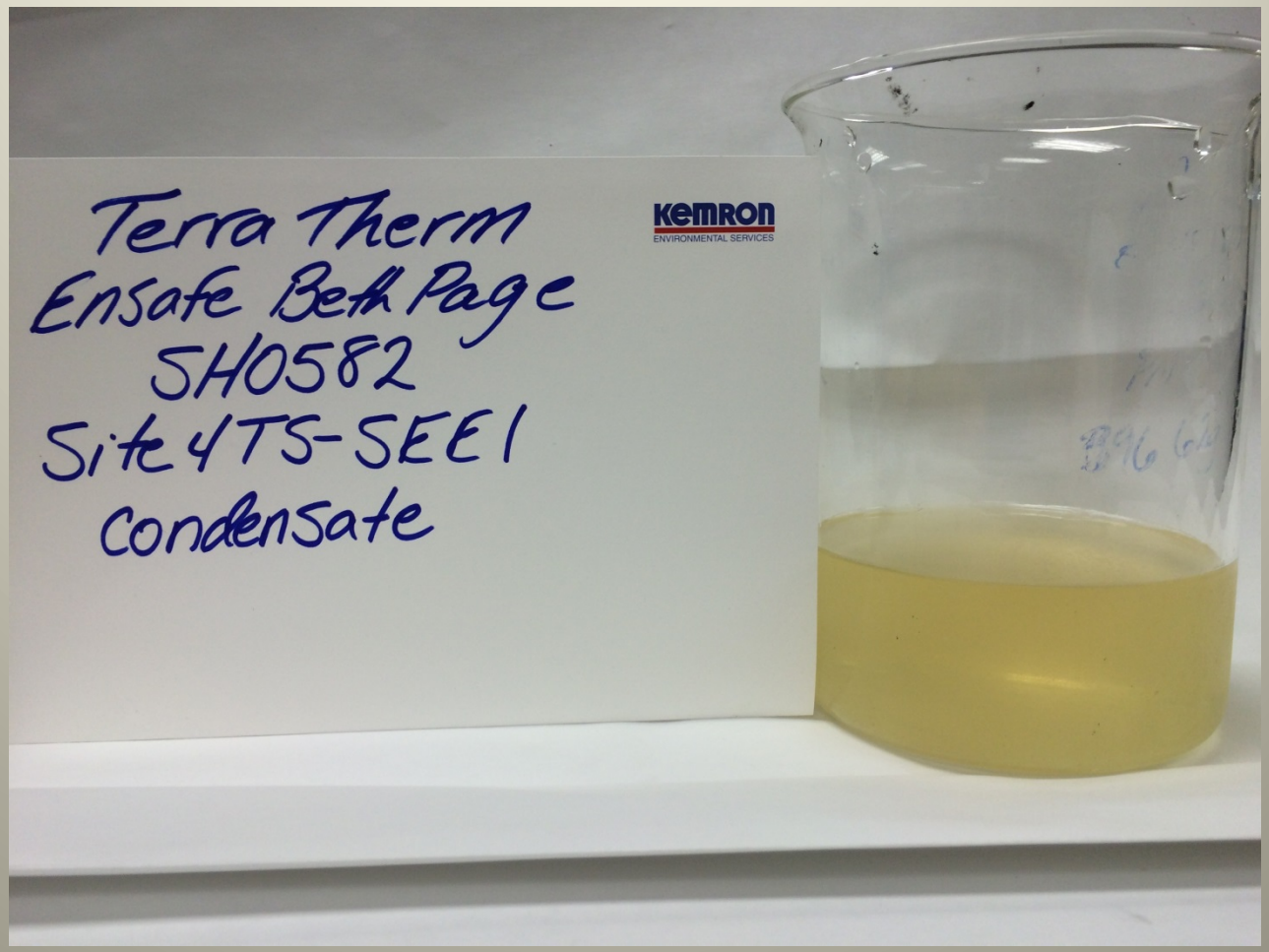
Site 4TS- SEE1 – 2PV
Pre-Treatment



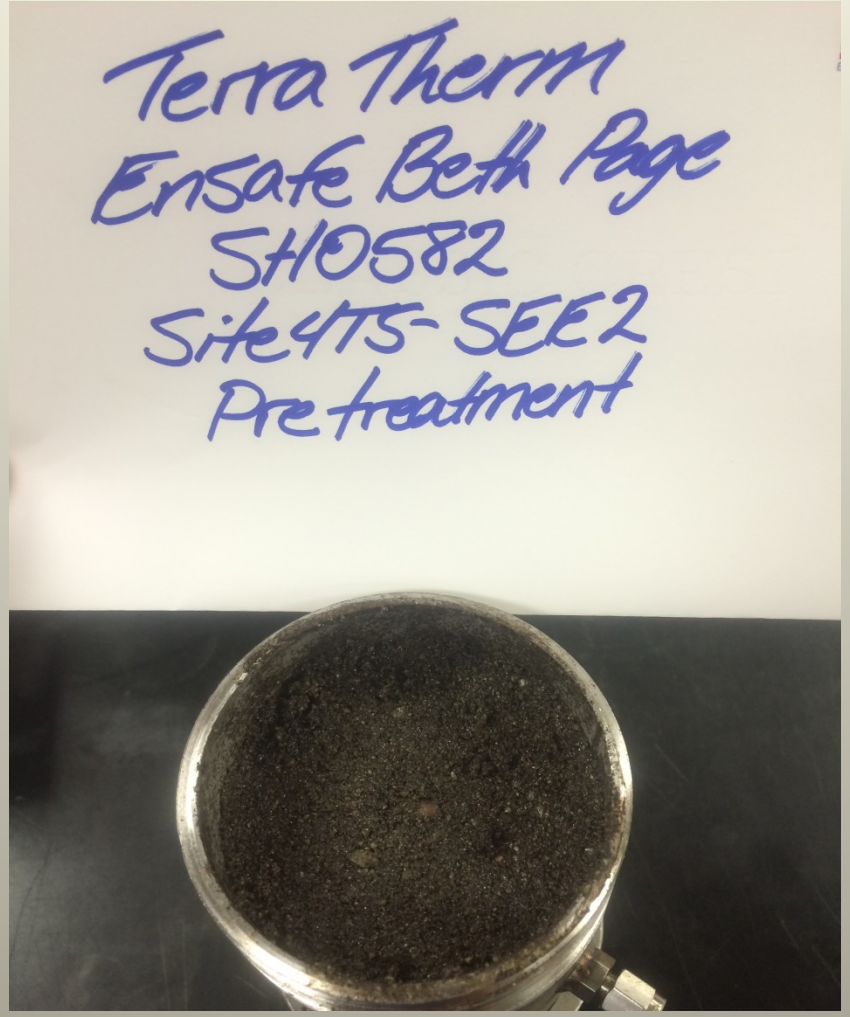
Site 4TS- SEE 1 – 2PV
Post-Treatment



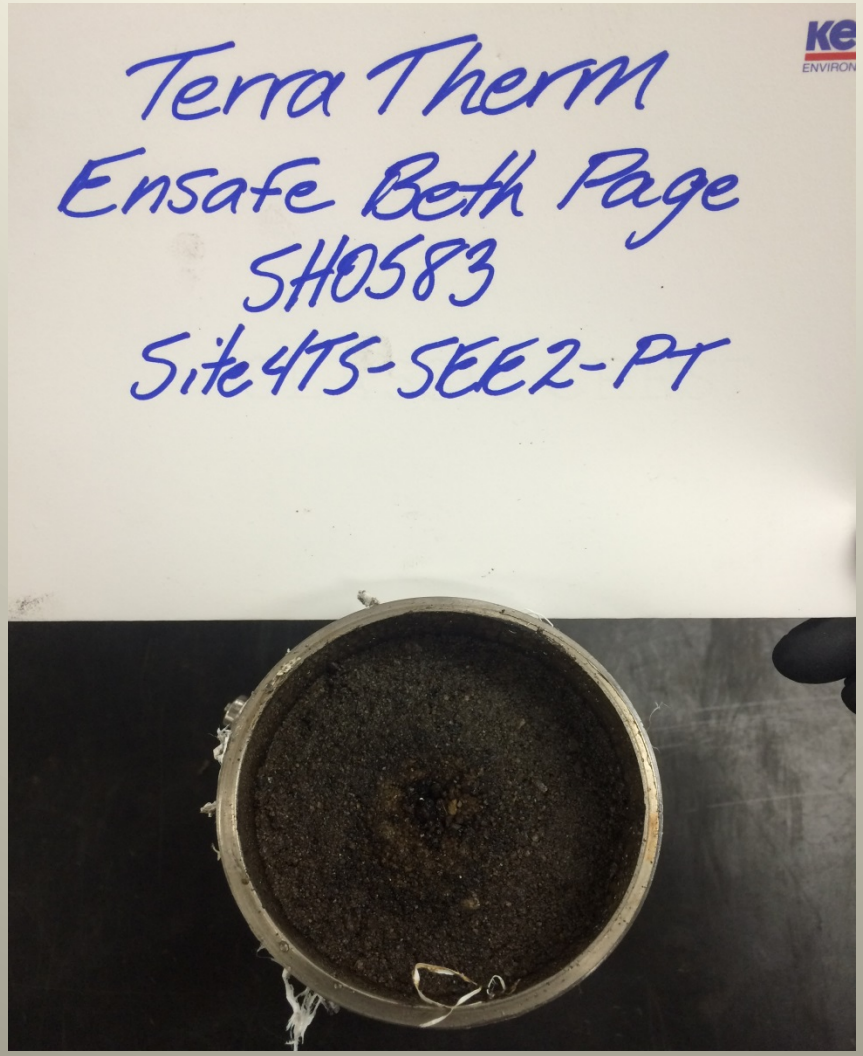
Site 4TS- SEE 1 – 2PV
Post-Treatment
“Homogenized”



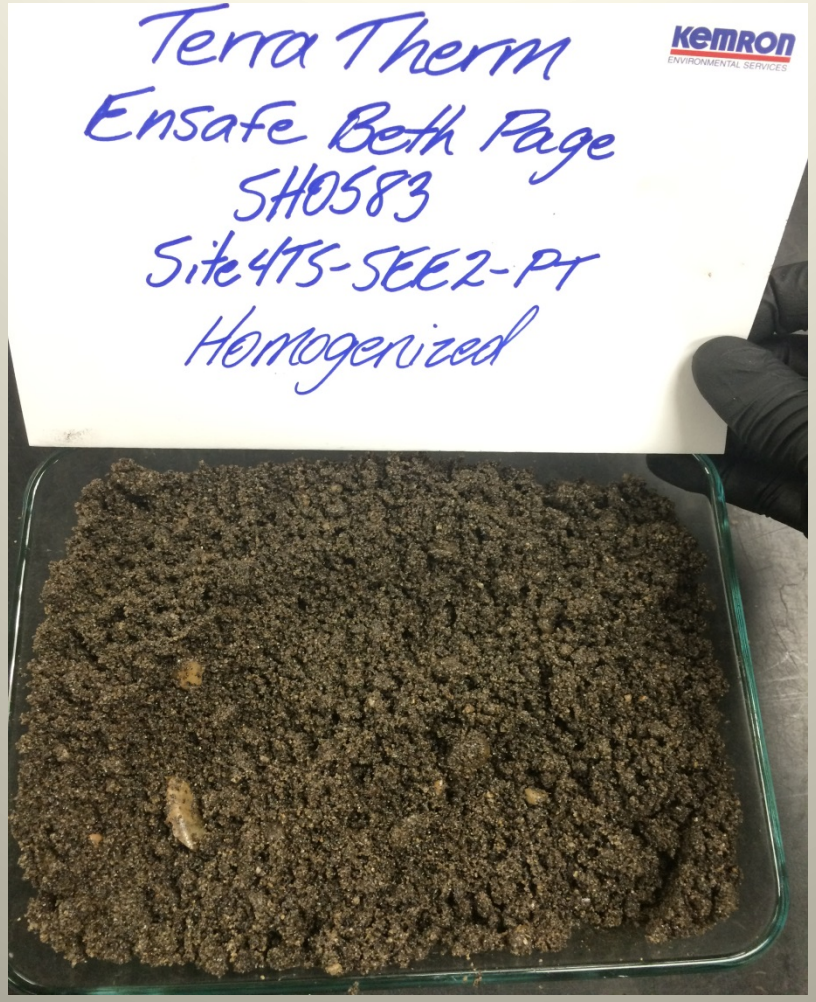
Site 4TS- SEE 1 – 2PV
“ Condensate”



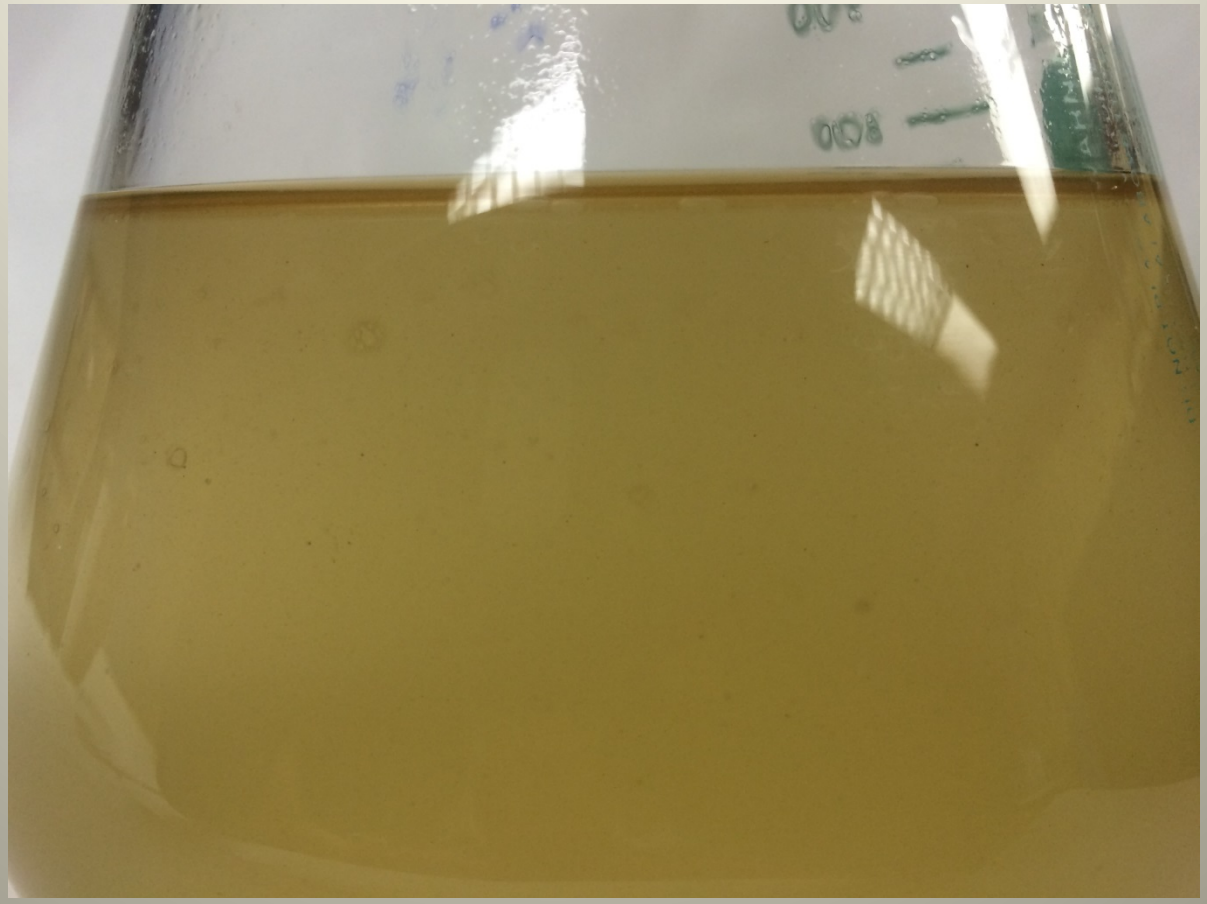
Site 4TS- SEE 2 – 6PV
Pre-Treatment



Site 4TS- SEE 2 – 6PV
Post-Treatment



Site 4TS- SEE 2 – 6PV
Post-Treatment
“Homogenized”



Site 4TS-SEE 2 – 6PV
"Condensate"
Thin layer of LNAPL on surface

Appendix D
Analytical Data

Table D1- Baseline Analytical Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

						Location	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1
						Sample ID	SITE 4TS-HWF1-B	SITE 4TS-HWF2-B	SITE 4TS-SEE1-B	SITE 4TS-SEE2-B	SITE4TS-FB
						Sample Date	6/15/2015	6/15/2015	6/22/2015	6/22/2015	6/4/2015
						Sample Type	Soil	Soil	Soil	Soil	Soil
Method	**Analyte**	**CAS No**	**Site 4 Remedial Goals**	**NYSDEC Unrestricted Use Soil**	**NYSDEC AWQS Class GA Groundwater**	**Units**					
8260C	1,1,2-TRICHLORO-1,2,2-TRICHFLUOROETHANE	76-13-1		NE		MG_KG	0.0013 J	ND	ND	ND	ND
8260C	1,2,4-TRIMETHYLBENZENE	95-63-6		3.6		MG_KG	ND	ND	ND	ND	0.026 MM
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0		0.02		MG_KG	0.002 J	ND	ND	ND	0.0013 JM
8260C	1,3,5-TRIMETHYLBENZENE	108-67-8		8.4		MG_KG	0.035	0.069	0.072	0.03	0.073
8260C	2-BUTANONE	78-93-3		0.12		MG_KG	0.062	ND	ND	ND	ND
8260C	4-ISOPROPYLTOLUENE	99-87-6		NE		MG_KG	0.046	ND	0.093	0.039	0.052 MM
8260C	ACETONE	67-64-1		0.05		MG_KG	***0.24***	***0.35***	***1.3***	ND	***0.1 M***
8260C	BENZENE	71-43-2		0.06		MG_KG	0.0029 J	ND	0.01 J	ND	0.0042 JM
8260C	CARBON DISULFIDE	75-15-0		NE		MG_KG	0.0047	ND	ND	ND	0.0029 J
8260C	CIS-1,2-DICHLOROETHENE	156-59-2		0.25		MG_KG	0.002 J	ND	ND	ND	0.0013 JM
8260C	CYCLOHEXANE	110-82-7		NE		MG_KG	0.034	0.024	0.077	ND	0.12 M
8260C	ETHYLBENZENE	100-41-4		1		MG_KG	0.03	0.055	0.096	0.027	0.063
8260C	ISOPROPYLBENZENE	98-82-8		NE		MG_KG	0.035	0.069	0.072	0.03	0.073
8260C	M- AND P-XYLENE	108-38-3/106-42		0.26		MG_KG	0.0087	0.022	0.036	0.012	0.0084 JMM
8260C	METHYL CYCLOHEXANE	108-87-2		NE		MG_KG	0.12	0.11	0.29	0.1	0.68 M
8260C	METHYLENE CHLORIDE	75-09-2		0.05		MG_KG	0.008 J	ND	ND	ND	ND
8260C	NAPHTHALENE	91-20-3	12	12		MG_KG	0.048	ND	0.035	0.055	0.029 M
8260C	N-BUTYLBENZENE	104-51-8		12		MG_KG	ND	ND	ND	ND	0.039 MM
8260C	O-XYLENE	95-47-6		0.26		MG_KG	0.0074	0.018	0.025	ND	0.0074 MM
8260C	SEC-BUTYLBENZENE	135-98-8		11		MG_KG	0.035	ND	0.07	0.029	0.054 M
8260C	TETRACHLOROETHENE	127-18-4		1.3		MG_KG	0.01	ND	0.027	0.0093	0.0097 M
8260C	TOLUENE	108-88-3		0.7		MG_KG	0.0038 J	0.0062 J	0.013	0.023	0.0040 JMM
8260C	XYLENES, TOTAL	1330-20-7		0.26		MG_KG	0.016	0.04	0.061	0.012 J	0.016 MM
8270D	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7		NE		MG_KG	ND	ND	ND	0.46 J	ND
8270D_SIM	2-METHYLNAPHTHALENE	91-57-6		NE		MG_KG	1.5	1.3	1.7	1.8	ND
8270D_SIM	ACENAPHTHENE	83-32-9		20		MG_KG	0.56	0.5	0.53	0.56	0.91 J
8270D_SIM	ACENAPHTHYLENE	208-96-8		100		MG_KG	ND	ND	0.13 J	0.15 J	ND
8270D_SIM	ANTHRACENE	120-12-7		100		MG_KG	0.99	0.95	0.65	0.83	2.8
8270D_SIM	BENZO[A]ANTHRACENE	56-55-3	1	1		MG_KG	***1.7 *****	***1.5 *****	***1.5 *****	***1.8 *****	***2.6 *****
8270D_SIM	BENZO[A]PYRENE	50-32-8	1	1		MG_KG	***1.2 *****	***1.1 *****	***1.6 *****	***1.6 *****	***1.8 *****
8270D_SIM	BENZO[B]FLUORANTHENE	205-99-2	1	1		MG_KG	0.65	0.56	1.1 L *	0.97 L	0.93 J
8270D_SIM	BENZO[G,H,I]PERYLENE	191-24-2		100		MG_KG	0.75	0.67	1.6	1.5	1 J
8270D_SIM	BENZO[K]FLUORANTHENE	207-08-9		0.8		MG_KG	ND	ND	0.3	0.26	ND
8270D_SIM	CHRYSENE	218-01-9	1	1		MG_KG	***2.6 *****	***2.6 *****	***3.2 *****	***2.8 *****	***4.2 *****
8270D_SIM	DIBENZ[A,H]ANTHRACENE	53-70-3		0.33		MG_KG	ND	0.22 J	***0.36***	***0.35***	0.27 J
8270D_SIM	FLUORANTHENE	206-44-0		100		MG_KG	0.58	0.44	0.33	0.36	1 J
8270D_SIM	FLUORENE	86-73-7		30		MG_KG	0.83	0.76	0.76	0.91	1.4
8270D_SIM	INDENO[1,2,3-CD]PYRENE	193-39-5		0.5		MG_KG	0.32 J	0.24 J	***0.66***	***0.52***	0.31 J
8270D_SIM	NAPHTHALENE	91-20-3		12		MG_KG	0.45	0.4	0.39	0.45	1.1
8270D_SIM	PHENANTHRENE	85-01-8		100		MG_KG	2.2	2.1	1.7	2	4.4
8270D_SIM	PYRENE	129-00-0		100		MG_KG	7	6.1	9.7	9.9	15

Table D1- Baseline Analytical Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

						Location	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1
						Sample ID	SITE 4TS-HWF1-B	SITE 4TS-HWF2-B	SITE 4TS-SEE1-B	SITE 4TS-SEE2-B	SITE4TS-FB
						Sample Date	6/15/2015	6/15/2015	6/22/2015	6/22/2015	6/4/2015
						Sample Type	Soil	Soil	Soil	Soil	Soil
Method	**Analyte**	**CAS No**	**Site 4 Remedial Goals**	**NYSDEC Unrestricted Use Soil**	**NYSDEC AWQS Class GA Groundwater**	**Units**					
6020A	ALUMINUM	7429-90-5		NE		MG_KG	NA	NA	NA	NA	1470 N
6020A	ANTIMONY	7440-36-0		NE		MG_KG	NA	NA	NA	NA	0.018 JN
6020A	ARSENIC	7440-38-2		13		MG_KG	NA	NA	NA	NA	2.34
6020A	BARIUM	7440-39-3		350		MG_KG	NA	NA	NA	NA	6.07
6020A	BERYLLIUM	7440-41-7		7.2		MG_KG	NA	NA	NA	NA	0.0483 J
6020A	CADMIUM	7440-43-9		2.5		MG_KG	NA	NA	NA	NA	0.0066 J
6020A	CALCIUM	7440-70-2		NE		MG_KG	NA	NA	NA	NA	66.3 NB
6020A	CHROMIUM, TOTAL	7440-47-3		NE		MG_KG	NA	NA	NA	NA	2.41
6020A	COBALT	7440-48-4		NE		MG_KG	NA	NA	NA	NA	0.642
6020A	COPPER	7440-50-8		50		MG_KG	NA	NA	NA	NA	2.77
6020A	IRON	7439-89-6		NE		MG_KG	NA	NA	NA	NA	3090 NA
6020A	LEAD	7439-92-1		63		MG_KG	NA	NA	NA	NA	2.65
6020A	MAGNESIUM	7439-95-4		NE		MG_KG	NA	NA	NA	NA	32.7
6020A	MANGANESE	7439-96-5		1600		MG_KG	NA	NA	NA	NA	11.4 B
6020A	NICKEL	7440-02-0		30		MG_KG	NA	NA	NA	NA	2.15
6020A	POTASSIUM	7440-09-7		NE		MG_KG	NA	NA	NA	NA	169
6020A	SELENIUM	7782-49-2		3.9		MG_KG	NA	NA	NA	NA	0.20 J
6020A	SODIUM	7440-23-5		NE		MG_KG	NA	NA	NA	NA	16 J
6020A	THALLIUM	7440-28-0		NE		MG_KG	NA	NA	NA	NA	0.023 J
6020A	VANADIUM	7440-62-2		NE		MG_KG	NA	NA	NA	NA	19.1
6020A	ZINC	7440-66-6		109		MG_KG	NA	NA	NA	NA	2.16
1312-8260	ETHYLBENZENE	100-41-4	5		5	UG_L	ND	ND	ND	ND	1.2 J
1312-8260	METHYLENE CHLORIDE	75-09-2			5	UG_L	***9.6 J***	***9.9 J***	***13 J***	ND	ND
1312-8270	ACENAPHTHENE	83-32-9			NE	UG_L	ND	ND	2.7 J	ND	ND
1312-8270	DIETHYLPHTHALATE	84-66-2			50*	UG_L	ND	ND	ND	ND	2.6 J
1312-8270D_SIM	1,1-BIPHENYL	92-52-4			5	UG_L	ND	ND	ND	0.13 J	ND
1312-8270D_SIM	2-METHYLNAPHTHALENE	91-57-6			NE	UG_L	2	1.7	1.5 L	1.6 L	3.7 M
1312-8270D_SIM	ANTHRACENE	120-12-7			50*	UG_L	0.12 JL	0.11 JL	0.12 JL	0.11 JL	0.18 JMM
1312-8270D_SIM	BENZO[A]ANTHRACENE	56-55-3			0.002*	UG_L	ND	ND	ND	ND	***0.058 JMM***
1312-8270D_SIM	BENZO[A]PYRENE	50-32-8			ND	UG_L	0.081 J	ND	ND	ND	ND
1312-8270D_SIM	BENZO[B]FLUORANTHENE	205-99-2			0.002*	UG_L	***0.18 JBLL***	***0.14 JBLL***	ND	ND	ND
1312-8270D_SIM	BENZO[G,H,I]PERYLENE	191-24-2			NE	UG_L	ND	ND	0.12 J	0.082 J	ND
1312-8270D_SIM	DIBENZ[A,H]ANTHRACENE	53-70-3			NE	UG_L	ND	ND	ND	0.3 L	0.13 JLM
1312-8270D_SIM	DIBENZOFURAN	132-64-9			NE	UG_L	0.14 JL	0.12 JL	0.14 J	0.15 J	0.21
1312-8270D_SIM	DI-N-OCTYLPHTHALATE	117-84-0			50	UG_L	ND	ND	ND	ND	0.087 JMM
1312-8270D_SIM	FLUORANTHENE	206-44-0			50*	UG_L	ND	ND	ND	ND	0.16 JLMM
1312-8270D_SIM	INDENO[1,2,3-CD]PYRENE	193-39-5			0.002*	UG_L	0.064 J	ND	0.54	0.35	***0.22 M***
1312-8270D_SIM	NAPHTHALENE	91-20-3	17		10*	UG_L	0.84	0.73	0.68	0.7	2.8 M
1312-8270D_SIM	PHENANTHRENE	85-01-8			50*	UG_L	0.56 LL	0.54 LL	0.52 L	0.49 L	0.82 L
1312-8270D_SIM	PYRENE	129-00-0			50*	UG_L	0.16 JLL	0.21 LL	0.17 JL	0.16 JL	0.30 MM
1312-6010	ALUMINUM	7429-90-5			NE	UG_L	NA	NA	NA	NA	180 J
1312-6010	BARIUM	7440-39-3			1000	UG_L	NA	NA	NA	NA	126 B
1312-6010	CALCIUM	7440-70-2			NE	UG_L	NA	NA	NA	NA	320 J
1312-6010	COBALT	7440-48-4	6		NE	UG_L	NA	NA	NA	NA	1.8 J
1312-6010	IRON	7439-89-6			300	UG_L	NA	NA	NA	NA	170 JN
1312-6010	MAGNESIUM	7439-95-4			35000*	UG_L	NA	NA	NA	NA	100 J
1312-6010	MANGANESE	7439-96-5	430		300	UG_L	NA	NA	NA	NA	14 J

Table D1- Baseline Analytical Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

						Location	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1
						Sample ID	SITE 4TS-HWF1-B	SITE 4TS-HWF2-B	SITE 4TS-SEE1-B	SITE 4TS-SEE2-B	SITE4TS-FB
						Sample Date	6/15/2015	6/15/2015	6/22/2015	6/22/2015	6/4/2015
						Sample Type	Soil	Soil	Soil	Soil	Soil
Method	**Analyte**	**CAS No**	**Site 4 Remedial Goals**	**NYSDEC Unrestricted Use Soil**	**NYSDEC AWQS Class GA Groundwater**	**Units**					
1312-6010	ZINC	7440-66-6			2000	UG_L	NA	NA	NA	NA	41.6 J

Notes:

NYSDEC	=	New York State Department of Environmental Conservation
AWQS	=	Ambient Water Quality Standards
MG_KG	=	Milligrams per kilogram
UG_L	=	Micrograms per liter
Bold	=	Exceeds NYSDEC Unrestricted Use Soil or AWQS Class GA Groundwater
Bold**	=	Exceeds Site 4 Remedial Goal
ND	=	Not detected
NA	=	Not analyzed
NE	=	Not established
M	=	The matrix spike / matrix spike duplicate accuracy and/or precision are outside criteria.
A	=	The post digestion spiked sample recovery is not within control limits.
L	=	Indicates that the flagged compound did not meet Department of Defense criteria in the corresponding laboratory control sample and/or duplicate prepared and/or analyzed concurrently with the sample.
N	=	The pre-digestion spiked sample recovery is not within control limits.
B	=	The analyte was detected in the laboratory method blank analyzed concurrently with the sample.
*	=	Indicates the value is a guidance value and not a standard

Table D2- Hot Water Flush Soils Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

						Location	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1
						Sample ID	SITE 4TS-HWF1-B	SITE 4TS-HWF1-PT	SITE 4TS-HWF2-B	SITE 4TS-HWF2-PT	SITE4TS-FB
						Sample Date	6/15/2015	6/16/2015	6/15/2015	6/17/2015	6/4/2015
						Sample Type	Soil	Soil	Soil	Soil	Soil
Method	**Analyte**	**CAS No**	**Site 4 Remedial Goals**	**NYSDEC Unrestricted Use Soil**	**NYSDEC AWQS Class GA Groundwater**	**Units**					
8260C	1,1,2-TRICHLORO-1,2,2-TRICHFLUOROETHANE	76-13-1		NE		MG_KG	0.0013 J	0.00095 J	ND	ND	ND
8260C	1,2,4-TRIMETHYLBENZENE	95-63-6		3.6		MG_KG	ND	ND	ND	ND	0.026 MM
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0		0.02		MG_KG	0.0020 J	ND	ND	ND	0.0013 JM
8260C	1,3,5-TRIMETHYLBENZENE	108-67-8		8.4		MG_KG	0.035	ND	0.069	ND	0.073
8260C	2-BUTANONE	78-93-3		0.12		MG_KG	0.062	0.066	ND	0.031	ND
8260C	4-ISOPROPYLTOLUENE	99-87-6		NE		MG_KG	0.046	0.039	ND	0.029	0.052 MM
8260C	ACETONE	67-64-1		0.05		MG_KG	***0.24***	***0.23***	***0.35***	***0.077***	***0.1 M***
8260C	BENZENE	71-43-2		0.06		MG_KG	0.0029 J	ND	ND	ND	0.0042 JM
8260C	BROMODICHLOROMETHANE	75-27-4		NE		MG_KG	ND	0.0033 J	ND	ND	ND
8260C	CARBON DISULFIDE	75-15-0		NE		MG_KG	0.0047	0.0064	ND	0.0034 J	0.0029 J
8260C	CHLOROFORM	67-66-3		0.37		MG_KG	ND	0.02	ND	0.0049	ND
8260C	CIS-1,2-DICHLOROETHENE	156-59-2		0.25		MG_KG	0.0020 J	ND	ND	ND	0.0013 JM
8260C	CYCLOHEXANE	110-82-7		NE		MG_KG	0.034	0.031	0.024	0.02	0.12 M
8260C	ETHYLBENZENE	100-41-4		1		MG_KG	0.03	0.0030 J	0.055	0.0041	0.063
8260C	ISOPROPYLBENZENE	98-82-8		NE		MG_KG	0.035	ND	0.069	0.0047	0.073
8260C	M- AND P-XYLENE	108-38-3/106-42		0.26		MG_KG	0.0087	0.0069 J	0.022	0.0047 J	0.0084 JMM
8260C	METHYL CYCLOHEXANE	108-87-2		NE		MG_KG	0.12	0.12	0.11	0.071	0.68 M
8260C	METHYLENE CHLORIDE	75-09-2		0.05		MG_KG	0.0080 J	0.0084 J	ND	ND	ND
8260C	NAPHTHALENE	91-20-3	12	12		MG_KG	0.048	ND	ND	ND	0.029 M
8260C	N-BUTYLBENZENE	104-51-8		12		MG_KG	ND	ND	ND	ND	0.039 MM
8260C	O-XYLENE	95-47-6		0.26		MG_KG	0.0074	0.007	0.018	0.0042	0.0074 MM
8260C	SEC-BUTYLBENZENE	135-98-8		11		MG_KG	0.035	ND	ND	ND	0.054 M
8260C	TETRACHLOROETHENE	127-18-4		1.3		MG_KG	0.01	0.012	ND	0.0045	0.0097 M
8260C	TOLUENE	108-88-3		0.7		MG_KG	0.0038 J	0.0020 J	0.0062 J	0.0014 J	0.0040 JMM
8260C	XYLENES, TOTAL	1330-20-7		0.26		MG_KG	0.016	0.014	0.04	0.0088 J	0.016 MM
8270D_SIM	2-METHYLNAPHTHALENE	91-57-6		NE		MG_KG	1.5	0.84	1.3	1	ND
8270D_SIM	ACENAPHTHENE	83-32-9		20		MG_KG	0.56	0.74	0.5	0.8	0.91 J
8270D_SIM	ANTHRACENE	120-12-7		100		MG_KG	0.99	1.2	0.95	2	2.8
8270D_SIM	BENZO[A]ANTHRACENE	56-55-3	1	1		MG_KG	***1.7****	***1.8****	***1.5****	***1.8****	***2.6****
8270D_SIM	BENZO[A]PYRENE	50-32-8	1	1		MG_KG	***1.2****	***1.4****	***1.1****	***1.4****	***1.8****
8270D_SIM	BENZO[B]FLUORANTHENE	205-99-2	1	1		MG_KG	0.65	0.76	0.56	0.76	0.93 J
8270D_SIM	BENZO[G,H,I]PERYLENE	191-24-2		100		MG_KG	0.75	0.89	0.67	0.86	1 J
8270D_SIM	CHRYSENE	218-01-9	1	1		MG_KG	***2.6****	***2.9****	***2.6****	***3.3****	***4.2****
8270D_SIM	DIBENZ[A,H]ANTHRACENE	53-70-3		0.33		MG_KG	ND	0.31 J	0.22 J	0.28 J	0.27 J
8270D_SIM	FLUORANTHENE	206-44-0		100		MG_KG	0.58	0.57	0.44	0.6	1 J
8270D_SIM	FLUORENE	86-73-7		30		MG_KG	0.83	0.81	0.76	0.84	1.4
8270D_SIM	INDENO[1,2,3-CD]PYRENE	193-39-5		0.5		MG_KG	0.32 J	0.36 J	0.24 J	0.36 J	0.31 J
8270D_SIM	NAPHTHALENE	91-20-3		12		MG_KG	0.45	0.26 J	0.4	0.28 J	1.1
8270D_SIM	PHENANTHRENE	85-01-8		100		MG_KG	2.2	2.1	2.1	2.7	4.4
8270D_SIM	PYRENE	129-00-0		100		MG_KG	7	12	6.1	7.8	15
6020A	ALUMINUM	7429-90-5		NE		MG_KG	NA	NA	NA	NA	1470 N
6020A	ANTIMONY	7440-36-0		NE		MG_KG	NA	NA	NA	NA	0.018 JN
6020A	ARSENIC	7440-38-2		13		MG_KG	NA	NA	NA	NA	2.34
6020A	BARIUM	7440-39-3		350		MG_KG	NA	NA	NA	NA	6.07
6020A	BERYLLIUM	7440-41-7		7.2		MG_KG	NA	NA	NA	NA	0.0483 J

Table D2- Hot Water Flush Soils Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

						Location	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1
						Sample ID	SITE 4TS-HWF1-B	SITE 4TS-HWF1-PT	SITE 4TS-HWF2-B	SITE 4TS-HWF2-PT	SITE4TS-FB
						Sample Date	6/15/2015	6/16/2015	6/15/2015	6/17/2015	6/4/2015
						Sample Type	Soil	Soil	Soil	Soil	Soil
Method	**Analyte**	**CAS No**	**Site 4 Remedial Goals**	**NYSDEC Unrestricted Use Soil**	**NYSDEC AWQS Class GA Groundwater**	**Units**					
6020A	CADMIUM	7440-43-9		2.5		MG_KG	NA	NA	NA	NA	0.0066 J
6020A	CALCIUM	7440-70-2		NE		MG_KG	NA	NA	NA	NA	66.3 NB
6020A	CHROMIUM, TOTAL	7440-47-3		NE		MG_KG	NA	NA	NA	NA	2.41
6020A	COBALT	7440-48-4		NE		MG_KG	NA	NA	NA	NA	0.642
6020A	COPPER	7440-50-8		50		MG_KG	NA	NA	NA	NA	2.77
6020A	IRON	7439-89-6		NE		MG_KG	NA	NA	NA	NA	3090 NA
6020A	LEAD	7439-92-1		63		MG_KG	NA	NA	NA	NA	2.65
6020A	MAGNESIUM	7439-95-4		NE		MG_KG	NA	NA	NA	NA	32.7
6020A	MANGANESE	7439-96-5		1600		MG_KG	NA	NA	NA	NA	11.4 B
6020A	NICKEL	7440-02-0		30		MG_KG	NA	NA	NA	NA	2.15
6020A	POTASSIUM	7440-09-7		NE		MG_KG	NA	NA	NA	NA	169
6020A	SELENIUM	7782-49-2		3.9		MG_KG	NA	NA	NA	NA	0.20 J
6020A	SODIUM	7440-23-5		NE		MG_KG	NA	NA	NA	NA	16 J
6020A	THALLIUM	7440-28-0		NE		MG_KG	NA	NA	NA	NA	0.023 J
6020A	VANADIUM	7440-62-2		NE		MG_KG	NA	NA	NA	NA	19.1
6020A	ZINC	7440-66-6		109		MG_KG	NA	NA	NA	NA	2.16
1312-8260	ETHYLBENZENE	100-41-4	5		5	UG_L	ND	ND	ND	ND	1.2 J
1312-8260	METHYLENE CHLORIDE	75-09-2			5	UG_L	***9.6 J***	***9.9 J***	***9.9 J***	***10 J***	ND
1312-8270	DIETHYLPHTHALATE	84-66-2			50*	UG_L	ND	ND	ND	ND	2.6 J
1312-8270D_SIM	2-METHYLNAPHTHALENE	91-57-6			NE	UG_L	2.0	0.28	1.7	0.22 J	3.7 M
1312-8270D_SIM	ANTHRACENE	120-12-7			50*	UG_L	0.12 JL	0.080 JL	0.11 JL	0.091 JL	0.18 JMM
1312-8270D_SIM	BENZO[A]ANTHRACENE	56-55-3			0.002*	UG_L	ND	ND	ND	ND	***0.058 JMM***
1312-8270D_SIM	BENZO[A]PYRENE	50-32-8			ND	UG_L	0.081 J	ND	ND	ND	ND
1312-8270D_SIM	BENZO[B]FLUORANTHENE	205-99-2			0.002*	UG_L	***0.18 JBLL***	***0.17 JBLL***	***0.14 JBLL***	***0.18 JBLL***	ND
1312-8270D_SIM	BIS(2-CHLOROETHYL)ETHER	111-44-4			1	UG_L	ND	0.076 JLL	ND	ND	ND
1312-8270D_SIM	DIBENZ[A,H]ANTHRACENE	53-70-3			NE	UG_L	ND	ND	ND	ND	0.13 JLM
1312-8270D_SIM	DIBENZOFURAN	132-64-9			NE	UG_L	0.14 JL	ND	0.12 JL	ND	0.21
1312-8270D_SIM	DI-N-OCTYLPHTHALATE	117-84-0			50	UG_L	ND	ND	ND	ND	0.087 JMM
1312-8270D_SIM	FLUORANTHENE	206-44-0			50*	UG_L	ND	ND	ND	ND	0.16 JLMM
1312-8270D_SIM	INDENO[1,2,3-CD]PYRENE	193-39-5			0.002*	UG_L	**0.064 J**	ND	ND	ND	**0.22 M**
1312-8270D_SIM	NAPHTHALENE	91-20-3	17		10*	UG_L	0.84	0.51	0.73	0.43	2.8 M
1312-8270D_SIM	PHENANTHRENE	85-01-8			50*	UG_L	0.56 LL	0.33 LL	0.54 LL	0.32 LL	0.82 L
1312-8270D_SIM	PYRENE	129-00-0			50*	UG_L	0.16 JLL	0.18 JLL	0.21 LL	0.16 JLL	0.30 MM
1312-6010	ALUMINUM	7429-90-5			NE	UG_L	NA	NA	NA	NA	180 J
1312-6010	BARIUM	7440-39-3			1000	UG_L	NA	NA	NA	NA	126 B
1312-6010	CALCIUM	7440-70-2			NE	UG_L	NA	NA	NA	NA	320 J
1312-6010	COBALT	7440-48-4	6		NE	UG_L	NA	NA	NA	NA	1.8 J
1312-6010	IRON	7439-89-6			300	UG_L	NA	NA	NA	NA	170 JN
1312-6010	MAGNESIUM	7439-95-4			35000*	UG_L	NA	NA	NA	NA	100 J

Table D2- Hot Water Flush Soils Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

						Location	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1
						Sample ID	SITE 4TS-HWF1-B	SITE 4TS-HWF1-PT	SITE 4TS-HWF2-B	SITE 4TS-HWF2-PT	SITE4TS-FB
						Sample Date	6/15/2015	6/16/2015	6/15/2015	6/17/2015	6/4/2015
						Sample Type	Soil	Soil	Soil	Soil	Soil
Method	**Analyte**	**CAS No**	**Site 4 Remedial Goals**	**NYSDEC Unrestricted Use Soil**	**NYSDEC AWQS Class GA Groundwater**	**Units**					
1312-6010	MANGANESE	7439-96-5	430		300	UG_L	NA	NA	NA	NA	14 J
1312-6010	ZINC	7440-66-6			2000	UG_L	NA	NA	NA	NA	41.6 J

Notes:

NYSDEC	=	New York State Department of Environmental Conservation
AWQS	=	Ambient Water Quality Standards
MG_KG	=	Milligrams per kilogram
UG_L	=	Micrograms per liter
Bold	=	Exceeds NYSDEC Unrestricted Use Soil or AWQS Class GA Groundwater
Bold**	=	Exceeds Site 4 Remedial Goal
ND	=	Not detected
NA	=	Not analyzed
NE	=	Not established
J	=	Estimated value, the analyte was detected in the sample at a concentration less than the laboratory limit of quantitation, but above the method detection limit.
M	=	The matrix spike / matrix spike duplicate accuracy and/or precision are outside criteria.
A	=	The post digestion spiked sample recovery is not within control limits.
L	=	Indicates that the flagged compound did not meet Department of Defense criteria in the corresponding laboratory control sample and/or duplicate prepared and/or analyzed concurrently with the sample.
N	=	The pre-digestion spiked sample recovery is not within control limits.
B	=	The analyte was detected in the laboratory method blank analyzed concurrently with the sample.
*	=	Indicates the value is a guidance value and not a standard

Table D3- Hot Water Flush Leachate Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

					Location	4TS-SB1	4TS-SB1
					Sample ID	SITE 4TS-HWF2-L1	SITE 4TS-HWF2-L2
					Sample Date	6/16/2015	6/17/2015
					Sample Type	Leachate	Leachate
Method	**Analyte**	**CAS No.**	**Site 4 Remedial Goals**	**NYSDEC AWQS Class GA Groundwater**	**Units**		
8260C	1,2,3-TRICHLOROPROPANE	96-18-4		0.04	UG_L	***14***	***9.4***
8260C	1,2,4-TRIMETHYLBENZENE	95-63-6		5	UG_L	0.21 J	ND
8260C	1,2-DICHLOROBENZENE	95-50-1		3	UG_L	0.39 J	0.19 J
8260C	1,2-DICHLOROETHANE	107-06-2		0.6	UG_L	***2.2***	***3***
8260C	2-BUTANONE	78-93-3		50*	UG_L	11	9.4
8260C	ACETONE	67-64-1		50*	UG_L	**110**	40
8260C	CARBON DISULFIDE	75-15-0		60*	UG_L	0.25 J	0.50 J
8260C	CHLOROFORM	67-66-3		7	UG_L	2.9	4.2
8260C	NAPHTHALENE	91-20-3	17	10*	UG_L	**15**	6.5
8260C	O-XYLENE	95-47-6		5	UG_L	ND	0.26 J
8260C	TOLUENE	108-88-3		5	UG_L	0.40 J	0.30 J
8260C	XYLENES, TOTAL	1330-20-7	5	5	UG_L	ND	0.26 J
8270D	BIS(2-CHLOROETHOXY)METHANE	111-91-1		5	UG_L	***5.6 J***	ND
8270D	BIS(2-CHLOROETHYL)ETHER	111-44-4		1	UG_L	***14***	ND
8270D	CAPROLACTAM	105-60-2		NE	UG_L	ND	1.6 JL
8270D_SIM	2-METHYLNAPHTHALENE	91-57-6		NE	UG_L	18	ND
8270D_SIM	ACENAPHTHENE	83-32-9		20*	UG_L	1.1	0.89
8270D_SIM	ANTHRACENE	120-12-7		50*	UG_L	0.73	0.33
8270D_SIM	BENZO[A]ANTHRACENE	56-55-3		0.002*	UG_L	ND	***0.11 J***
8270D_SIM	BENZO[B]FLUORANTHENE	205-99-2		0.002*	UG_L	***0.13 J***	***0.10 J***
8270D_SIM	FLUORANTHENE	206-44-0		50*	UG_L	0.21	0.15 J
8270D_SIM	FLUORENE	86-73-7		50*	UG_L	1.5	1
8270D_SIM	NAPHTHALENE	91-20-3	17	10*	UG_L	***22*****	3.1
8270D_SIM	PHENANTHRENE	85-01-8		50*	UG_L	3.9	1.4
8270D_SIM	PYRENE	129-00-0		50*	UG_L	0.59	0.72

Notes:

NYSDEC	=	New York State Department of Environmental Conservation
AWQS	=	Ambient Water Quality Standards
UG_L	=	Micrograms per liter
Bold	=	Exceeds NYSDEC AWQS Class GA Groundwater
Bold**	=	Exceeds Site 4 Remedial Goal
ND	=	Not detected
J	=	Estimated value, the analyte was detected in the sample at a concentration less than the laboratory limit of quantitation, but above the method detection limit.
L	=	Indicates that the flagged compound did not meet Department of Defense criteria in the corresponding laboratory control sample and/or duplicate prepared and/or analyzed concurrently with the sample.
NE	=	Not established
*	=	Indicates the value is a guidance value and not a standard

Table D4- Steam Enhanced Extraction Soil Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

						Location	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1
						Sample ID	SITE 4TS-SEE1-B	SITE 4TS-SEE1-PT	SITE 4TS-SEE2-B	SITE 4TS-SEE2-PT	SITE4TS-FB
						Sample Date	6/22/2015	6/23/2015	6/22/2015	6/26/2015	6/4/2015
						Sample Type	Soil	Soil	Soil	Soil	Soil
Method	**Analyte**	**CAS No**	**Site 4 Remedial Goals**	**NYSDEC Unrestricted Use Soil**	**NYSDEC AWQS GA Groundwater**	**Units**					
8260C	1,2,4-TRIMETHYLBENZENE	95-63-6		3.6		MG_KG	ND	ND	ND	ND	0.026 MM
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0		0.02		MG_KG	ND	ND	ND	ND	0.0013 JM
8260C	1,3,5-TRIMETHYLBENZENE	108-67-8		8.4		MG_KG	0.072	ND	0.03	ND	0.073
8260C	2-BUTANONE	78-93-3		0.12		MG_KG	ND	0.048	ND	0.053	ND
8260C	4-ISOPROPYLTOLUENE	99-87-6		NE		MG_KG	0.093	ND	0.039	ND	0.052 MM
8260C	ACETONE	67-64-1		0.05		MG_KG	***1.3****	***0.25****	ND	***0.3****	***0.1 M****
8260C	BENZENE	71-43-2		0.06		MG_KG	0.01 J	0.0037 J	ND	ND	0.0042 JM
8260C	BROMOMETHANE	74-83-9		NE		MG_KG	ND	0.19 E	ND	ND	ND
8260C	CARBON DISULFIDE	75-15-0		NE		MG_KG	ND	ND	ND	0.0027 J	0.0029 J
8260C	CIS-1,2-DICHLOROETHENE	156-59-2		0.25		MG_KG	ND	ND	ND	ND	0.0013 JM
8260C	CYCLOHEXANE	110-82-7		NE		MG_KG	0.077	ND	ND	ND	0.12 M
8260C	ETHYLBENZENE	100-41-4		1		MG_KG	0.096	ND	0.027	0.00089 J	0.063
8260C	ISOPROPYLBENZENE	98-82-8		NE		MG_KG	0.072	ND	0.03	ND	0.073
8260C	M- AND P-XYLENE	108-38-3/106-42		0.26		MG_KG	0.036	0.0037 J	0.012	0.0036 J	0.0084 JMM
8260C	METHYL CYCLOHEXANE	108-87-2		NE		MG_KG	0.29	0.0089	0.1	0.0046	0.68 M
8260C	METHYLENE CHLORIDE	75-09-2		0.05		MG_KG	ND	ND	ND	0.0092 J	ND
8260C	NAPHTHALENE	91-20-3	12	12		MG_KG	0.035	ND	0.055	ND	0.029 M
8260C	N-BUTYLBENZENE	104-51-8		12		MG_KG	ND	ND	ND	ND	0.039 MM
8260C	O-XYLENE	95-47-6		0.26		MG_KG	0.025	0.0021 J	ND	ND	0.0074 MM
8260C	SEC-BUTYLBENZENE	135-98-8		11		MG_KG	0.07	ND	0.029	ND	0.054 M
8260C	TETRACHLOROETHENE	127-18-4		1.3		MG_KG	0.027	ND	0.0093	ND	0.0097 M
8260C	TOLUENE	108-88-3		0.7		MG_KG	0.013	0.0062	0.023	0.0022 J	0.0040 JMM
8260C	XYLENES, TOTAL	1330-20-7		0.26		MG_KG	0.061	0.0058 J	0.012 J	0.0036 J	0.016 MM
8270D	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7		NE		MG_KG	ND	ND	0.46 J	ND	ND
8270D_SIM	2-METHYLNAPHTHALENE	91-57-6		NE		MG_KG	1.7	0.62	1.8	ND	ND
8270D_SIM	ACENAPHTHENE	83-32-9		20		MG_KG	0.53	0.49	0.56	0.06 J	0.91 J
8270D_SIM	ACENAPHTHYLENE	208-96-8		100		MG_KG	0.13 J	ND	0.15 J	ND	ND
8270D_SIM	ANTHRACENE	120-12-7		100		MG_KG	0.65	0.65	0.83	0.17 J	2.8
8270D_SIM	BENZO[A]ANTHRACENE	56-55-3	1	1		MG_KG	***1.5*****	***1.6*****	***1.8*****	0.3	***2.6*****
8270D_SIM	BENZO[A]PYRENE	50-32-8	1	1		MG_KG	***1.6*****	***1.3*****	***1.6*****	0.3	***1.8*****
8270D_SIM	BENZO[B]FLUORANTHENE	205-99-2	1	1		MG_KG	***1.1 L*****	0.78 L	0.97 L	0.2	0.93 J
8270D_SIM	BENZO[G,H,I]PERYLENE	191-24-2		100		MG_KG	1.6	1.3	1.5	0.18 J	1 J
8270D_SIM	BENZO[K]FLUORANTHENE	207-08-9		0.8		MG_KG	0.3	0.16 J	0.26	ND	ND
8270D_SIM	CHRYSENE	218-01-9	1	1		MG_KG	***3.2*****	***2.8*****	***2.8*****	0.54	***4.2*****
8270D_SIM	DIBENZ[A,H]ANTHRACENE	53-70-3		0.33		MG_KG	***0.36***	0.3	***0.35***	0.048 J	0.27 J
8270D_SIM	FLUORANTHENE	206-44-0		100		MG_KG	0.33	0.39	0.36	0.1 J	1 J
8270D_SIM	FLUORENE	86-73-7		30		MG_KG	0.76	0.66	0.91	0.1 J	1.4
8270D_SIM	INDENO[1,2,3-CD]PYRENE	193-39-5		0.5		MG_KG	***0.66***	0.45	***0.52***	0.074 J	0.31 J
8270D_SIM	NAPHTHALENE	91-20-3	12	12		MG_KG	0.39	0.11 J	0.45	ND	1.1
8270D_SIM	PHENANTHRENE	85-01-8		100		MG_KG	1.7	1.6	2	0.44	4.4
8270D_SIM	PYRENE	129-00-0		100		MG_KG	9.7	7.2	9.9	1.2	15
6020A	ALUMINUM	7429-90-5		NE		MG_KG	NA	NA	NA	1170	1470 N
6020A	ANTIMONY	7440-36-0		NE		MG_KG	NA	NA	NA	0.028 J	0.018 JN

Table D4- Steam Enhanced Extraction Soil Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

						Location	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1
						Sample ID	SITE 4TS-SEE1-B	SITE 4TS-SEE1-PT	SITE 4TS-SEE2-B	SITE 4TS-SEE2-PT	SITE4TS-FB
						Sample Date	6/22/2015	6/23/2015	6/22/2015	6/26/2015	6/4/2015
						Sample Type	Soil	Soil	Soil	Soil	Soil
Method	**Analyte**	**CAS No**	**Site 4 Remedial Goals**	**NYSDEC Unrestricted Use Soil**	**NYSDEC AWQS GA Groundwater**	**Units**					
6020A	ARSENIC	7440-38-2		13		MG_KG	NA	NA	NA	1.75	2.34
6020A	BARIUM	7440-39-3		350		MG_KG	NA	NA	NA	5.08	6.07
6020A	BERYLLIUM	7440-41-7		7.2		MG_KG	NA	NA	NA	0.0574 J	0.0483 J
6020A	CADMIUM	7440-43-9		2.5		MG_KG	NA	NA	NA	0.0057 J	0.0066 J
6020A	CALCIUM	7440-70-2		NE		MG_KG	NA	NA	NA	51.1	66.3 NB
6020A	CHROMIUM, TOTAL	7440-47-3		NE		MG_KG	NA	NA	NA	3.45	2.41
6020A	COBALT	7440-48-4		NE		MG_KG	NA	NA	NA	0.609	0.642
6020A	COPPER	7440-50-8		50		MG_KG	NA	NA	NA	1.95	2.77
6020A	IRON	7439-89-6		NE		MG_KG	NA	NA	NA	3660	3090 NA
6020A	LEAD	7439-92-1		63		MG_KG	NA	NA	NA	1.84	2.65
6020A	MAGNESIUM	7439-95-4		NE		MG_KG	NA	NA	NA	76.8	32.7
6020A	MANGANESE	7439-96-5		1600		MG_KG	NA	NA	NA	23.0 B	11.4 B
6020A	NICKEL	7440-02-0		30		MG_KG	NA	NA	NA	2.38	2.15
6020A	POTASSIUM	7440-09-7		NE		MG_KG	NA	NA	NA	114	169
6020A	SELENIUM	7782-49-2		3.9		MG_KG	NA	NA	NA	0.044 J	0.20 J
6020A	SILVER	7440-22-4		2		MG_KG	NA	NA	NA	0.0062 J	ND
6020A	SODIUM	7440-23-5		NE		MG_KG	NA	NA	NA	11 J	16 J
6020A	THALLIUM	7440-28-0		NE		MG_KG	NA	NA	NA	0.016 J	0.023 J
6020A	VANADIUM	7440-62-2		NE		MG_KG	NA	NA	NA	15.7	19.1
6020A	ZINC	7440-66-6		109		MG_KG	NA	NA	NA	3.92	2.16
1312-6010	ALUMINUM	7429-90-5			NE	UG_L	NA	NA	NA	ND	180 J
1312-6010	BARIUM	7440-39-3			1000	UG_L	NA	NA	NA	25.7	126 B
1312-6010	CALCIUM	7440-70-2			NE	UG_L	NA	NA	NA	1260	320 J
1312-6010	CHROMIUM, TOTAL	7440-47-3			50	UG_L	NA	NA	NA	2.1 J	ND
1312-6010	COBALT	7440-48-4	6		NE	UG_L	NA	NA	NA	ND	1.8 J
1312-6010	COPPER	7440-50-8			200	UG_L	NA	NA	NA	6.0 J	ND
1312-6010	IRON	7439-89-6			300	UG_L	NA	NA	NA	***752***	170 JN
1312-6010	MAGNESIUM	7439-95-4			300	UG_L	NA	NA	NA	190 J	100 J
1312-6010	MANGANESE	7439-96-5	430		300	UG_L	NA	NA	NA	***346***	14 J
1312-6010	NICKEL	7440-02-0			100	UG_L	NA	NA	NA	4.1 J	ND
1312-6010	POTASSIUM	7440-09-7			NE	UG_L	NA	NA	NA	490 J	ND
1312-6010	SODIUM	7440-23-5			20000	UG_L	NA	NA	NA	440 J	ND
1312-6010	ZINC	7440-66-6			2000	UG_L	NA	NA	NA	55.3 J	41.6 J
1312-8260	ETHYLBENZENE	100-41-4	5		5	UG_L	ND	ND	ND	ND	1.2 J
1312-8260	METHYLENE CHLORIDE	75-09-2			5	UG_L	***13 J***	ND	ND	***170***	ND
1312-8270	ACENAPHTHENE	83-32-9			NE	UG_L	2.7 J	1.8 J	ND	ND	ND
1312-8270	BENZALDEHYDE	100-52-7			NE	UG_L	ND	ND	ND	1.8 J	ND
1312-8270	DIETHYLPHTHALATE	84-66-2			50*	UG_L	ND	ND	ND	ND	2.6 J
1312-8270D_SIM	1,1-BIPHENYL	92-52-4			5	UG_L	ND	ND	0.13 J	ND	ND
1312-8270D_SIM	2-METHYLNAPHTHALENE	91-57-6			NE	UG_L	1.5 L	0.68 L	1.6 L	ND	3.7 M
1312-8270D_SIM	ANTHRACENE	120-12-7			50*	UG_L	0.12 JL	0.11 JL	0.11 JL	0.071 J	0.18 JMM
1312-8270D_SIM	BENZO[A]ANTHRACENE	56-55-3			0.002*	UG_L	ND	ND	ND	ND	***0.058 JMM***
1312-8270D_SIM	BENZO[G,H,I]PERYLENE	191-24-2			NE	UG_L	0.12 J	0.075 J	0.082 J	ND	ND

Table D4- Steam Enhanced Extraction Soil Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

						Location	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1	4TS-SB1
						Sample ID	SITE 4TS-SEE1-B	SITE 4TS-SEE1-PT	SITE 4TS-SEE2-B	SITE 4TS-SEE2-PT	SITE4TS-FB
						Sample Date	6/22/2015	6/23/2015	6/22/2015	6/26/2015	6/4/2015
						Sample Type	Soil	Soil	Soil	Soil	Soil
Method	**Analyte**	**CAS No**	**Site 4 Remedial Goals**	**NYSDEC Unrestricted Use Soil**	**NYSDEC AWQS GA Groundwater**	**Units**					
1312-8270D_SIM	DIBENZ[A,H]ANTHRACENE	53-70-3			NE	UG_L	ND	ND	0.30 L	ND	0.13 JLM
1312-8270D_SIM	DIBENZOFURAN	132-64-9			NE	UG_L	0.14 J	0.11 J	0.15 J	ND	0.21
1312-8270D_SIM	DI-N-OCTYLPHTHALATE	117-84-0			50	UG_L	ND	ND	ND	ND	0.087 JMM
1312-8270D_SIM	FLUORANTHENE	206-44-0			50*	UG_L	ND	ND	ND	ND	0.16 JLMM
1312-8270D_SIM	INDENO[1,2,3-CD]PYRENE	193-39-5			0.002	UG_L	***0.54***	***0.35***	***0.35***	ND	***0.22 M***
1312-8270D_SIM	NAPHTHALENE	91-20-3	17		10*	UG_L	0.68	0.26	0.7	ND	2.8 M
1312-8270D_SIM	PHENANTHRENE	85-01-8			50*	UG_L	0.52 L	0.48 L	0.49 L	0.47 LL	0.82 L
1312-8270D_SIM	PYRENE	129-00-0			50*	UG_L	0.17 JL	0.18 JL	0.16 JL	0.13 J	0.30 MM

Notes:

NYSDEC	=	New York State Department of Environmental Conservation
AWQS	=	Ambient Water Quality Standards
MG_KG	=	Milligrams per kilogram
UG_L	=	Micrograms per liter
Bold	=	Exceeds NYSDEC Unrestricted Use Soil or AWQS Class GA Groundwater
Bold**	=	Exceeds Site 4 Remedial Goal
ND	=	Not detected
NA	=	Not analyzed
NE	=	Not established
J	=	Estimated value, the analyte was detected in the sample at a concentration less than the laboratory limit of quantitation, but above the method detection limit.
M	=	The matrix spike / matrix spike duplicate accuracy and/or precision are outside criteria.
A	=	The post digestion spiked sample recovery is not within control limits.
E	=	Estimated value, this flag identifies compounds whoseconcentrations exceedes the upper level of the calibration range of the insturment for that analysis.
L	=	Indicates that the flagged compound did not meet Department of Defense criteria in the corresponding laboratory control sample and/or duplicate prepared and/or analyzed concurrently with the sample.
N	=	The pre-digestion spiked sample recovery is not within control limits
B	=	The analyte was detected in the laboratory method blank analyzed concurrently with the sample.
*	=	Indicates the value is a guidance value and not a standard

Table D5 - Groundwater Data
Treatability Study Summary Report
Site 4
NWIRP Bethpage

					Location	BPTTAOC22MW01	BPTTAOC22MW03	BPTTAOC22MW04	BPTTAOC22MW06	BPTTAOC22MW07	BPTTAOC22MW08	BPTTAOC22MW09	BPTTAOC22MW10	BPTTAOC22MW11
					Sample ID	MW-01-GW-040215	MW-03-GW-040115	MW-04-GW-040115	MW-06-GW-033115	MW-07-GW-033115	MW-08-GW-033115	MW-09-GW-033115	MW-10-GW-040115	MW-11-GW-040115
					Sample Date	4/2/2015	4/1/2015	4/1/2015	3/31/2015	3/31/2015	3/31/2015	3/31/2015	4/1/2015	4/1/2015
					Sample Type	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Method	**Analyte**	**CAS No.**	**Site 4 Remedial Goals**	**NYSDEC AWQS GA Groundwater**	**Units**									
6010C	ALUMINUM	7429-90-5		NE	UG_L	233 J	42 J	77 J	3290	674	228 J	58 J	812	856
6010C	ANTIMONY	7440-36-0		3	UG_L	ND	2.1 J	ND	ND	ND	ND	ND	ND	ND
6010C	ARSENIC	7440-38-2		25	UG_L	5.9 J	ND	ND	23.6	ND	2.2 J	ND	2.0 J	ND
6010C	BARIUM	7440-39-3		1000	UG_L	68.8	38.9	19.2	62.2	46.3	27.9	33.2	52.7	24.9
6010C	BERYLLIUM	7440-41-7		3*	UG_L	ND	ND	ND	0.42 J	0.39 J	0.18 J	0.10 J	ND	ND
6010C	CADMIUM	7440-43-9		5	UG_L	ND	ND	0.13 J	0.093 J	0.23 J	0.061 J	***22.7***	ND	0.10 J
6010C	CALCIUM	7440-70-2		NE	UG_L	38300	34300	13600	15600	17000	63200	12600	13000	20500
6010C	CHROMIUM, TOTAL	7440-47-3		50	UG_L	0.63 J	3.0 J	ND	5 J	0.75 J	1.8 J	9.35 J	27.9	9.74 J
6010C	COBALT	7440-48-4	6	NE	UG_L	1.7 J	0.91 J	0.66 J	**16.9****	1.4 J	0.54 J	ND	ND	0.38 J
6010C	COPPER	7440-50-8		200	UG_L	2.4 J	3.0 J	1.5 J	14.8 J	3.0 J	1.9 J	0.76 J	1.8 J	4.5 J
6010C	IRON	7439-89-6		300	UG_L	***13900***	***499***	126	***29800***	280	164	48 J	***988***	***610***
6010C	LEAD	7439-92-1		25	UG_L	ND	ND	ND	2.8 J	2.1 J	ND	ND	ND	1.3 J
6010C	MAGNESIUM	7439-95-4		35000*	UG_L	4000	5040	2130	2540	4540	19400	2310	3370	1650
6010C	MANGANESE	7439-96-5	430	300	UG_L	***412***	54.1	28.7	***1880*****	99.1	26.5	ND	5.8	16.6
6010C	NICKEL	7440-02-0		100	UG_L	1.5 J	0.58 J	ND	3.38 J	7.51 J	2.5 J	0.85 J	0.29 J	0.58 J
6010C	POTASSIUM	7440-09-7		NE	UG_L	3760	2480	890 J	2310	1720	3210	1840	2460	879 J
6010C	SODIUM	7440-23-5		20000	UG_L	16600	***28300***	6840	14100	10800	***136000***	***25000***	***30400***	***20400***
6010C	THALLIUM	7440-28-0		0.5*	UG_L	ND	ND	ND	**1.9 J**	**1.8 J**	**1.5 J**	**1.2 J**	ND	ND
6010C	VANADIUM	7440-62-2		NE	UG_L	3.23 J	0.58 J	ND	7.13 J	1.3 J	0.68 J	0.60 J	1.3 J	3.46 J
6010C	ZINC	7440-66-6		2000	UG_L	10.8 J	16.2 J	3.8 J	31.1	142	46.4	25.8	15.8 J	13.1 J
7470A	MERCURY	7439-97-6		0.7	UG_L	ND	ND	ND	0.312	ND	ND	ND	***1.53***	ND
8260C	1,1,1-TRICHLOROETHANE	71-55-6		5	UG_L	ND	ND	ND	ND	0.37 J	0.23 J	0.36 J	ND	ND
8260C	1,2-DICHLOROETHENE, TOTAL	540-59-0		0.6	UG_L	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND
8260C	ACETONE	67-64-1		50*	UG_L	4.3 J	ND	3.0 J	ND	ND	ND	ND	ND	4.8 J
8260C	CIS-1,2-DICHLOROETHENE	156-59-2		5	UG_L	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND
8260C	TETRACHLOROETHENE	127-18-4		5	UG_L	ND	ND	ND	ND	ND	ND	ND	0.70 J	ND
8260C	TRICHLOROETHENE	79-01-6		5	UG_L	ND	1.3	ND	ND	2.4	2.7	4.6 M	4.1	ND
8270D	BENZO[B]FLUORANTHENE	205-99-2		0.002*	UG_L	ND	ND	ND	ND	ND	ND	ND	ND	**1.2 J**
8270D	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7		5	UG_L	2.5 J	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

NYSDEC	=	New York State Department of Environmental Conservation
AWQS	=	Ambient Water Quality Standards
UG_L	=	Micrograms per liter
Bold	=	Exceeds AWQS Class GA Groundwater
Bold**	=	Exceeds Site 4 Remedial Goal
ND	=	Not detected
J	=	Estimated value, the analyte was detected in the sample at a concentration less than the laboratory limit of quantitation, but above the method detection limit.
M	=	Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.
*	=	Indicates the value is a guidance value and not a standard

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, Maine

CASE NO. WE15 SDG NO. BI2008 SDG NOS. TO FOLLOW
SAS NO.

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	TO	CHECK LAB	EPA
1. **Inventory Sheet** (Form DC-2) (Do not Number)	0000001	0000007	✓	
2. **SDG Case Narrative**	0000010	0000014	✓	
3. **SDG Cover Sheet/Traffic Report**	0000008	0000009	✓	
4. **Volatiles Data**				
a. QC Summary				
System Monitoring Compound Summary (Form II	0000027	0000029	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA) + DATA	0000335	0000350	✓	
Method Blank Summary (Form IV VOA)	0000030	0000033	✓	
GC/MS Instrument Performance Check (Form V VOA)	0000034	0000039	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	0000040	0000045	✓	
b. Sample Data	0000046	0000097		
TCL Results - (Form I VOA-1, VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	0000098	0000279		
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB	0000280	0000297	✓	
Blank Data	0000298	0000314	✓	
~~Matrix Spike/Matrix Spike Duplicate Data~~ LABORATORY CONTROL SPIKE Data	0000315	0000338	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. SI2006 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** – SIM				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000358	0000360	✓	
MS/MSD Summary (Form III SV)	—	—	✓	
Method Blank Summary (Form IV SV)	0000361	0000361	✓	
GC/MS Instrument Performance Check (Form V SV)	0000362	0000363	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000364	0000364	✓	
b. Sample Data	0000365	0000377	✓	
TCL Results - (Form I SV-1, SV-2)				
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000378	0000397	✓	
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	0000398	0000407	✓	
Blank Data	0000408	0000411	✓	
~~Matrix Spike/Matrix Spike Duplicate Data~~ Laboratory Control Spike / Duplicate - Data	0000412	0000420	✓	
e. Raw ~~GPC~~ Data (Logbooks)	0000421	0000424	✓	
6. ~~**Pesticides Data**~~				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)	↓	↓	↓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. 512008 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000425	0000427	✓	
MS/MSD Summary (Form III SV) + DATA	0000593	0000603	✓	
Method Blank Summary (Form IV SV)	0000428	0000429	✓	
GC/MS Instrument Performance Check (Form V SV)	0000430	0000432	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000433	0000434	✓	
b. Sample Data	0000435	0000465	✓	
TCL Results - (Form I SV-1, SV-2)				
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000466	0000538		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	0000539	0000559	✓	
Blank Data	0000560	0000570	✓	
~~Matrix Spike/Matrix Spike Duplicate Data~~ LABORATORY CONTROL SPIKE/DUPLICATE DATA	0000571	0000592	✓	
e. Raw ~~GPC~~ Data (Logbooks)	0000604	0000609	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)				
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. IWE15 SDG NO. 512008 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. **Pesticides Data** (Cont.)				
e. Raw GPC Data	NA	NA	NA	
f. Raw Florisil Data	↓	↓	↓	
7. **Miscellaneous Data**				
Original preparation and analysis forms or of preparation and analysis logbook pages – VOA	0000351	0000357	✓	
Internal sample and sample extract transfer chain-of-custody records	0000021	0000026	✓	
Screening records	NA	NA	NA	
All instrument output, including strip charts from screening activities (describe or list)	↓	↓	↓	
8. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments _____)	↓	↓	↓	
Chain-of-Custody Records	0000017	0000017	✓	
Sample Tags			—	
Sample Log-in Sheet (Lab & DC1)	NA	NA	NA	
Miscellaneous Shipping/Receiving Records (describe or list)				
Sample Receipt Condition Report	0000015	0000014	✓	
Login Chain of Custody	0000018	0000020	✓	
9. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
	NA	NA	NA	
	↓	↓	↓	
10. **Other Records** (describe or list)				
Telephone Communication Log	↓	↓	↓	

11. **Comments:** _____

FORM DC-2-4 OLM04.2

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. S12008 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

Completed by: (CLP Lab)	Leslie Dimond (Signature)	Leslie Dimond/QAO (Printed Name/Title)	04.27.15 (Date)
Verified by: (CLP Lab)	(Signature)	(Printed Name/Title)	(Date)
Audited by: (EPA)	(Signature)	(Printed Name/Title)	(Date)

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, ME
CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____

CONTRACT NO. _____
SOW NO. _____

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - ILM05.4, Exhibit B Section 2.6)

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1. Cover Page	0000008	0000009	✓	
2. SDG Narrative	0000010	0000014	✓	
3. Sample Log-In Sheet (DC-1)	—	—	✓	
4. Inventory Sheet (DC-2))	0000001	0000007	✓	
5. Traffic Report/Chain of Custody Record(s)	0000017	0000017	✓	
Inorganic Analysis				
6. Data Sheet (Form I-IN)	0000610	0000618	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	0000619	0000633	✓	
8. CRQL Standard(Form IIB-IN)	0000634	0000638	✓	
9. Blanks (Form III-IN)	0000639	0000651	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	0000652	0000655	✓	
11. ICP-MS Interference Check Sample(Form IVB-IN)	—	—	✓	
12. Matrix Spike Sample Recovery(Form VA-IN)	0000656	0000657	✓	
13. Post-Digestion Spike Sample Recovery(Form VB-IN)	0000658	0000658	✓	
14. Duplicates (Form VI-IN)	0000659	0000659	✓	
15. Laboratory Control Sample(Form VII-IN)	0000660	0000662	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	0000663	0000663	✓	
17. Method Detection Limits (Annually) (Form IX-IN)	0000664	0000670	✓	
18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN)	0000671	0000671	✓	
19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN)	—	—	✓	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN)	0000672	0000672	✓	
21. Preparation Log (Form XII-IN)	0000673	~~0000673~~ 0000676	✓	
22. Analysis Run Log (Form XIII-IN)	0000674	0000686	✓	

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23. ICP-MS Tune (Form XIV-IN)	—	—	✓	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)	—	—	✓	
25. ICP-AES Raw Data	0006687	0000840	✓	
26. ICP-MS Raw Data	NA	NA	NA	
27. Mercury Raw Data				
28. Cyanide Raw Data				
29. Preparation Logs Raw Data (Wet Chemistry)				
30. Percent Solids Determination Log				
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)				
Sample Tags				
Sample Log-In Sheet (Lab)				
32. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs				
Sample Receipt Condition Report	0000015	0000016	✓	
	NA	NA	NA	
33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)				
Internal Chain of Custody	0000021	0000026	✓	
Login Chain of Custody Report	0000018	0000020	✓	
34. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	NA	NA	NA	
Analysis Records				
Description Duplicate Precision Form				
35. Other Records (describe or list)				
Telephone Communications Log				
DAS Specifications				

36. Comments

Completed by:
(CLP Lab) Leslie Dimond (Signature) Leslie Dimond (Print Name & Title) 04.27.15 (Date)

Audited by:
(USEPA) _____ (Signature) _____ (Print Name & Title) _____ (Date)

FORM DC-2-2 M&E DAS

ENSAFE
NAVY CLEAN WE15-03-06 NWIRP
BETHPAGE, NY
SI2008

KATAHDIN ANALYTICAL SERVICES, INC.
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

000008

SAMPLE DATA PACKAGE

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
ENSAFE
NAVY CLEAN WE15-03-06 NWIRP BETHPAGE, NY
SI2008

Sample Receipt

The following samples were received on April 01, 2015 and were logged in under Katahdin Analytical Services work order number SI2008 for a hardcopy due date of April 20, 2015.

KATAHDIN Sample No.	AECOM Sample Identification
SI2008-1	MW-09-GW-033115
SI2008-2	MW-08-GW-033115
SI2008-3	MW-06-GW-033115
SI2008-4	MW-07-GW-033115
SI2008-5	RE108D1-GW-032715
SI2008-6	RE108D2-GW-032715
SI2008-7	DUPLICATE-GW-033115
SI2008-8	TRIP BLANK

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Jennifer Obrin.** This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SI2008 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

Sample SI2008-1 was used for the matrix spike (MS) and matrix spike duplicate (MSD), as per client request.

8270D SCAN Analysis

Samples SI2008-1 and 2 had low recoveries for one or two surrogates, which were outside the DoD QSM acceptance limits. These samples were reextracted one day out of hold time, analyzed and had acceptable surrogate recoveries. The results for both extractions are reported.

The MS WG160777-4 had a low recovery for one surrogate, which was outside the DoD QSM acceptance limits.

The initial calibration analyzed on the U instrument on 03/23/2015 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analytes 3&4-methylphenol, N-nitroso-di-n-propylamine, 4-nitrophenol, hexachlorobenzene, anthracene, and di-n-butylphthalate failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model. The corresponding independent check standard (file U9727) had a high concentration for the target analyte bis(2-chloroethyl)ether and low concentrations for hexachlorocyclopentadiene and 3,3'-dichlorobenzidine, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The CV (file U9932) had low responses for the target analytes 4-nitrophenol and pentachlorophenol. The CV (file U9982) had a low response for the target analyte 2-nitroaniline. These responses resulted in %D's that were greater than the DoD QSM acceptance limit of 20%.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on the DoD QSM for the full list of spiked compounds and all additional compounds are statistically derived. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable.

<u>8270D SIM 1,4-Dioxane Analysis</u>

Sample SI2008-6RE was manually integrated for the surrogate 1,4-dioxane-d8. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

<u>8260B Analysis</u>

Sample SI2008-6DL had high recoveries for two surrogates that were outside of the DoD QSM acceptance limits. This sample required analysis at a different dilution and also had a high recovery for one surrogate that was outside acceptance limits, indicating a possible matrix effect. Therefore, no further action was taken and the results from analyses are reported.

Sample SI2008-8 and 3 and the method blanks WG160723-2 and WG160815-9 had high recoveries for one or two surrogates that were outside of the DoD QSM acceptance limits. Since a high recovery would indicate a high bias and no target analytes were detected above the MDL, no further action was taken.

The MS WG160815-11 and LCS WG160815-8 had high recoveries for one surrogate that were outside of the DoD QSM acceptance limits.

The independent check standard (file C1964) associated with the initial calibration analyzed on the C instrument on 03/28/15 had high concentrations for the target analytes dichlorodifluoromethane, chloromethane, bromomethane, carbon disulfide, acetone, bromochloromethane, 2-butanone, tetrachloroethene and 2-hexanone, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The initial calibration analyzed on the C instrument on 4/6/15 had %RSD values for some target analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The analyte acetone failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990, respectively. This analyte was calibrated using the average model. The corresponding independent check standard (file C2122A) had a high concentration for the target analyte acetone, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL

The independent check standard (file C2182A) associated with the initial calibration analyzed on the C instrument on 04/08/15 had high concentrations for the target analytes acetone and 4-methyl-2-pentanone, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The CV (file C2041) had high responses for the compounds chloroethane. The CV (file C2067) had high responses for the compounds dichlorodifluoromethane, bromomethane, chloroethane, and trichlorofluoromethane and low responses for the analytes methyl acetate and methylcyclohexane. These responses resulted in %D's that were greater than the DoD QSM acceptance limits of 20%.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on the DoD QSM for the full list of spiked compounds and all additional compounds are statistically derived. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable.

The LCS WG160655-1 had high recoveries for the analytes chloroethane, carbon disulfide, and cyclohexane that were outside of the DoD QSM acceptance limits. The DoD QSM allowable

number of exceedances for 51 analytes is one. Since none of the analytes with high recoveries were detected in the associated samples, the samples were not reanalyzed.

The LCS WG160723-1 had high recoveries for the analytes carbon disulfide, cyclohexane, and acetone, and a low recovery for methylcyclohexane that were outside of the DoD QSM acceptance limits. The DoD QSM allowable number of exceedances for 51 analytes is one. Since none of the analytes with high recoveries were detected in the associated samples, the samples were not reanalyzed.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Metals Analysis

The samples of Katahdin Work Order SI1619 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Aqueous-matrix Katahdin Sample Numbers SI2008-(1-4 and 7) were originally digested for ICP analysis on 04/02/15 (QC Batch ID02ICW2) in accordance with USEPA Method 3010A. Katahdin Sample Number SI2008-1 was prepared with duplicate matrix spiked aliquots. Katahdin Sample Number SI2008-1 was redigested on 04/17/15 (QC Batch ID17ICW1) to provide additional volume to complete all required analyses. Redigestates are identified on sample preparation and analysis run logs and throughout the raw data by the suffix "R" appended to the Katahdin Sample Number, e.g. "SI2008-001R".

ICP analyses of Katahdin Work Order SI2008 sample digestates were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010C. All samples were analyzed within holding times and all analytical run QC criteria were met.

Analysis of Mercury by Cold Vapor Atomic Absorption (CVAA)

Aqueous-matrix Katahdin Sample Numbers SI2008-(1-4 and 7) were digested for mercury analysis on 04/02/15 (QC Batch ID02HGW2) in accordance with USEPA Method 7470A. Katahdin Sample Number SI2008-1 was prepared with duplicate matrix spiked aliquots.

Mercury analysis of the Katahdin Work Order SI2008 sample digestates were performed using a Cetac M6100 automated mercury analyzer in accordance with USEPA Method 7470A. All analytical run QC criteria were met and all samples were analyzed within holding times.

Matrix QC Summary

The measured recoveries of all analytes in the matrix-spiked aliquots of Katahdin Sample Number SI2008-1 are within the project's acceptance criteria (80% - 120% recovery of the added element).

The measured recovery of selenium in the post-digestion spiked aliquot of Katahdin Sample Number SI2008-1 is outside the project acceptance criteria (75% - 125% recovery of the added element).

The matrix-spike duplicate analysis of Katahdin Sample Number SI2008-1 is within the laboratory's acceptance limit (<20% relative difference between duplicate matrix-spiked aliquots) for all analytes.

The serial dilution analysis of Katahdin Sample Number SI2008-1 is within the project acceptance limit (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for all analytes.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I and preparation blanks on Form IIIP have been reported using the laboratory's limits of detection (LOD). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that fall between the MDL and the LOQ are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOD is listed in the concentration column. These LOQs, MDLs, and LODs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

Analytical results on Forms VA, VD, VII, and IX for client samples, matrix QC samples (duplicates and matrix spikes), and laboratory control samples have been reported down to the laboratory's method detection limits (MDLs). Analytical results that are below the MDLs are flagged with "U" in the C-qualifier column, and the measured concentration is listed in the concentration column.

Analytical results for instrument run QC samples (ICVs, ICBs, etc.) have been reported down to the laboratory's instrument detection limits (IDLs).

IDLs, LODs, MDLs, and LOQs are listed on Form 10 of the accompanying data package.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Jennifer Obringer 04.24.15

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Sample Receipt Condition Report

Client: AECOM		KAS PM: JO		Sampled By: Client	
Project:		KIMS Entry By: GW		Delivered By: FedEx	
KAS Work Order#: SI2008		KIMS Review By: [illegible]		Received By: GW	
SDG #:	Cooler: 1 of 2			Date/Time Rec.: 4-1-15/0930	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 4.7
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?	✓				
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

Katahdin Analytical Services, Inc.

Sample Receipt Condition Report

Client: AECOM		KAS PM: Jo		Sampled By: Client	
Project:		KIMS Entry By: GN		Delivered By: FedEx	
KAS Work Order#: SI2008		KIMS Review By: JO		Received By: GN	
SDG #:	Cooler: 2 of 2			Date/Time Rec.: 4-1-15/0930	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 2.3
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?	✓			NA	
Soil/Sediment:				✓	
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

Katahdin ANALYTICAL SERVICES
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Client: Resolution Consultants
Contact: E. Vivaudou
Phone #: (845) 425 4980
Fax #: (845) 425 4989
Address: 100 Red Schoolhouse Rd Ste B
City: Chestnut Ridge
State: NY
Zip Code: 10977
Purchase Order #:
Proj. Name / No.: NWIRP Bethpage - 60266526
Katahdin Quote #:
Bill (if different than above):
Address:
Sampler (Print / Sign): Jim Christopher
Copies To:

LAB USE ONLY
WORK ORDER #: SI2008
KATAHDIN PROJECT NUMBER:

REMARKS:

SHIPPING INFO: ☒ FED EX ☐ UPS ☐ CLIENT
AIRBILL NO: 8064 4268 6477
TEMP°C: ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	VOCs 40mL - HCl (Filt. ☐Y ☒N)	SVOCs 1L AG - None (Filt. ☐Y ☒N)	TAL Metals 250mL HDPE - HNO_3 (Filt. ☐Y ☒N)	1,4-Dioxane 1L AG - None (Filt. ☐Y ☐N)	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
FLWS	MW-09-GW-033115	3/31/15 / 1110	WG	6	3	2	1	—						
FLWS	MW-09-GW-033115 MS	3/31/15 / 1110	WG	6	3	2	1	—						
FLWS	MW-09-GW-033115 MSD	3/31/15 / 1110	WG	6	3	2	1	—						
FLWS	MW-08-GW-033115	3/31/15 / 1125	WG	6	3	2	1	—						
FLWS	MW-06-GW-033115	3/31/15 / 1410	WG	6	3	2	1	—						
FLWS	MW-07-GW-033115	3/31/15 / 1430	WG	6	3	2	1	—						
FLWS	RE108D1-GW-032715	3/27/15 / 1000	WG	5	3	—	—	2						
FLWS	RE108D2-GW-032715	3/27/15 / 1045	WG	5	3	—	—	2						
FLWS	DUPLICATE-GW-033115	3/31/15 / 900	WG	6	3	2	1	—						
FLW	TRIP BLANK	3/31/15 / —	WG	3	3	—	—	—						

COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
	3/31/15 1700	Fed Ex			4-1-15 0830
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (Ino1)

Apr. 02, 2015
07:05 AM

Login Number: SI2008

Account: ENSAFE001
ENSAFE

NoWeb

Project: AECOM-BETHPAGE
NWIRP Bethpage, NY

Primary Report Address:
Dana Miller
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134
dmiller@Ensafe.com

Primary Invoice Address:
Accounts Payable
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: AECOM-BETHPAGE

Login Information:

ANALYSIS INSTRUCTIONS	:	Form 1's due in 48 hrs for VOCs. Follow DoD QSM Version 4.2 using DoD limits. "U" LOD. "J" flag between DL and LOQ.
CHECK NO.	:	
CLIENT PO#	:	16518
CLIENT PROJECT MANAGE	:	Brian Caldwell
CONTRACT	:	
COOLER TEMPERATURE	:	4.7, 2.3
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	KAS135QC-CSV
LOGIN INITIALS	:	GN
PM	:	JO
PROJECT NAME	:	Navy Clean WE15-03-06 NWIRP Bethpage, NY
QC LEVEL	:	IV
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	Send CD only to Dana. Upload to Dropbox. Email invoice to purchasing@ensafe.com.
SDG ID	:	
SDG STATUS	:	

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI2008-1	MW-09-GW-033115	31-MAR-15 11:10	01-APR-15		**03-APR-15**	20-APR-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	14-APR-15	40mL Vial+HCl		**MS/MSD**
Aqueous	S	SW8270BNA	07-APR-15	1L N-Amber Glass		
Aqueous	P	TAL-METALS-SW846				

SW3010-PREP	SW6010-ALUMINUM	SW6010-ANTIMONY
SW6010-ARSENIC	SW6010-BARIUM	SW6010-BERYLLIUM
SW6010-CADMIUM	SW6010-CALCIUM	SW6010-CHROMIUM
SW6010-COBALT	SW6010-COPPER	SW6010-IRON
SW6010-LEAD	SW6010-MAGNESIUM	SW6010-MANGANESE
SW6010-NICKEL	SW6010-POTASSIUM	SW6010-SELENIUM
SW6010-SILVER	SW6010-SODIUM	SW6010-THALLIUM
SW6010-VANADIUM	SW6010-ZINC	SW7470-MERCURY

SI2008-2	MW-08-GW-033115	31-MAR-15 11:25	01-APR-15	**03-APR-15**	20-APR-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	14-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270BNA	07-APR-15	1L N-Amber Glass		
Aqueous	P	TAL-METALS-SW846				

SW3010-PREP	SW6010-ALUMINUM	SW6010-ANTIMONY
SW6010-ARSENIC	SW6010-BARIUM	SW6010-BERYLLIUM
SW6010-CADMIUM	SW6010-CALCIUM	SW6010-CHROMIUM
SW6010-COBALT	SW6010-COPPER	SW6010-IRON
SW6010-LEAD	SW6010-MAGNESIUM	SW6010-MANGANESE
SW6010-NICKEL	SW6010-POTASSIUM	SW6010-SELENIUM
SW6010-SILVER	SW6010-SODIUM	SW6010-THALLIUM
SW6010-VANADIUM	SW6010-ZINC	SW7470-MERCURY

OP
04.01.15
000018

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (Ino1)

Apr. 02, 2015
07:05 AM

Login Number: SI2008

Quote/Incoming: AECOM-BETHPAGE

Account: ENSAFE001
ENSAFE

NoWeb

Project: AECOM-BETHPAGE
NWIRP Bethpage, NY

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI2008-3	MW-06-GW-033115	31-MAR-15 14:10	01-APR-15		**03-APR-15**	20-APR-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	14-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270BNA	07-APR-15	1L N-Amber Glass		
Aqueous	P	TAL-METALS-SW846				

SW3010-PREP	SW6010-ALUMINUM	SW6010-ANTIMONY
SW6010-ARSENIC	SW6010-BARIUM	SW6010-BERYLLIUM
SW6010-CADMIUM	SW6010-CALCIUM	SW6010-CHROMIUM
SW6010-COBALT	SW6010-COPPER	SW6010-IRON
SW6010-LEAD	SW6010-MAGNESIUM	SW6010-MANGANESE
SW6010-NICKEL	SW6010-POTASSIUM	SW6010-SELENIUM
SW6010-SILVER	SW6010-SODIUM	SW6010-THALLIUM
SW6010-VANADIUM	SW6010-ZINC	SW7470-MERCURY

SI2008-4	MW-07-GW-033115	31-MAR-15 14:30	01-APR-15		**03-APR-15**	20-APR-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	14-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270BNA	07-APR-15	1L N-Amber Glass		
Aqueous	P	TAL-METALS-SW846				

SW3010-PREP	SW6010-ALUMINUM	SW6010-ANTIMONY
SW6010-ARSENIC	SW6010-BARIUM	SW6010-BERYLLIUM
SW6010-CADMIUM	SW6010-CALCIUM	SW6010-CHROMIUM
SW6010-COBALT	SW6010-COPPER	SW6010-IRON
SW6010-LEAD	SW6010-MAGNESIUM	SW6010-MANGANESE
SW6010-NICKEL	SW6010-POTASSIUM	SW6010-SELENIUM
SW6010-SILVER	SW6010-SODIUM	SW6010-THALLIUM
SW6010-VANADIUM	SW6010-ZINC	SW7470-MERCURY

SI2008-5	RE108D1-GW-032715	27-MAR-15 10:00	01-APR-15		**03-APR-15**	20-APR-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	10-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270SIM-S	03-APR-15	1L N-Amber Glass		

SI2008-6	RE108D2-GW-032715	27-MAR-15 10:45	01-APR-15		**03-APR-15**	20-APR-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	10-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270SIM-S	03-APR-15	1L N-Amber Glass		

SI2008-7	DUPLICATE-GW-033115	31-MAR-15 09:00	01-APR-15		**03-APR-15**	20-APR-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	14-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270BNA	07-APR-15	1L N-Amber Glass		
Aqueous	P	TAL-METALS-SW846				

SW3010-PREP	SW6010-ALUMINUM	SW6010-ANTIMONY
SW6010-ARSENIC	SW6010-BARIUM	SW6010-BERYLLIUM
SW6010-CADMIUM	SW6010-CALCIUM	SW6010-CHROMIUM
SW6010-COBALT	SW6010-COPPER	SW6010-IRON
SW6010-LEAD	SW6010-MAGNESIUM	SW6010-MANGANESE
SW6010-NICKEL	SW6010-POTASSIUM	SW6010-SELENIUM
SW6010-SILVER	SW6010-SODIUM	SW6010-THALLIUM
SW6010-VANADIUM	SW6010-ZINC	SW7470-MERCURY

SI2008-8	TRIP BLANK	31-MAR-15 00:00	01-APR-15		**03-APR-15**	20-APR-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	14-APR-15	40mL Vial+HCl		

04.01.15

0000019

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Apr. 02, 2015
07:05 AM

Login Number: SI2008

Quote/Incoming: AECOM-BETHPAGE

Account: ENSAFE001
ENSAFE

NoWeb

Project: AECOM-BETHPAGE
NWIRP Bethpage, NY

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed

Total Samples: ***8*** ***Total Analyses:*** ***20***

op
04.01.15

0000020

Katahdin Analytical Services, Inc.

Container Transfer History for SI2008

Samplenum SI2008-1

Container Id SI2008-1A **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
02-APR-15 10:58	VOA_FREEZER1	GC/MS	RCROCKER	N	
03-APR-15 08:13	GC/MS	VOA_WALK-IN	RCROCKER	N	

Container Id SI2008-1B **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
06-APR-15 17:33	VOA_WALK-IN	GC/MS	RCROCKER	N	
07-APR-15 07:09	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2008-1C **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
06-APR-15 17:33	VOA_WALK-IN	GC/MS	RCROCKER	N	
07-APR-15 07:09	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2008-1D **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
10-APR-15 10:12	VOA_WALK-IN	GC/MS	EEVERETT	N	
13-APR-15 08:56	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2008-1E **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-1F **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-1G **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-1H **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-1I **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-1J **Containertype** **250mL Plastic+HNO3** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-VANADIUM, SW6010-SILVER, SW6010-SODIUM, SW6010-THALLIUM, SW6010-ZINC, SW6010-SELENIUM, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	

Container Id SI2008-1K **Containertype** **250mL Plastic+HNO3** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-*

Katahdin Analytical Services, Inc.

Container Transfer History for SI2008

Samplenum SI2008-1

Container Id SI2008-1K **Containertype 250mL Plastic+HNO3** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-VANADIUM, SW6010-THALLIUM, SW6010-SODIUM, SW6010-SELENIUM, SW6010-SILVER, SW6010-ZINC*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Container Id SI2008-1L **Containertype 250mL Plastic+HNO3** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-SELENIUM, SW6010-SILVER, SW6010-SODIUM, SW6010-THALLIUM, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-ZINC, SW6010-VANADIUM*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Container Id SI2008-1M **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Container Id SI2008-1N **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
08-APR-15 10:03	WALK-IN	WET CHEMISTRY	HGOULD	N	
08-APR-15 10:04	WET CHEMISTRY	CONSUMED	HGOULD	N	

Container Id SI2008-1O **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	

Container Id SI2008-1P **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
02-APR-15 08:33	WALK-IN	METALS PREP	TSWETT	N	
02-APR-15 14:18	METALS PREP	WALK-IN	TSWETT	N	
17-APR-15 08:47	WALK-IN	METALS PREP	TSWETT	N	
17-APR-15 10:41	METALS PREP	WALK-IN	TSWETT	N	

Container Id SI2008-1Q **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	

Container Id SI2008-1R **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	

Samplenum SI2008-2

Container Id SI2008-2A **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

0000022

Katahdin Analytical Services, Inc.
Container Transfer History for SI2008

Samplenum SI2008-2

Container Id SI2008-2A **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
02-APR-15 10:58	VOA_FREEZER1	GC/MS	RCROCKER	N	
03-APR-15 08:13	GC/MS	VOA_WALK-IN	RCROCKER	N	

Container Id SI2008-2B **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
10-APR-15 10:12	VOA_WALK-IN	GC/MS	EEVERETT	N	
13-APR-15 08:56	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2008-2C **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-2D **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-SELENIUM, SW6010-SILVER, SW6010-SODIUM, SW6010-THALLIUM, SW6010-VANADIUM, SW6010-ZINC, SW6010-BERYLLIUM, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
08-APR-15 10:03	WALK-IN	WET CHEMISTRY	HGOULD	N	
08-APR-15 10:04	WET CHEMISTRY	CONSUMED	HGOULD	N	

Container Id SI2008-2E **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Container Id SI2008-2F **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
02-APR-15 08:33	WALK-IN	METALS PREP	TSWETT	N	
02-APR-15 14:18	METALS PREP	WALK-IN	TSWETT	N	

Samplenum SI2008-3

Container Id SI2008-3A **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
02-APR-15 10:58	VOA_FREEZER1	GC/MS	RCROCKER	N	
03-APR-15 08:13	GC/MS	VOA_WALK-IN	RCROCKER	N	

Container Id SI2008-3B **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-3C **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-3D **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-*

CCC0023

Katahdin Analytical Services, Inc.

Container Transfer History for SI2008

Samplenum SI2008-3

Container Id SI2008-3D **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-VANADIUM, SW6010-THALLIUM, SW6010-SODIUM, SW6010-SELENIUM, SW6010-SILVER, SW6010-ZINC*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Container Id SI2008-3E **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	

Container Id SI2008-3F **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
02-APR-15 08:33	WALK-IN	METALS PREP	TSWETT	N	
02-APR-15 14:18	METALS PREP	WALK-IN	TSWETT	N	

Samplenum SI2008-4

Container Id SI2008-4A **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
02-APR-15 10:58	VOA_FREEZER1	GC/MS	RCROCKER	N	
03-APR-15 08:13	GC/MS	VOA_WALK-IN	RCROCKER	N	

Container Id SI2008-4B **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
10-APR-15 10:12	VOA_WALK-IN	GC/MS	EEVERETT	N	
13-APR-15 08:56	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2008-4C **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-4D **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-SELENIUM, SW6010-SILVER, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-CHROMIUM, SW6010-COBALT, SW6010-VANADIUM, SW6010-THALLIUM, SW6010-ZINC, SW6010-SODIUM*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	

Container Id SI2008-4E **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Container Id SI2008-4F **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
02-APR-15 08:33	WALK-IN	METALS PREP	TSWETT	N	
02-APR-15 14:18	METALS PREP	WALK-IN	TSWETT	N	

00000 24

Katahdin Analytical Services, Inc.
Container Transfer History for SI2008

Samplenum SI2008-5

Container Id SI2008-5A **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
02-APR-15 10:58	VOA_FREEZER1	GC/MS	RCROCKER	N	
03-APR-15 08:13	GC/MS	VOA_WALK-IN	RCROCKER	N	

Container Id SI2008-5B **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-5C **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
10-APR-15 10:12	VOA_WALK-IN	GC/MS	EEVERETT	N	
13-APR-15 08:56	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2008-5E **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8270SIM-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
03-APR-15 11:38	WALK-IN	ORGANIC PREP	HGOULD	N	
03-APR-15 11:38	ORGANIC PREP	CONSUMED	HGOULD	N	

Samplenum SI2008-6

Container Id SI2008-6A **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
02-APR-15 10:30	VOA_WALK-IN	GC/MS	RCROCKER	N	
03-APR-15 08:21	GC/MS	VOA_WALK-IN	RCROCKER	N	

Container Id SI2008-6B **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
03-APR-15 13:17	VOA_WALK-IN	GC/MS	EEVERETT	N	
03-APR-15 21:03	GC/MS	VOA_WALK-IN	RCROCKER	N	
06-APR-15 17:33	VOA_WALK-IN	GC/MS	RCROCKER	N	
07-APR-15 07:09	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2008-6C **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
03-APR-15 22:32	VOA_WALK-IN	GC/MS	RCROCKER	N	
04-APR-15 11:46	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2008-6E **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8270SIM-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
03-APR-15 11:38	WALK-IN	ORGANIC PREP	HGOULD	N	
03-APR-15 11:38	ORGANIC PREP	CONSUMED	HGOULD	N	

Samplenum SI2008-7

Container Id SI2008-7A **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments

Katahdin Analytical Services, Inc.

Container Transfer History for SI2008

Samplenum SI2008-7

Container Id SI2008-7A **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
02-APR-15 10:30	VOA_WALK-IN	GC/MS	RCROCKER	N	
03-APR-15 08:21	GC/MS	VOA_WALK-IN	RCROCKER	N	

Container Id SI2008-7B **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
03-APR-15 13:17	VOA_WALK-IN	GC/MS	EEVERETT	N	
03-APR-15 21:03	GC/MS	VOA_WALK-IN	RCROCKER	N	

Container Id SI2008-7C **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
10-APR-15 10:12	VOA_WALK-IN	GC/MS	EEVERETT	N	
13-APR-15 08:56	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2008-7D **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-THALLIUM, SW6010-VANADIUM, SW6010-ZINC, SW6010-SODIUM, SW6010-SELENIUM, SW6010-NICKEL, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW601(MAGNESIUM, SW6010-MANGANESE, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-POTASSIUM, SW6010-SILVER*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	

Container Id SI2008-7E **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:31	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Container Id SI2008-7F **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
02-APR-15 08:33	WALK-IN	METALS PREP	TSWETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to GNICKERSON for department LOGIN on 04/01/15 11:04 .
02-APR-15 14:18	METALS PREP	WALK-IN	TSWETT	N	

Samplenum SI2008-8

Container Id SI2008-8A **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	
03-APR-15 13:17	VOA_WALK-IN	GC/MS	EEVERETT	N	
03-APR-15 21:03	GC/MS	VOA_WALK-IN	RCROCKER	N	

Container Id SI2008-8B **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI2008-8C **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
01-APR-15 13:09	LOGIN	VOA_WALK-IN	APIMENTEL	N	

VOLATILES DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE15-03-06 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI2008

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
MW-09-GW-033115	SI2008-1RA		95.7		100.		110.		106.	
MW-08-GW-033115	SI2008-2RA		92.1		99.7		112.		106.	
MW-06-GW-033115	SI2008-3		104.		115.		122.	*	102.	
MW-07-GW-033115	SI2008-4RA		93.6		99.9		111.		107.	
RE108D1-GW-032715	SI2008-5RA		95.9		98.6		112.		109.	
RE108D2-GW-032715	SI2008-6DL		105.		116.	*	130.	*	101.	
RE108D2-GW-032715	SI2008-6DL2		99.7		112.		119.		127.	*
DUPLICATE-GW-033115	SI2008-7RA		92.6		96.0		114.		105.	
TRIP BLANK	SI2008-8		104.		118.	*	127.	*	103.	
Laboratory Control S	WG160655-1		101.		107.		114.		98.0	
Method Blank Sample	WG160655-2		102.		112.		117.		102.	
Laboratory Control S	WG160723-1		105.		112.		116.		102.	
Method Blank Sample	WG160723-2		105.		116.	*	125.	*	104.	
Matrix Spike	WG160815-11		104.		109.		113.		122.	*
Matrix Spike Duplica	WG160815-12		100.		107.		112.		119.	
Laboratory Control S	WG160815-8		103.		106.		113.		122.	*
Method Blank Sample	WG160815-9		96.9		110.		113.		124.	*
Laboratory Control S	WG161013-1		92.2		92.0		94.5		104.	
Method Blank Sample	WG161013-2		89.6		99.3		103.		104.	

		QC Limits
DCA	1,2-DICHLOROETHANE-D4	70-120
BFB	P-BROMOFLUOROBENZENE	75-120
DBF	DIBROMOFLUOROMETHANE	85-115
TOL	TOLUENE-D8	85-120

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
SDG : SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab Sample ID : WG160655-2
Lab File ID : C2046.D
Date Analyzed : 02-APR-15
Instrument ID : GCMS-C
Time Analyzed : 12:12
Heated Purge : No

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG160655-1	C2043.D	04/02/15	10:26
MW-06-GW-033115	SI2008-3	C2059.D	04/02/15	19:12

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
SDG : SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab Sample ID : WG160723-2
Lab File ID : C2071.D
Date Analyzed : 03-APR-15
Instrument ID : GCMS-C
Time Analyzed : 14:13
Heated Purge : No

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG160723-1	C2068.D	04/03/15	12:16
RE108D2-GW-032715	SI2008-6DL	C2081.D	04/03/15	19:39
TRIP BLANK	SI2008-8	C2083.D	04/03/15	20:47

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
SDG : SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab Sample ID : WG160815-9
Lab File ID : C2125.D
Date Analyzed : 06-APR-15
Instrument ID : GCMS-C
Time Analyzed : 19:21
Heated Purge : No

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG160815-8	C2122.D	04/06/15	17:30
RE108D2-GW-032715	SI2008-6DL2	C2126.D	04/06/15	19:55
Matrix Spike	WG160815-11	C2127.D	04/06/15	20:30
Matrix Spike Duplica	WG160815-12	C2128.D	04/06/15	21:05

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
SDG : SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab Sample ID : WG161013-2
Lab File ID : C2233.D
Date Analyzed : 10-APR-15
Instrument ID : GCMS-C
Time Analyzed : 11:22
Heated Purge : No

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG161013-1	C2230.D	04/10/15	09:36
MW-09-GW-033115	SI2008-1RA	C2241.D	04/10/15	15:38
MW-08-GW-033115	SI2008-2RA	C2242.D	04/10/15	16:10
MW-07-GW-033115	SI2008-4RA	C2243.D	04/10/15	16:42
RE108D1-GW-032715	SI2008-5RA	C2244.D	04/10/15	17:14
DUPLICATE-GW-033115	SI2008-7RA	C2245.D	04/10/15	17:46

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : CB045.D
Instrument ID : GCMS-C

SDG : SI2008
Date Analyzed : 28-MAR-15
Time Analyzed : 10:39
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	18.9		
75	30.0 - 60.0% of mass 95	47.5		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.1		
173	Less than 2.0% of mass 174	0.3	0.52	1
174	Greater than 50.0% of mass 95	64.4		
175	5.0 - 9.0% of mass 174	4.5	6.93	1
176	95.0 - 101.0% of mass 174	64.0	99.26	1
177	5.0 - 9.0% of mass 176	4.3	6.67	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG160458-4	C1957.D	03/28/15	11:07
Initial Calibration	WG160458-3	C1958.D	03/28/15	11:51
Initial Calibration	WG160458-2	C1959.D	03/28/15	12:25
Initial Calibration	WG160458-1	C1960.D	03/28/15	13:00
Initial Calibration	WG160458-6	C1962.D	03/28/15	14:09
Initial Calibration	WG160458-5	C1963.D	03/28/15	14:44
Independent Source	WG160458-7	C1964.D	03/28/15	15:18

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : CB049.D
Instrument ID : GCMS-C

SDG : SI2008
Date Analyzed : 02-APR-15
Time Analyzed : 08:16
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	19.0		
75	30.0 - 60.0% of mass 95	50.9		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.7		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	67.2		
175	5.0 - 9.0% of mass 174	5.0	7.46	1
176	95.0 - 101.0% of mass 174	64.5	95.99	1
177	5.0 - 9.0% of mass 176	4.5	7.04	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG160655-4	C2041.D	04/02/15	08:52
Laboratory Control S	WG160655-1	C2043.D	04/02/15	10:26
Method Blank Sample	WG160655-2	C2046.D	04/02/15	12:12
MW-06-GW-033115	SI2008-3	C2059.D	04/02/15	19:12

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : CB050.D
Instrument ID : GCMS-C

SDG : SI2008
Date Analyzed : 03-APR-15
Time Analyzed : 09:30
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	23.2		
75	30.0 - 60.0% of mass 95	54.7		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.0		
173	Less than 2.0% of mass 174	0.5	0.79	1
174	Greater than 50.0% of mass 95	62.5		
175	5.0 - 9.0% of mass 174	5.0	8.00	1
176	95.0 - 101.0% of mass 174	60.5	96.79	1
177	5.0 - 9.0% of mass 176	4.6	7.66	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG160723-4	C2067.D	04/03/15	11:12
Laboratory Control S	WG160723-1	C2068.D	04/03/15	12:16
Method Blank Sample	WG160723-2	C2071.D	04/03/15	14:13
RE108D2-GW-032715	SI2008-6DL	C2081.D	04/03/15	19:39
TRIP BLANK	SI2008-8	C2083.D	04/03/15	20:47

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : CB054.D
Instrument ID : GCMS-C

SDG : SI2008
Date Analyzed : 06-APR-15
Time Analyzed : 11:15
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	21.9		
75	30.0 - 60.0% of mass 95	55.6		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.8		
173	Less than 2.0% of mass 174	0.3	0.45	1
174	Greater than 50.0% of mass 95	63.4		
175	5.0 - 9.0% of mass 174	5.5	8.63	1
176	95.0 - 101.0% of mass 174	64.0	100.89	1
177	5.0 - 9.0% of mass 176	4.2	6.62	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG160815-4	C2113.D	04/06/15	11:46
Initial Calibration	WG160815-3	C2114.D	04/06/15	12:18
Initial Calibration	WG160815-2	C2115.D	04/06/15	12:50
Initial Calibration	WG160815-6	C2117.D	04/06/15	13:54
Initial Calibration	WG160815-5	C2118.D	04/06/15	14:26
Initial Calibration	WG160815-1	C2120.D	04/06/15	15:49
Laboratory Control S	WG160815-8	C2122.D	04/06/15	17:30
Independent Source	WG160815-7	C2122A.D	04/06/15	17:30
Method Blank Sample	WG160815-9	C2125.D	04/06/15	19:21
RE108D2-GW-032715	SI2008-6DL2	C2126.D	04/06/15	19:55
Matrix Spike	WG160815-11	C2127.D	04/06/15	20:30
Matrix Spike Duplica	WG160815-12	C2128.D	04/06/15	21:05

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : CB057.D
Instrument ID : GCMS-C

SDG : SI2008
Date Analyzed : 08-APR-15
Time Analyzed : 10:19
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	21.9		
75	30.0 - 60.0% of mass 95	48.0		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	5.9		
173	Less than 2.0% of mass 174	0.6	0.94	1
174	Greater than 50.0% of mass 95	61.7		
175	5.0 - 9.0% of mass 174	4.3	6.99	1
176	95.0 - 101.0% of mass 174	60.0	97.33	1
177	5.0 - 9.0% of mass 176	4.3	7.16	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG160924-4	C2176.D	04/08/15	10:49
Initial Calibration	WG160924-3	C2177.D	04/08/15	11:59
Initial Calibration	WG160924-2	C2178.D	04/08/15	12:31
Initial Calibration	WG160924-1	C2179.D	04/08/15	13:02
Initial Calibration	WG160924-6	C2180.D	04/08/15	13:34
Initial Calibration	WG160924-5	C2181.D	04/08/15	14:06
Independent Source	WG160924-7	C2182A.D	04/08/15	14:53

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : CB059.D
Instrument ID : GCMS-C

SDG : SI2008
Date Analyzed : 10-APR-15
Time Analyzed : 08:25
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	21.0		
75	30.0 - 60.0% of mass 95	49.1		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.9		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	65.7		
175	5.0 - 9.0% of mass 174	4.3	6.55	1
176	95.0 - 101.0% of mass 174	66.1	100.49	1
177	5.0 - 9.0% of mass 176	4.3	6.58	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG161013-4	C2229.D	04/10/15	08:51
Laboratory Control S	WG161013-1	C2230.D	04/10/15	09:36
Method Blank Sample	WG161013-2	C2233.D	04/10/15	11:22
MW-09-GW-033115	SI2008-1RA	C2241.D	04/10/15	15:38
MW-08-GW-033115	SI2008-2RA	C2242.D	04/10/15	16:10
MW-07-GW-033115	SI2008-4RA	C2243.D	04/10/15	16:42
RE108D1-GW-032715	SI2008-5RA	C2244.D	04/10/15	17:14
DUPLICATE-GW-033115	SI2008-7RA	C2245.D	04/10/15	17:46

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160458-4
Lab File ID : C1957.D

SDG: SI2008
Analytical Date: 03/28/15 11:07
Instrument ID: GCMS-C

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	426030		8.04		738549		8.70		692607		12.19	
	Upper Limit	852060		8.54		1477098		9.20		1385214		12.69	
	Lower Limit	213015		7.54		369274.5		8.20		346303.5		11.69	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG160655-4	421355		8.04		748123		8.70		689407		12.19	
Laboratory Control S	WG160655-1	433063		8.04		763695		8.70		697894		12.19	
Method Blank Sample	WG160655-2	410462		8.04		702988		8.70		670514		12.19	
MW-06-GW-033115	SI2008-3	362636		8.04		635362		8.70		610617		12.19	
Continuing Calibrati	WG160723-4	404610		8.04		703472		8.70		668289		12.19	
Laboratory Control S	WG160723-1	428946		8.04		751635		8.70		692594		12.19	
Method Blank Sample	WG160723-2	379406		8.04		663350		8.71		631435		12.19	
RE108D2-GW-032715	SI2008-6DL	359479		8.04		634581		8.70		610844		12.19	
TRIP BLANK	SI2008-8	352707		8.04		620157		8.70		593275		12.19	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160458-4
Lab File ID : C1957.D

SDG: SI2008
Analytical Date: 03/28/15 11:07
Instrument ID: GCMS-C

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	394663		15.52	
	Upper Limit	789326		16.02	
	Lower Limit	197331.5		15.02	
Client Sample ID	Lab Sample ID				
Continuing Calibrati	WG160655-4	390732		15.52	
Laboratory Control S	WG160655-1	386420		15.52	
Method Blank Sample	WG160655-2	352230		15.52	
MW-06-GW-033115	SI2008-3	328996		15.51	
Continuing Calibrati	WG160723-4	366307		15.52	
Laboratory Control S	WG160723-1	392944		15.52	
Method Blank Sample	WG160723-2	334203		15.52	
RE108D2-GW-032715	SI2008-6DL	319566		15.52	
TRIP BLANK	SI2008-8	314797		15.52	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160815-4
Lab File ID : C2113.D

SDG: SI2008
Analytical Date: 04/06/15 11:46
Instrument ID: GCMS-C

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	316564		8.04		528421		8.70		522326		12.19	
	Upper Limit	633128		8.54		1056842		9.20		1044652		12.69	
	Lower Limit	158282		7.54		264210.5		8.20		261163		11.69	
Client Sample ID	Lab Sample ID												
Laboratory Control S	WG160815-8	315956		8.04		521841		8.70		515096		12.19	
Method Blank Sample	WG160815-9	279872		8.04		471267		8.70		469067		12.19	
RE108D2-GW-032715	SI2008-6DL2	276568		8.04		456662		8.70		467762		12.19	
Matrix Spike	WG160815-11	288875		8.04		476525		8.70		480770		12.19	
Matrix Spike Duplica	WG160815-12	296523		8.04		507916		8.70		492856		12.19	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160815-4
Lab File ID : C2113.D

SDG: SI2008
Analytical Date: 04/06/15 11:46
Instrument ID: GCMS-C

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	305565		15.51	
	Upper Limit	611130		16.01	
	Lower Limit	152782.5		15.01	
Client Sample ID	Lab Sample ID				
Laboratory Control S	WG160815-8	303603		15.52	
Method Blank Sample	WG160815-9	236703		15.52	
RE108D2-GW-032715	SI2008-6DL2	231500		15.52	
Matrix Spike	WG160815-11	281407		15.52	
Matrix Spike Duplica	WG160815-12	290165		15.52	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160924-4
Lab File ID : C2176.D

SDG: SI2008
Analytical Date: 04/08/15 10:49
Instrument ID: GCMS-C

		PENTAFLUOROBENZENE		1,4-DIFLUOROBENZENE		CHLOROBENZENE-D5	
		Area #	RT #	Area #	RT #	Area #	RT #
	Std .	332115	8.04	559910	8.70	542634	12.19
	Upper Limit	664230	8.54	1119820	9.20	1085268	12.69
	Lower Limit	166057.5	7.54	279955	8.20	271317	11.69
Client Sample ID	Lab Sample ID						
Continuing Calibrati	WG161013-4	352934	8.04	589771	8.70	573405	12.19
Laboratory Control S	WG161013-1	359328	8.04	616957	8.71	589632	12.19
Method Blank Sample	WG161013-2	322163	8.04	554008	8.71	536950	12.19
MW-09-GW-033115	SI2008-1RA	292839	8.04	499044	8.70	504163	12.20
MW-08-GW-033115	SI2008-2RA	287531	8.04	498867	8.71	490293	12.19
MW-07-GW-033115	SI2008-4RA	285790	8.04	496814	8.71	482329	12.19
RE108D1-GW-032715	SI2008-5RA	289077	8.04	484926	8.71	492526	12.19
DUPLICATE-GW-033	SI2008-7RA	299681	8.04	510707	8.70	510074	12.19

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160924-4
Lab File ID : C2176.D

SDG: SI2008
Analytical Date: 04/08/15 10:49
Instrument ID: GCMS-C

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	329788		15.52	
	Upper Limit	659576		16.02	
	Lower Limit	164894		15.02	
Client Sample ID	Lab Sample ID				
Continuing Calibrati	WG161013-4	347871		15.52	
Laboratory Control S	WG161013-1	364711		15.52	
Method Blank Sample	WG161013-2	308124		15.52	
MW-09-GW-033115	SI2008-1RA	286312		15.52	
MW-08-GW-033115	SI2008-2RA	287160		15.52	
MW-07-GW-033115	SI2008-4RA	286024		15.52	
RE108D1-GW-032715	SI2008-5RA	287005		15.52	
DUPLICATE-GW-033	SI2008-7RA	292189		15.52	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-1RA
Client ID: MW-09-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2241.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	J	0.36	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	M	4.6	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	UMM	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	UM	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	UMM	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-1RA
Client ID: MW-09-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2241.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	UMM	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	UMM	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		95.7	%					
Toluene-d8		106.	%					
1,2-Dichloroethane-d4		110.	%					
Dibromofluoromethane		100.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2241.D
Report Date: 13-Apr-2015 14:23

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C041015.b\C2241.D
Lab Smp Id: SI2008-1RA Client Smp ID: MW-09-GW-033115
Inj Date : 10-APR-2015 15:38 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2008-1RA
Misc Info : WG161013,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C041015.b\C826A36.m
Meth Date : 13-Apr-2015 14:13 gcms-c.i Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

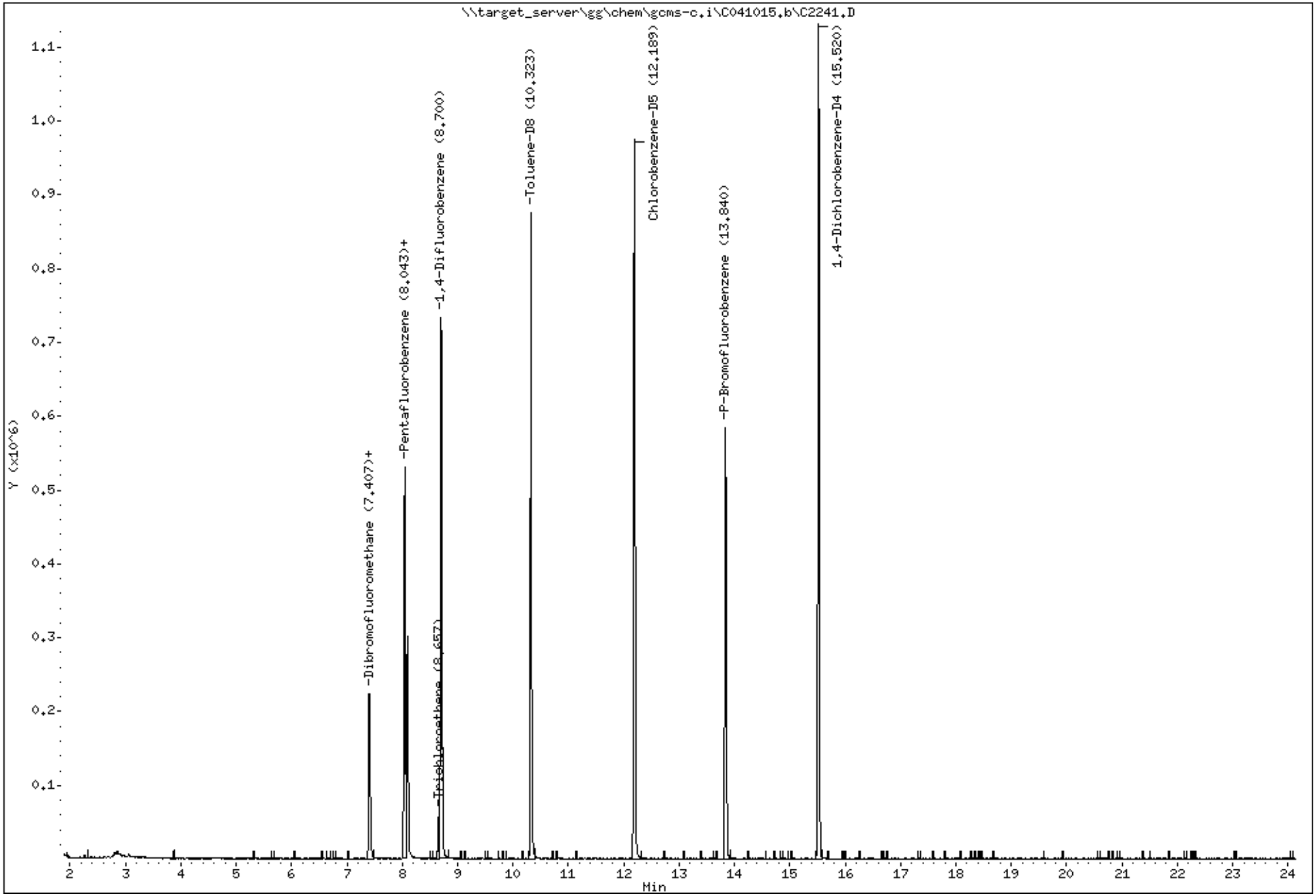
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.406	7.405	(0.921)	147673	50.2677	50.3	
38 1,1,1-Trichloroethane	97	7.420	7.412	(0.923)	2660	0.35880	0.36(a)	
* 42 Pentafluorobenzene	168	8.042	8.041	(1.000)	292839	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.092	8.090	(1.006)	216379	55.0508	55.0	
48 Trichloroethene	95	8.657	8.648	(0.995)	19826	4.63284	4.6	
* 49 1,4-Difluorobenzene	114	8.700	8.698	(1.000)	499044	50.0000		
$ 55 Toluene-D8	98	10.322	10.321	(1.186)	485265	53.0250	53.0	
* 66 Chlorobenzene-D5	117	12.195	12.187	(1.000)	504163	50.0000		
$ 76 P-Bromofluorobenzene	95	13.839	13.838	(1.591)	230379	47.8425	47.8	
* 91 1,4-Dichlorobenzene-D4	152	15.519	15.518	(1.000)	286312	50.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2241.D
Date : 10-APR-2015 15:38
Client ID: MW-09-GW-033115
Sample Info: SI2008-1RA

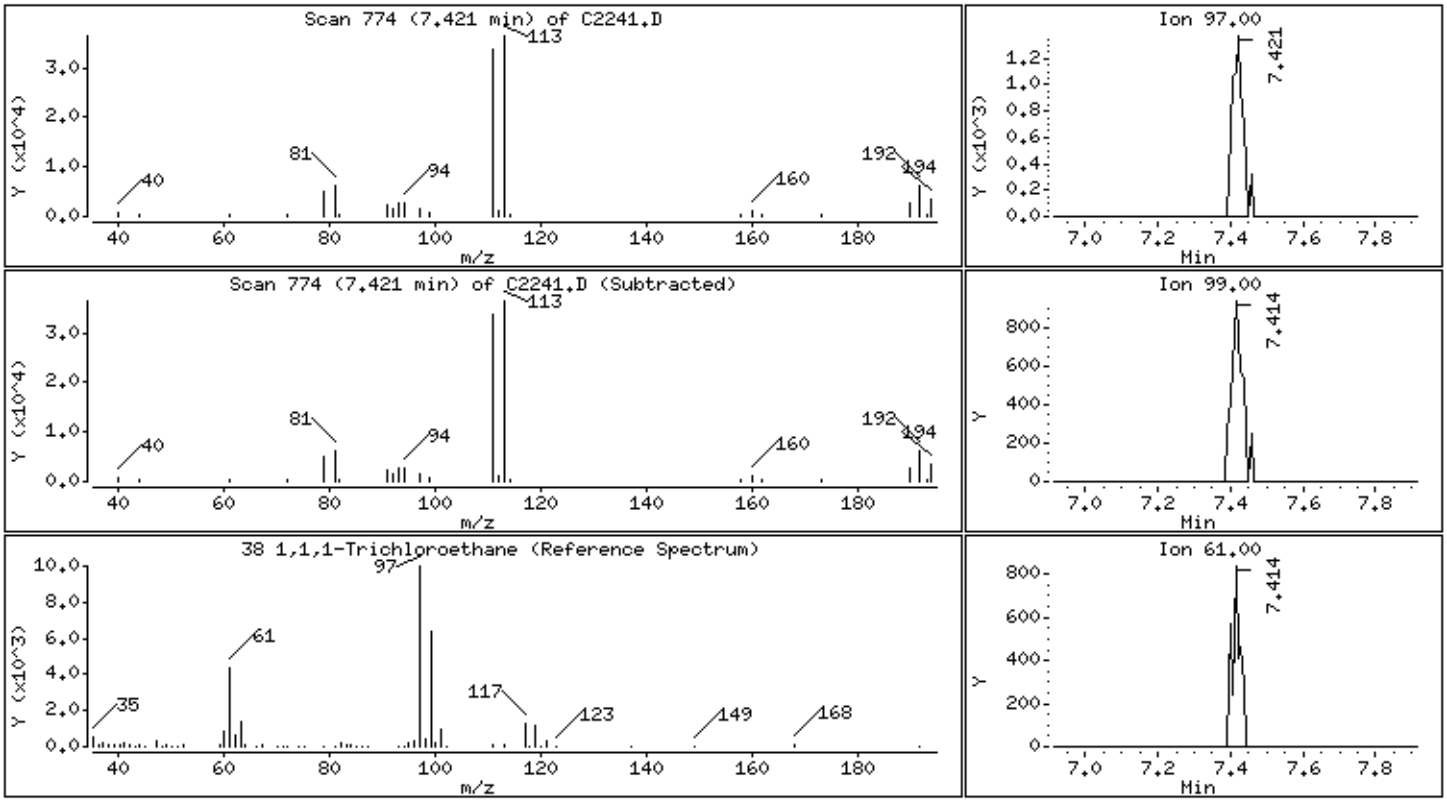
Instrument: gcms-c.i



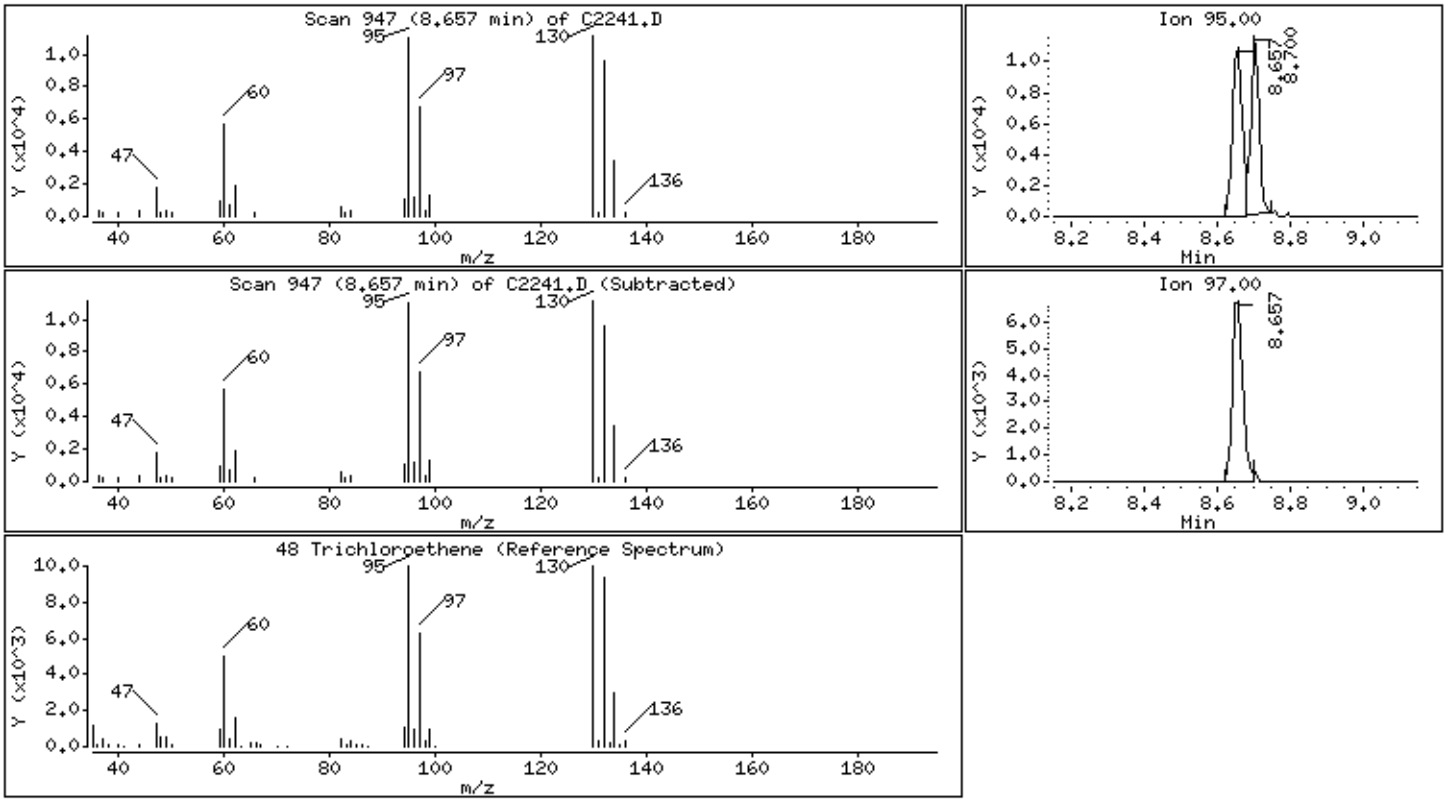
0000052

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2241.D
Date : 10-APR-2015 15:38
Client ID: MW-09-GW-033115 Instrument: gcms-c.i
Sample Info: SI2008-1RA

38 1,1,1-Trichloroethane Concentration: 0.36 ug/l



48 Trichloroethene Concentration: 4.6 ug/l



Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-2RA
Client ID: MW-08-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2242.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	J	0.23	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene		2.7	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-2RA
Client ID: MW-08-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2242.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		92.1	%					
Toluene-d8		106.	%					
1,2-Dichloroethane-d4		112.	%					
Dibromofluoromethane		99.7	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2242.D
Report Date: 13-Apr-2015 14:23

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C041015.b\C2242.D
Lab Smp Id: SI2008-2RA Client Smp ID: MW-08-GW-033115
Inj Date : 10-APR-2015 16:10 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2008-2RA
Misc Info : WG161013,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C041015.b\C826A36.m
Meth Date : 13-Apr-2015 14:13 gcms-c.i Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

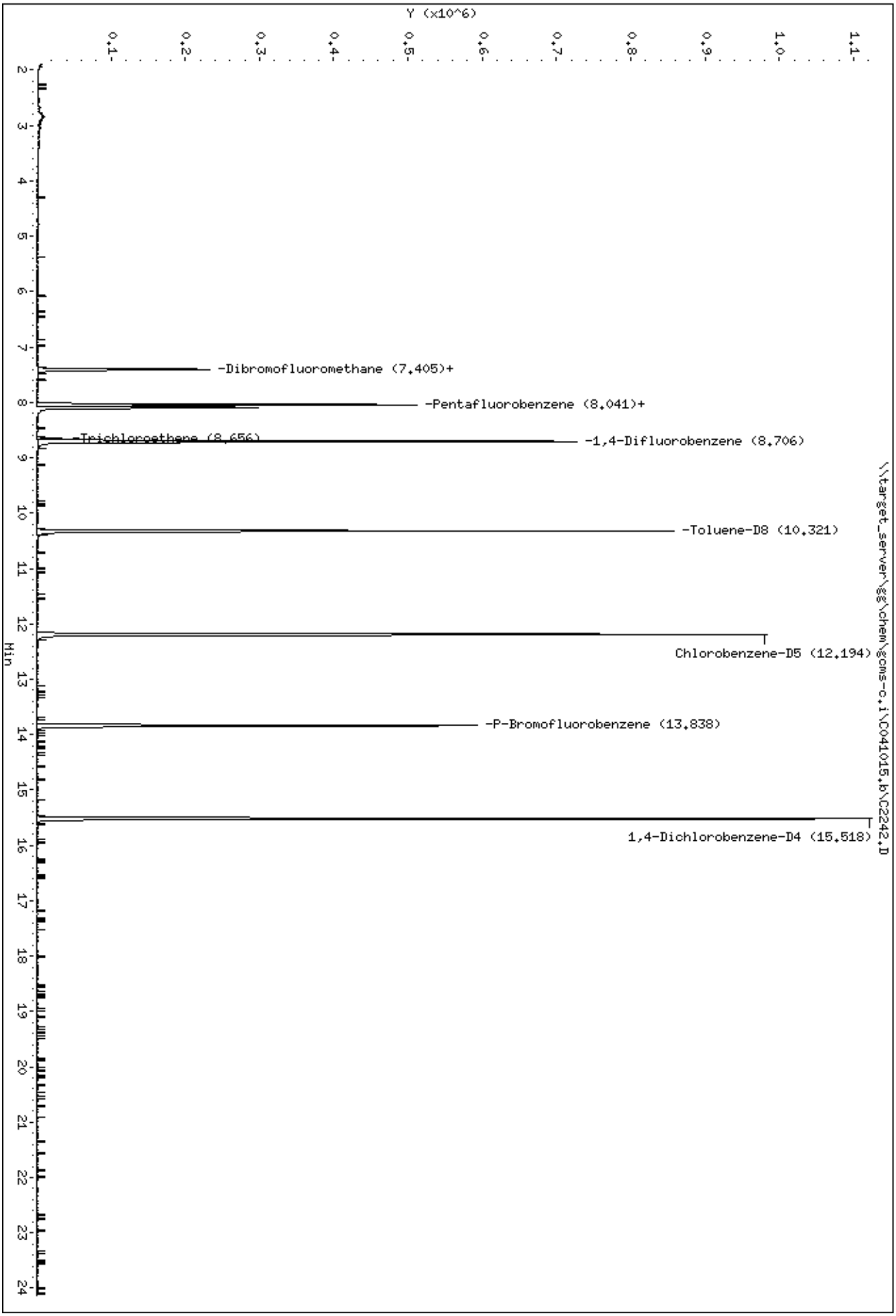
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.404	7.405	(0.921)	143847	49.8693	49.9	
38 1,1,1-Trichloroethane	97	7.426	7.412	(0.924)	1702	0.23382	0.23(a)	
* 42 Pentafluorobenzene	168	8.040	8.041	(1.000)	287531	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	216901	56.2023	56.2	
48 Trichloroethene	95	8.655	8.648	(0.994)	11743	2.74502	2.7	
* 49 1,4-Difluorobenzene	114	8.705	8.698	(1.000)	498867	50.0000		
$ 55 Toluene-D8	98	10.321	10.321	(1.186)	487489	53.2869	53.3	
* 66 Chlorobenzene-D5	117	12.193	12.187	(1.000)	490293	50.0000		
$ 76 P-Bromofluorobenzene	95	13.837	13.838	(1.590)	221752	46.0673	46.1	
* 91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	287160	50.0000		

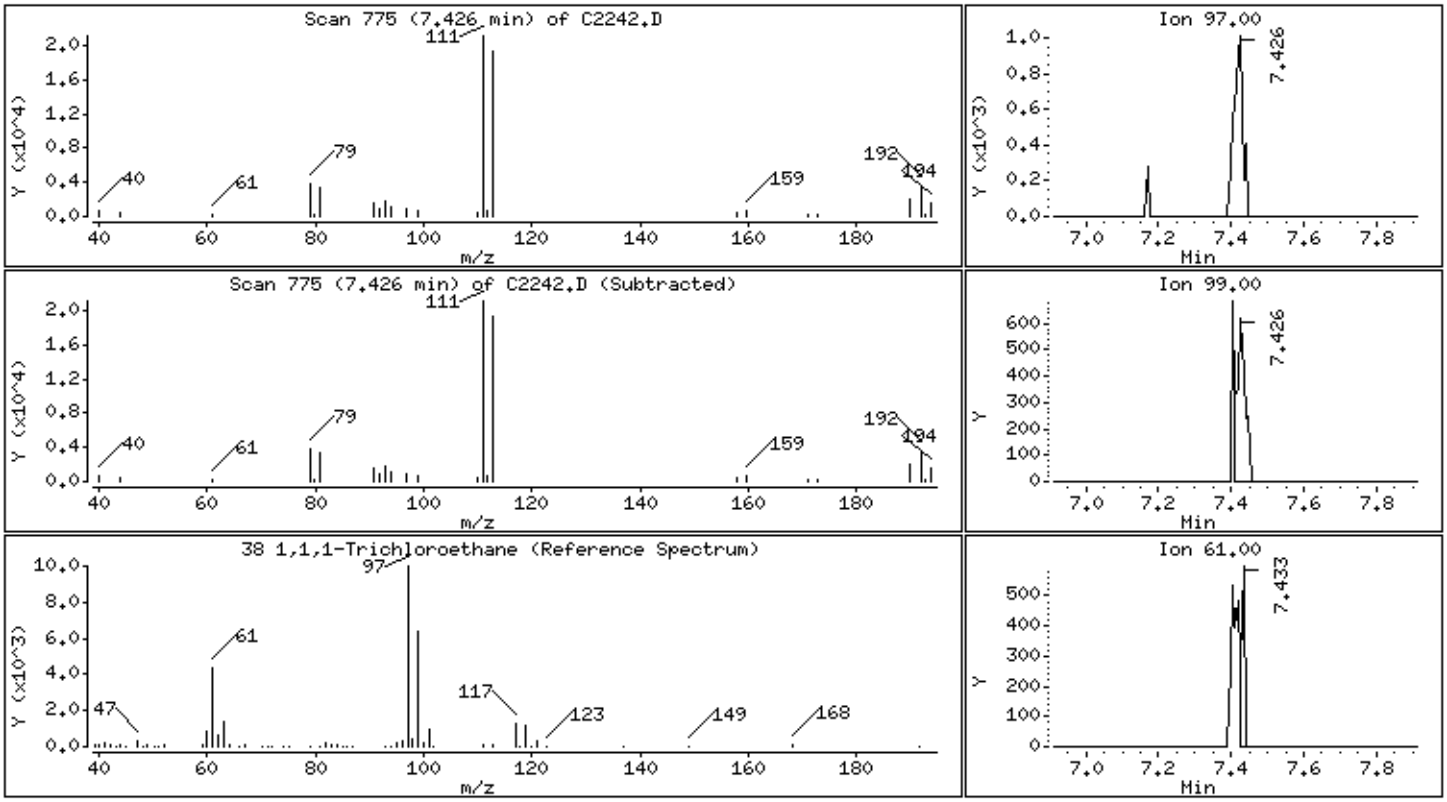
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

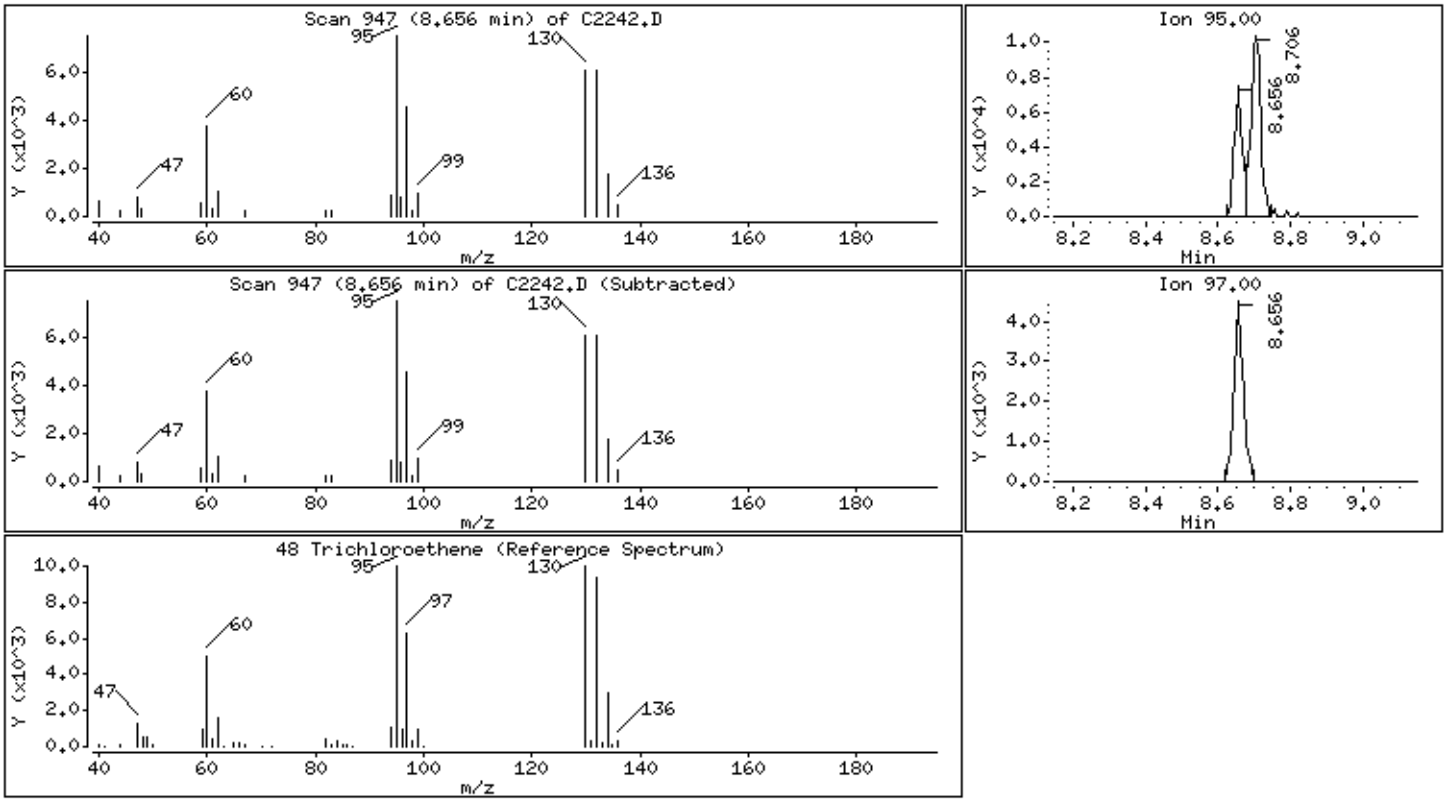

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2242.D
Date : 10-APR-2015 16:10
Client ID: MW-08-GW-033115
Sample Info: SI2008-2RA
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C041015.b\C2242.D
Y (x10^6)
Min
-Dibromofluoromethane (7.405)+
-Pentafluorobenzene (8.041)+
-Trichloroethene (8.656)
-1,4-Difluorobenzene (8.706)
-Toluene-D8 (10.321)
Chlorobenzene-D5 (12.194)
-P-Bromofluorobenzene (13.838)
1,4-Dichlorobenzene-D4 (15.518)

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2242.D
Date : 10-APR-2015 16:10
Client ID: MW-08-GW-033115 Instrument: gcms-c.i
Sample Info: SI2008-2RA

38 1,1,1-Trichloroethane Concentration: 0.23 ug/l



48 Trichloroethene Concentration: 2.7 ug/l



Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-3
Client ID: MW-06-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2059.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 02-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160655

Analysis Date: 02-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 23-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	UL	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	UL	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	UL	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-3
Client ID: MW-06-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2059.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 02-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160655

Analysis Date: 02-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 23-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		104.	%					
Toluene-d8		102.	%					
1,2-Dichloroethane-d4	*	122.	%					
Dibromofluoromethane		115.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2059.D
Report Date: 23-Apr-2015 16:10

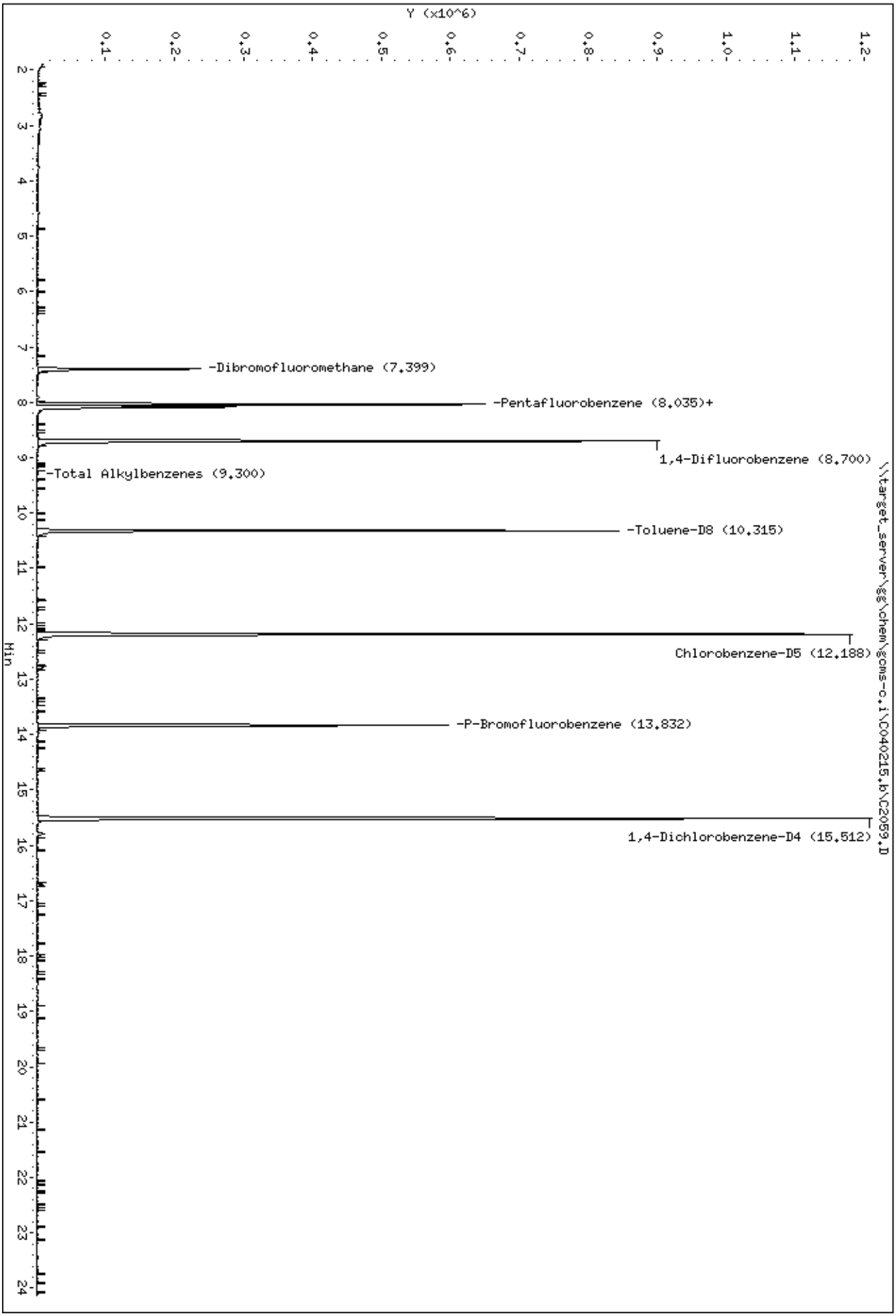
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040215.b\C2059.D
Lab Smp Id: SI2008-3
Inj Date : 02-APR-2015 19:12 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2008-3
Misc Info : WG160655,WG160458-4
Comment : SW846 5030
Method : \\TARGET_SERVER\GG\chem\gcms-c.i\C040215.b\C826A34.m
Meth Date : 23-Apr-2015 16:09 gcms-c.i Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.399	7.397	(0.921)	144871	57.5100	57.5	
* 42 Pentafluorobenzene	168	8.035	8.039	(1.000)	362636	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.085	8.090	(1.006)	200313	61.0463	61.0	
* 49 1,4-Difluorobenzene	114	8.699	8.696	(1.000)	635362	50.0000		
$ 55 Toluene-D8	98	10.315	10.320	(1.186)	506750	51.0204	51.0	
* 66 Chlorobenzene-D5	117	12.188	12.193	(1.000)	610617	50.0000		
$ 76 P-Bromofluorobenzene	95	13.832	13.837	(1.590)	235742	52.0024	52.0	
* 91 1,4-Dichlorobenzene-D4	152	15.512	15.517	(1.000)	328996	50.0000		


Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2059.D
Date : 02-APR-2015 19:12
Client ID:
Sample Info: SI2008-3
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C040215.b\C2059.D
Y (x10^6)
Min
-Dibromofluoromethane (7.399)
-Pentafluorobenzene (8.035)+
1,4-Difluorobenzene (8.700)
-Total Alkylbenzenes (9.300)
-Toluene-D8 (10.315)
Chlorobenzene-D5 (12.188)
-P-Bromofluorobenzene (13.832)
1,4-Dichlorobenzene-D4 (15.512)

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-4RA
Client ID: MW-07-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2243.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	J	0.37	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene		2.4	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-4RA
Client ID: MW-07-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2243.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		93.6	%					
Toluene-d8		107.	%					
1,2-Dichloroethane-d4		111.	%					
Dibromofluoromethane		99.9	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2243.D
Report Date: 13-Apr-2015 14:23

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C041015.b\C2243.D
Lab Smp Id: SI2008-4RA Client Smp ID: MW-07-GW-033115
Inj Date : 10-APR-2015 16:42 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2008-4RA
Misc Info : WG161013,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C041015.b\C826A36.m
Meth Date : 13-Apr-2015 14:13 gcms-c.i Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

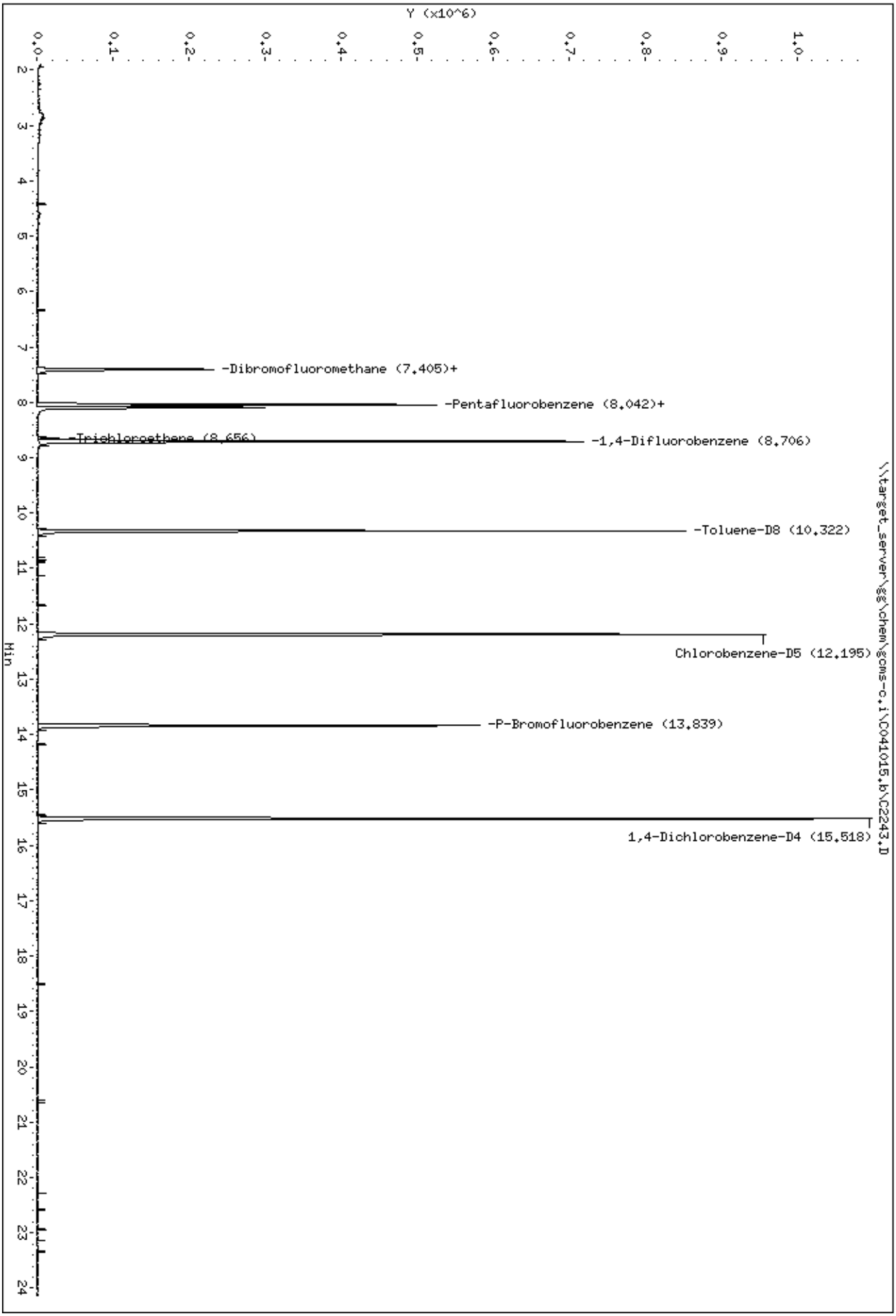
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.405	7.405	(0.921)	143273	49.9729	50.0	
38 1,1,1-Trichloroethane	97	7.412	7.412	(0.922)	2703	0.37360	0.37(a)	
* 42 Pentafluorobenzene	168	8.041	8.041	(1.000)	285790	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.091	8.090	(1.006)	212233	55.3277	55.3	
48 Trichloroethene	95	8.656	8.648	(0.994)	10239	2.40334	2.4	
* 49 1,4-Difluorobenzene	114	8.706	8.698	(1.000)	496814	50.0000		
$ 55 Toluene-D8	98	10.321	10.321	(1.186)	487010	53.4545	53.4	
* 66 Chlorobenzene-D5	117	12.194	12.187	(1.000)	482329	50.0000		
$ 76 P-Bromofluorobenzene	95	13.838	13.838	(1.589)	224452	46.8209	46.8	
* 91 1,4-Dichlorobenzene-D4	152	15.518	15.518	(1.000)	286024	50.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2243.D
Date : 10-APR-2015 16:42
Client ID: MW-07-GW-033115
Sample Info: SI2008-4RA
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C041015.b\C2243.D
Y (x10^6)
Min
-Dibromofluoromethane (7.405)+
-Pentafluorobenzene (8.042)+
-Trichloroethene (8.656)
-1,4-Difluorobenzene (8.706)
-Toluene-D8 (10.322)
Chlorobenzene-D5 (12.195)
-P-Bromofluorobenzene (13.839)
1,4-Dichlorobenzene-D4 (15.518)

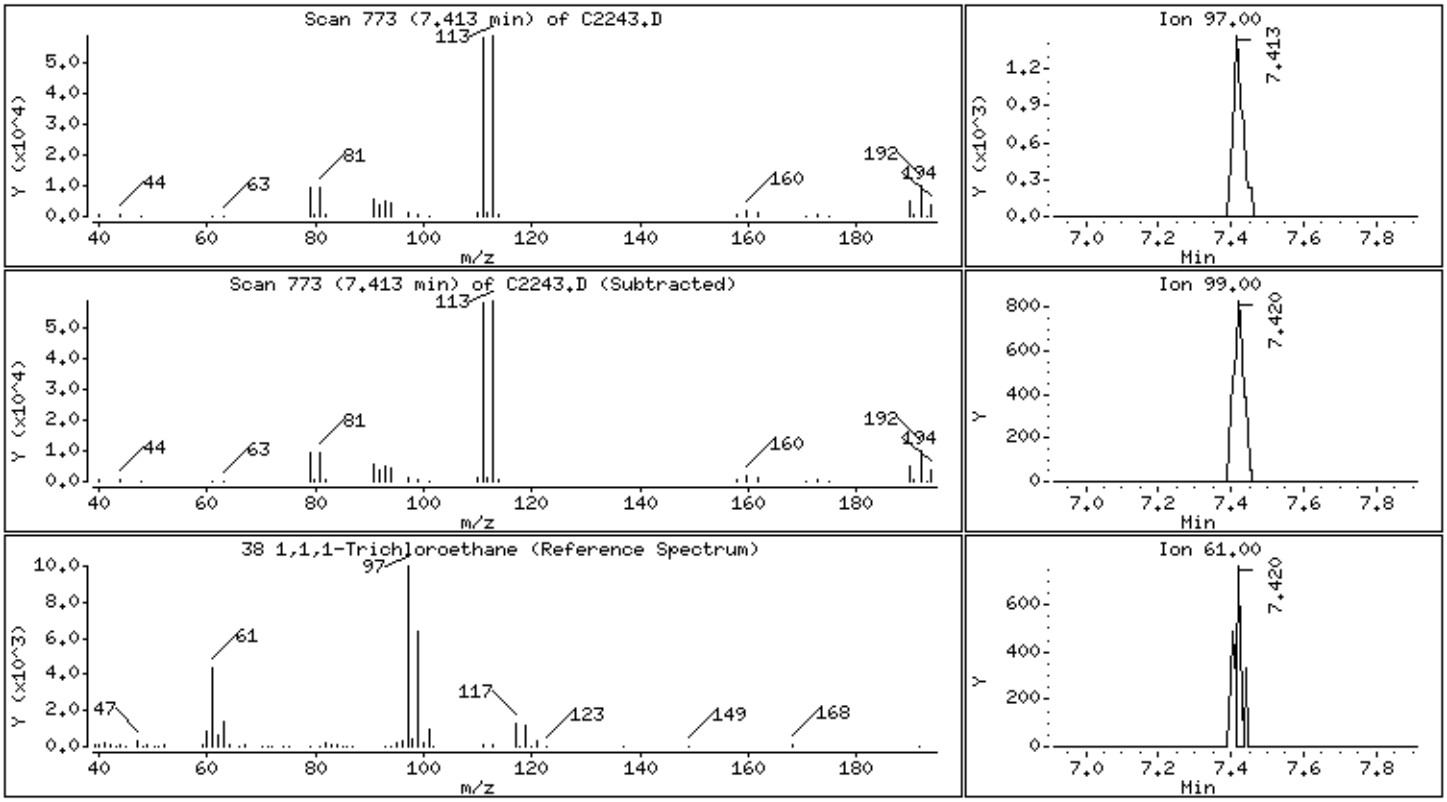
Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2243.D

Date : 10-APR-2015 16:42

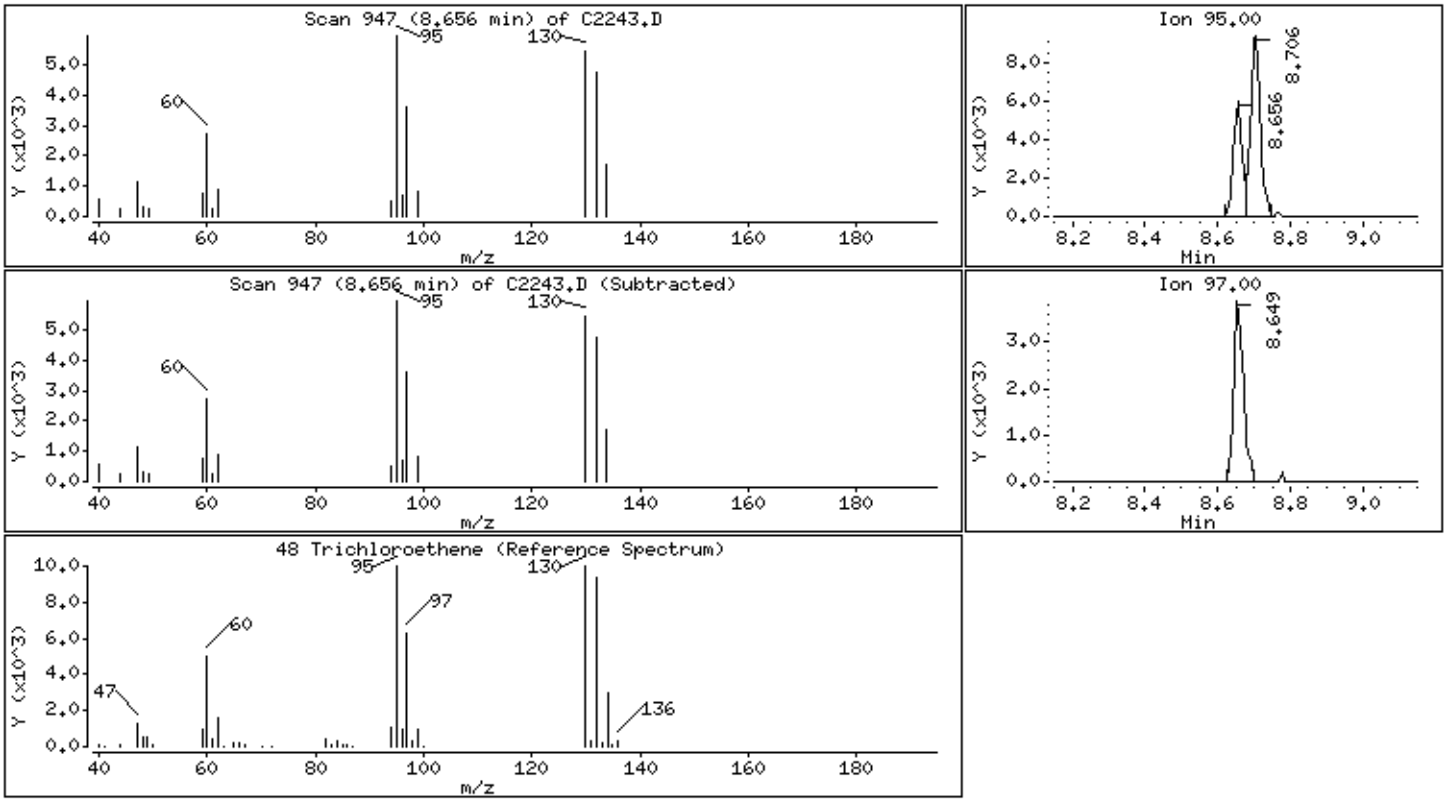
Client ID: MW-07-GW-033115 Instrument: gcms-c.i

Sample Info: SI2008-4RA

38 1,1,1-Trichloroethane Concentration: 0.37 ug/l



48 Trichloroethene Concentration: 2.4 ug/l



Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-5RA
Client ID: RE108D1-GW-032715
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2244.D

Sample Date: 27-MAR-15
Received Date: 01-APR-15
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113		1.2	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	J	0.46	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene		140	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene		1.1	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-5RA
Client ID: RE108D1-GW-032715
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2244.D

Sample Date: 27-MAR-15
Received Date: 01-APR-15
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	J	0.46	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		95.9	%					
Toluene-d8		109.	%					
1,2-Dichloroethane-d4		112.	%					
Dibromofluoromethane		98.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2244.D
Report Date: 13-Apr-2015 14:23

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C041015.b\C2244.D
Lab Smp Id: SI2008-5RA Client Smp ID: RE108D1-GW-032715
Inj Date : 10-APR-2015 17:14 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2008-5RA
Misc Info : WG161013,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C041015.b\C826A36.m
Meth Date : 13-Apr-2015 14:13 gcms-c.i Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

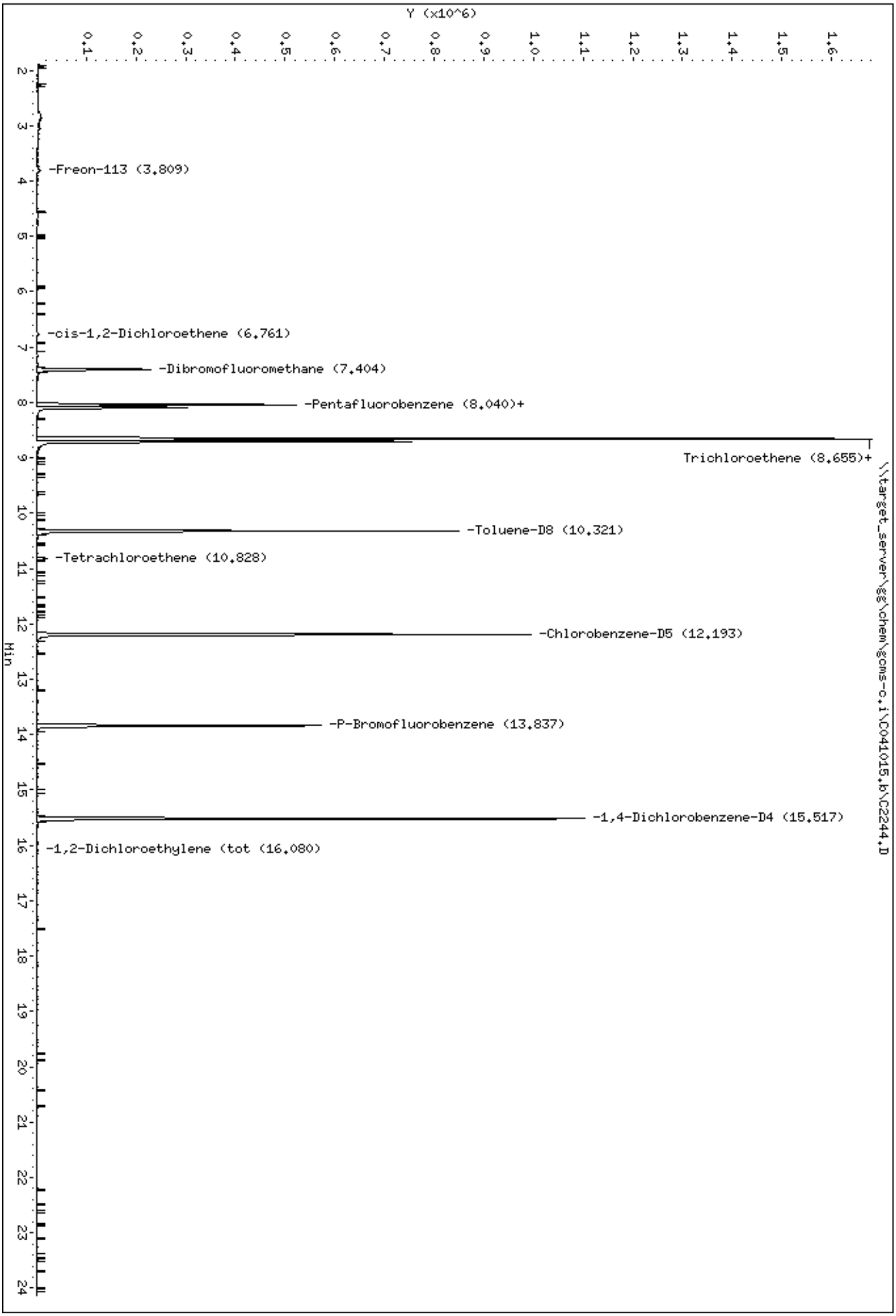
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
11 Freon-113	151	3.808	3.809	(0.474)	2917	1.24804	1.2	
29 cis-1,2-Dichloroethene	96	6.760	6.761	(0.841)	1832	0.46221	0.46(a)	
M 30 1,2-Dichloroethylene (total)	96				1832	0.46221	0.46(a)	
$ 37 Dibromofluoromethane	113	7.404	7.405	(0.921)	143018	49.3167	49.3	
* 42 Pentafluorobenzene	168	8.040	8.041	(1.000)	289077	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	216411	55.7754	55.8	
48 Trichloroethene	95	8.655	8.648	(0.994)	567973	136.585	136	
* 49 1,4-Difluorobenzene	114	8.705	8.698	(1.000)	484926	50.0000		
$ 55 Toluene-D8	98	10.320	10.321	(1.186)	483931	54.4187	54.4	
59 Tetrachloroethene	164	10.828	10.821	(0.888)	3523	1.12051	1.1	
* 66 Chlorobenzene-D5	117	12.193	12.187	(1.000)	492526	50.0000		
$ 76 P-Bromofluorobenzene	95	13.837	13.838	(1.590)	224337	47.9441	47.9	
* 91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	287005	50.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2244.D
Date : 10-APR-2015 17:14
Client ID: RE108D1-GW-032715
Sample Info: S12008-5RA
Instrument: gcms-c.i
Y (x10^6)
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6
Min
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
-Freon-113 (3.809)
-cis-1,2-Dichloroethene (6.761)
-Dibromofluoromethane (7.404)
-Pentafluorobenzene (8.040)+
Trichloroethene (8.655)+
-Toluene-D8 (10.321)
-Tetrachloroethene (10.828)
-Chlorobenzene-D5 (12.193)
-P-Bromofluorobenzene (13.837)
-1,4-Dichlorobenzene-D4 (15.517)
-1,2-Dichloroethylene (tot (16.080)
\\target_server\gg\chem\gcms-c.i\C041015.b\C2244.D

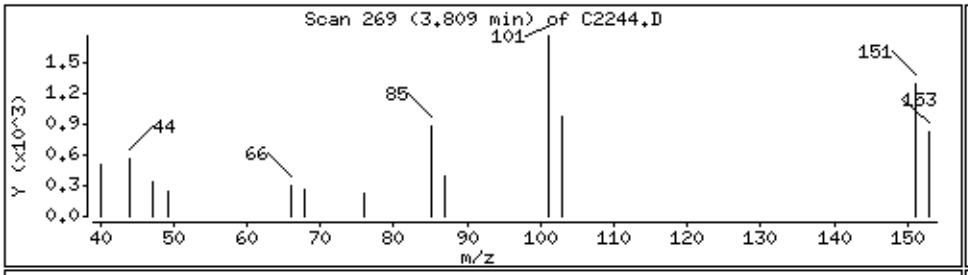
Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2244.D

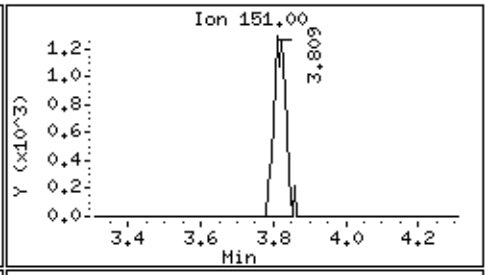
Date : 10-APR-2015 17:14

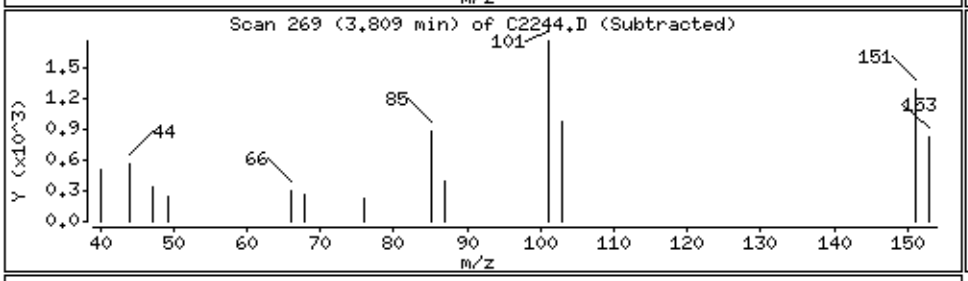
Client ID: RE108D1-GW-032715 Instrument: gcms-c.i

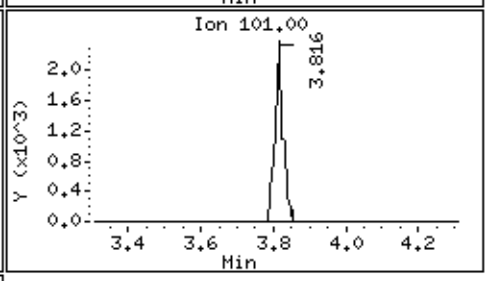
Sample Info: SI2008-5RA

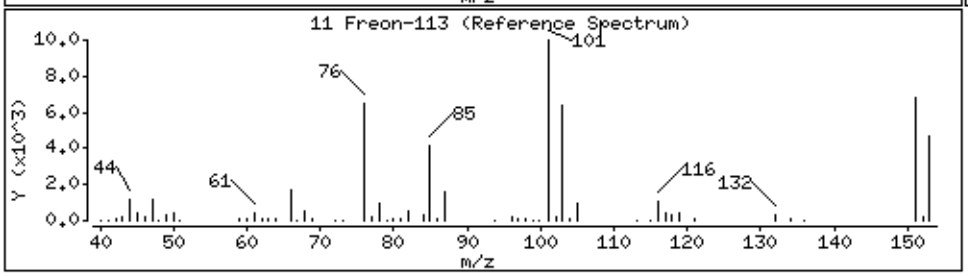
11 Freon-113 Concentration: 1.2 ug/l



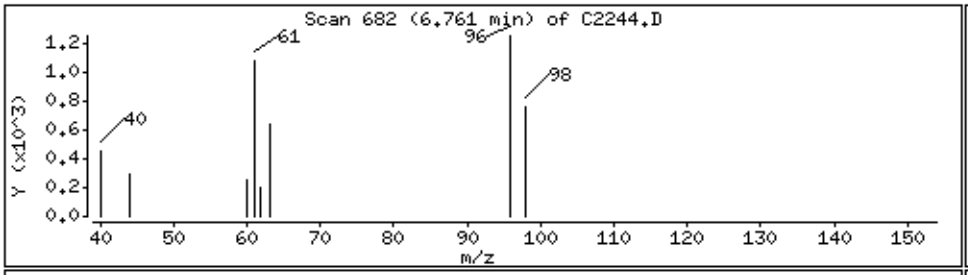


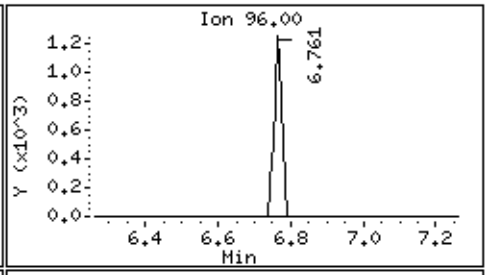


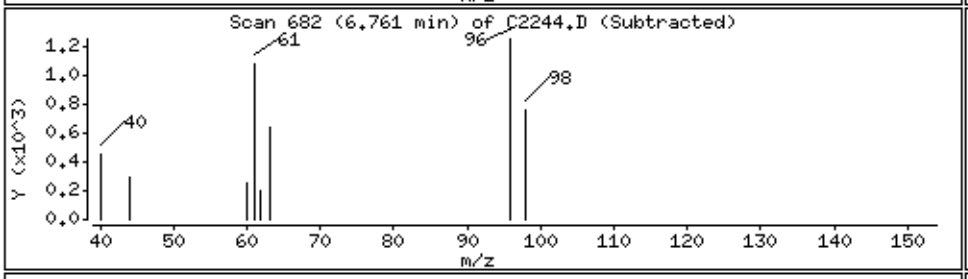


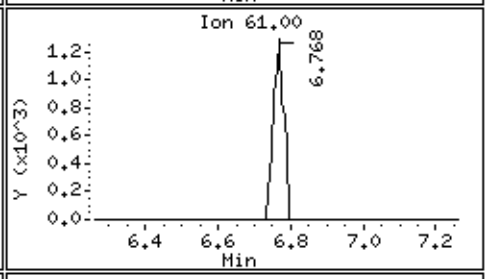


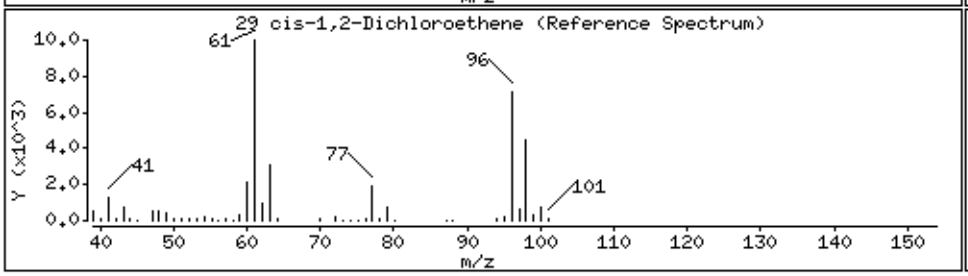
29 cis-1,2-Dichloroethene Concentration: 0.46 ug/l

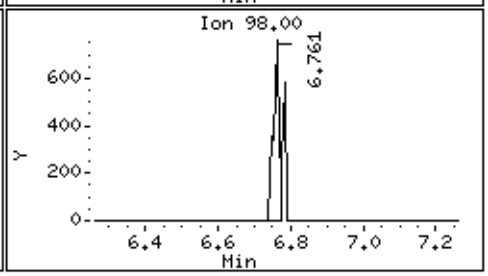












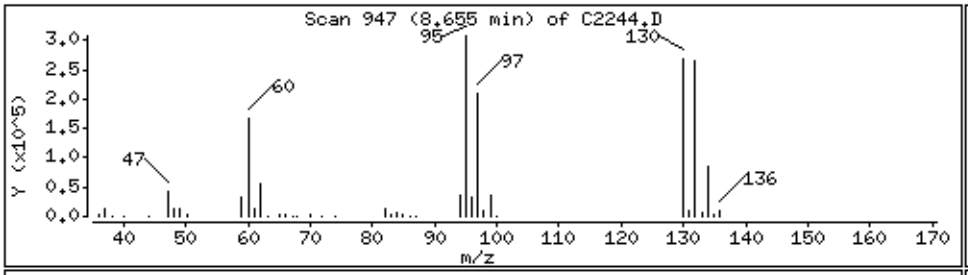
Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2244.D

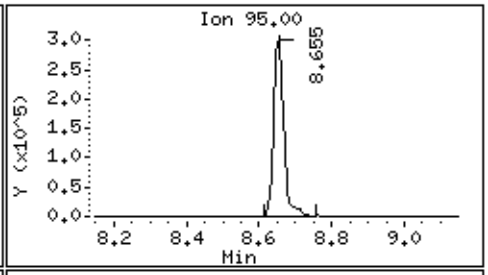
Date : 10-APR-2015 17:14

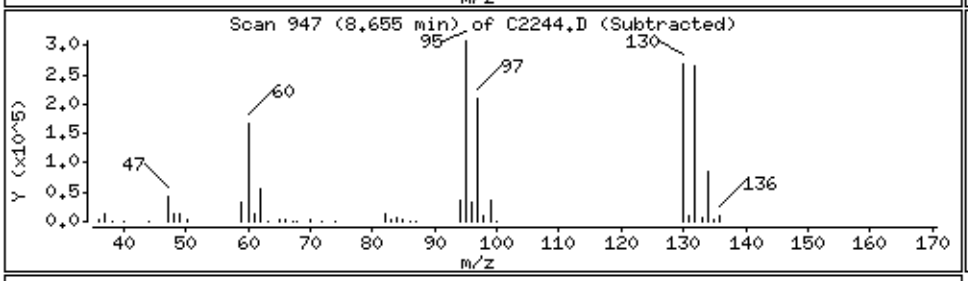
Client ID: RE108D1-GW-032715 Instrument: gcms-c.i

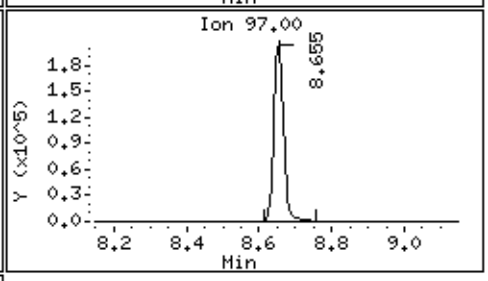
Sample Info: SI2008-5RA

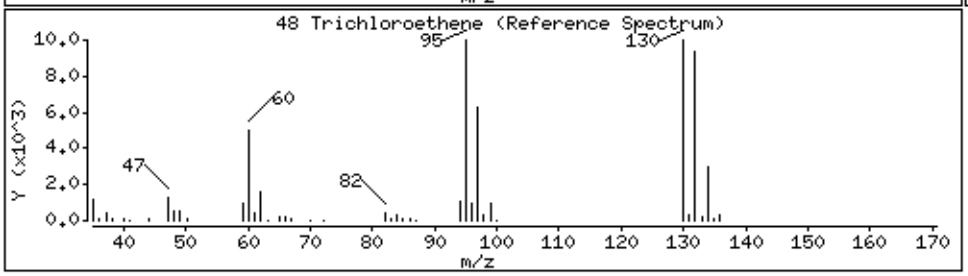
48 Trichloroethene Concentration: 136 ug/l



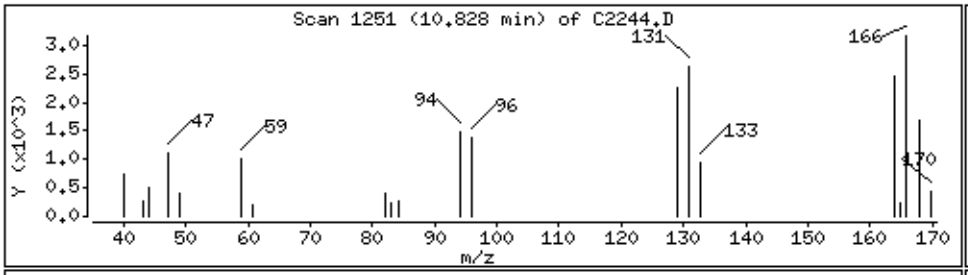


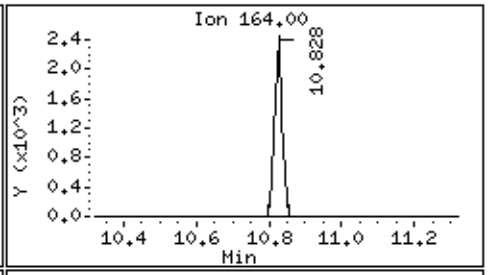


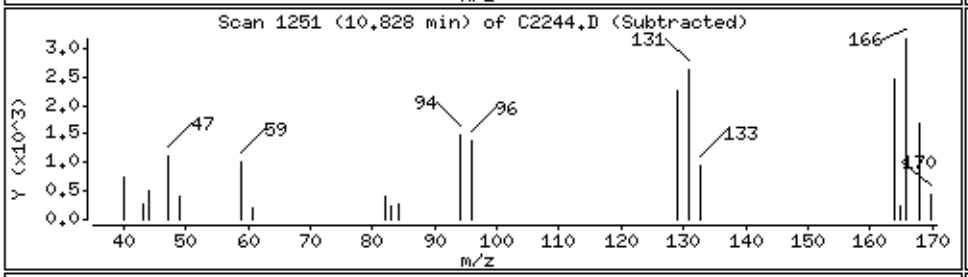


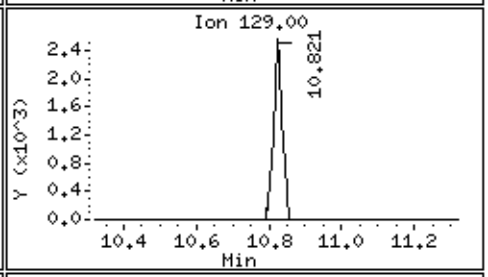


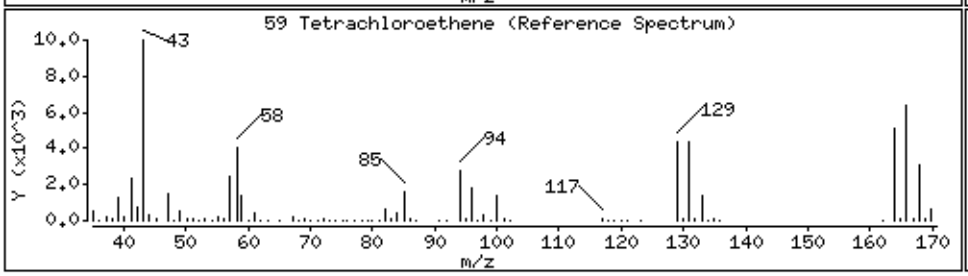
59 Tetrachloroethene Concentration: 1.1 ug/l

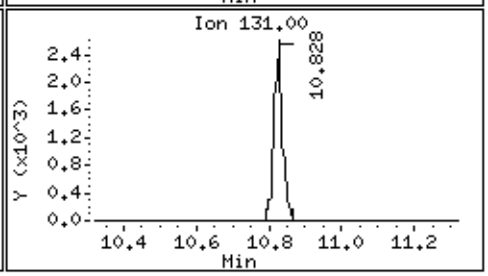












Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-6DL
Client ID: RE108D2-GW-032715
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2081.D

Sample Date: 27-MAR-15
Received Date: 01-APR-15
Extract Date: 03-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160723

Analysis Date: 03-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	20	ug/L	20	2	40.	4.8	20.
Chloromethane	U	20	ug/L	20	2	40.	7.2	20.
Vinyl Chloride	U	20	ug/L	20	2	40.	5.0	20.
Bromomethane	U	20	ug/L	20	2	40.	9.8	20.
Chloroethane	U	20	ug/L	20	2	40.	11.	20.
Trichlorofluoromethane	U	20	ug/L	20	2	40.	4.8	20.
1,1-Dichloroethene	J	7.0	ug/L	20	1	20.	7.0	10.
Carbon Disulfide	U	10	ug/L	20	1	20.	5.0	10.
Freon-113	U	10	ug/L	20	1	20.	6.2	10.
Methylene Chloride	J	25	ug/L	20	5	100	23.	50.
Acetone	U	50	ug/L	20	5	100	44.	50.
trans-1,2-Dichloroethene	U	10	ug/L	20	1	20.	5.0	10.
Methyl tert-butyl Ether	U	10	ug/L	20	1	20.	7.2	10.
1,1-Dichloroethane	U	10	ug/L	20	1	20.	4.2	10.
cis-1,2-Dichloroethene	J	6.6	ug/L	20	1	20.	4.2	10.
Chloroform	U	10	ug/L	20	1	20.	6.4	10.
1,1,1-Trichloroethane	U	10	ug/L	20	1	20.	4.0	10.
2-Butanone	U	50	ug/L	20	5	100	26.	50.
Cyclohexane	U	10	ug/L	20	1	20.	6.2	10.
Carbon Tetrachloride	U	10	ug/L	20	1	20.	4.4	10.
Benzene	U	10	ug/L	20	1	20.	5.2	10.
1,2-Dichloroethane	U	10	ug/L	20	1	20.	4.0	10.
Trichloroethene		3300	ug/L	20	1	20.	5.6	10.
1,2-Dichloropropane	U	10	ug/L	20	1	20.	5.0	10.
Bromodichloromethane	U	10	ug/L	20	1	20.	6.6	10.
cis-1,3-Dichloropropene	U	10	ug/L	20	1	20.	3.8	10.
Toluene	U	10	ug/L	20	1	20.	5.4	10.
4-Methyl-2-Pentanone	U	50	ug/L	20	5	100	26.	50.
trans-1,3-Dichloropropene	U	10	ug/L	20	1	20.	4.0	10.
1,1,2-Trichloroethane	U	10	ug/L	20	1	20.	6.6	10.
Tetrachloroethene	U	10	ug/L	20	1	20.	8.0	10.
Dibromochloromethane	U	10	ug/L	20	1	20.	6.0	10.
2-Hexanone	U	50	ug/L	20	5	100	34.	50.
Chlorobenzene	U	10	ug/L	20	1	20.	4.4	10.
Ethylbenzene	U	10	ug/L	20	1	20.	4.2	10.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-6DL
Client ID: RE108D2-GW-032715
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2081.D

Sample Date: 27-MAR-15
Received Date: 01-APR-15
Extract Date: 03-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160723

Analysis Date: 03-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	30	ug/L	20	3	60.	5.0	30.
Styrene	U	10	ug/L	20	1	20.	4.6	10.
Bromoform	U	10	ug/L	20	1	20.	4.6	10.
Isopropylbenzene	U	10	ug/L	20	1	20.	4.6	10.
1,1,2,2-Tetrachloroethane	U	10	ug/L	20	1	20.	7.6	10.
1,3-Dichlorobenzene	U	10	ug/L	20	1	20.	5.2	10.
1,4-Dichlorobenzene	U	10	ug/L	20	1	20.	4.8	10.
1,2-Dichlorobenzene	U	10	ug/L	20	1	20.	3.0	10.
1,2,4-Trichlorobenzene	U	10	ug/L	20	1	20.	7.4	10.
Methyl Acetate	U	15	ug/L	20	1	20.	11.	15.
Methylcyclohexane	U	10	ug/L	20	1	20.	6.0	10.
o-Xylene	U	10	ug/L	20	1	20.	5.0	10.
M+P-Xylenes	U	20	ug/L	20	2	40.	12.	20.
1,2-Dichloroethylene (Total)	J	6.6	ug/L	20	2	40.	4.2	20.
1,2-Dibromoethane	U	10	ug/L	20	1	20.	4.4	10.
1,2-Dibromo-3-Chloropropane	U	15	ug/L	20	1	20.	10.	15.
P-Bromofluorobenzene		105.	%					
Toluene-d8		101.	%					
1,2-Dichloroethane-d4	*	130.	%					
Dibromofluoromethane	*	116.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2081.D
Report Date: 06-Apr-2015 13:17

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040315.b\C2081.D
Lab Smp Id: SI2008-6DL Client Smp ID: RE108D2-GW-032715
Inj Date : 03-APR-2015 19:39 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2008-6DL
Misc Info : WG160723,WG160458-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040315.b\C826A34.m
Meth Date : 03-Apr-2015 11:41 eeverett Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 16
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

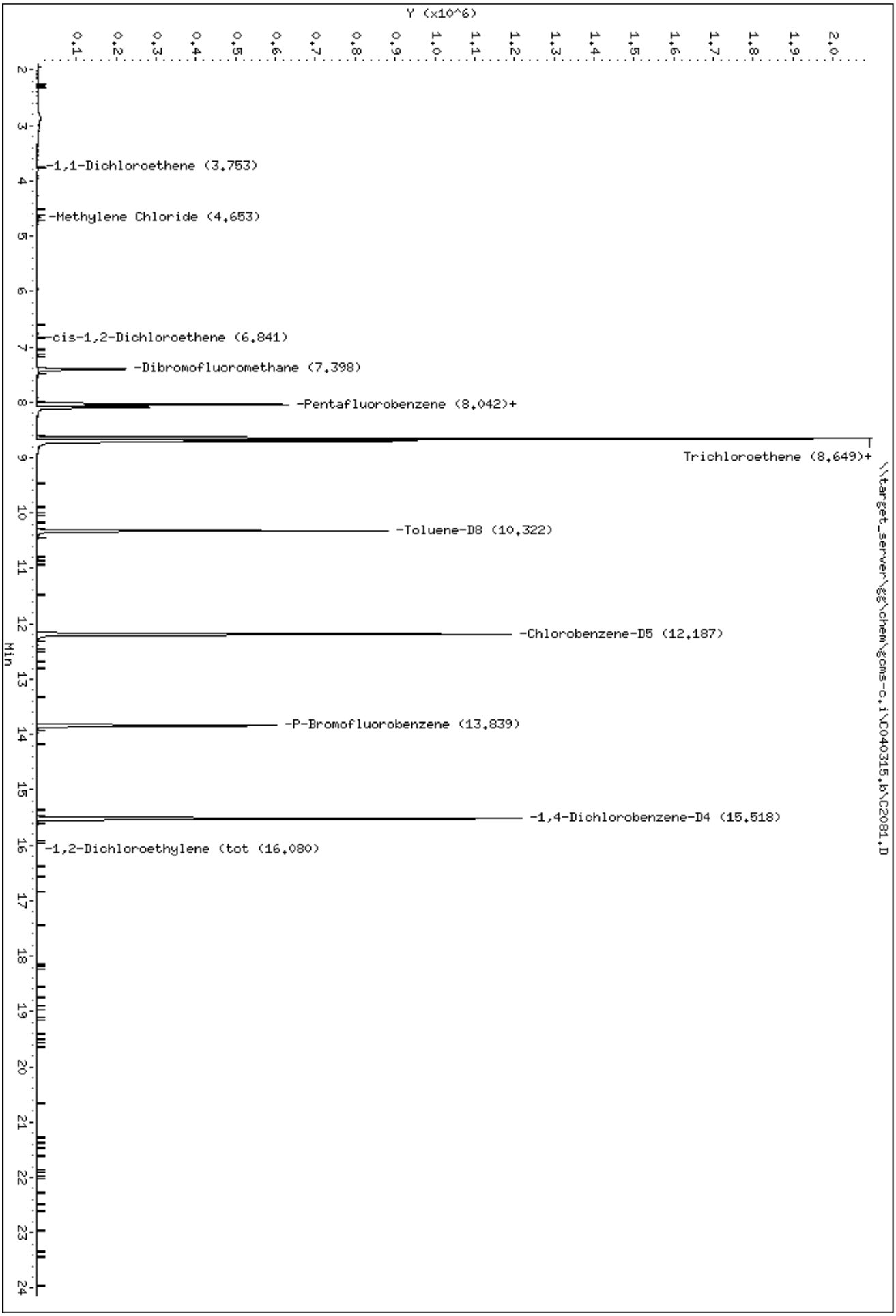
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	20.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	9 1,1-Dichloroethene	96	3.752	3.751	(0.467)	1155	0.35239	7.0(a)	
	14 Methylene Chloride	84	4.653	4.652	(0.579)	5092	1.24309	24.9(a)	
	29 cis-1,2-Dichloroethene	96	6.754	6.753	(0.840)	1355	0.33282	6.6(a)	
M	30 1,2-Dichloroethylene (total)	96				1355	0.33282	6.6(a)	
$	37 Dibromofluoromethane	113	7.398	7.397	(0.920)	145074	58.0964	58.1	
*	42 Pentafluorobenzene	168	8.041	8.039	(1.000)	359479	50.0000		
$	45 1,2-Dichloroethane-D4	65	8.091	8.090	(1.006)	212096	65.2049	65.2	
	48 Trichloroethene	95	8.649	8.647	(0.994)	685131	166.550	3330	
*	49 1,4-Difluorobenzene	114	8.699	8.696	(1.000)	634581	50.0000		
$	55 Toluene-D8	98	10.321	10.320	(1.187)	503373	50.7428	50.7	
*	66 Chlorobenzene-D5	117	12.187	12.193	(1.000)	610844	50.0000		
$	76 P-Bromofluorobenzene	95	13.838	13.837	(1.591)	237901	52.5432	52.5	
*	91 1,4-Dichlorobenzene-D4	152	15.518	15.517	(1.000)	319566	50.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2081.D
Date : 03-APR-2015 19:39
Client ID: RE108D2-GW-032715
Sample Info: SI2008-6DL
Instrument: gcms-c.i
Y (x10^6)
Min
-1,1-Dichloroethene (3.753)
-Methylene Chloride (4.653)
-cis-1,2-Dichloroethene (6.841)
-Dibromofluoromethane (7.398)
-Pentafluorobenzene (8.042)+
Trichloroethene (8.649)+
-Toluene-D8 (10.322)
-Chlorobenzene-D5 (12.187)
-P-Bromofluorobenzene (13.839)
-1,4-Dichlorobenzene-D4 (15.518)
-1,2-Dichloroethylene (tot (16.080)
\\target_server\gg\chem\gcms-c.i\C040315.b\C2081.D

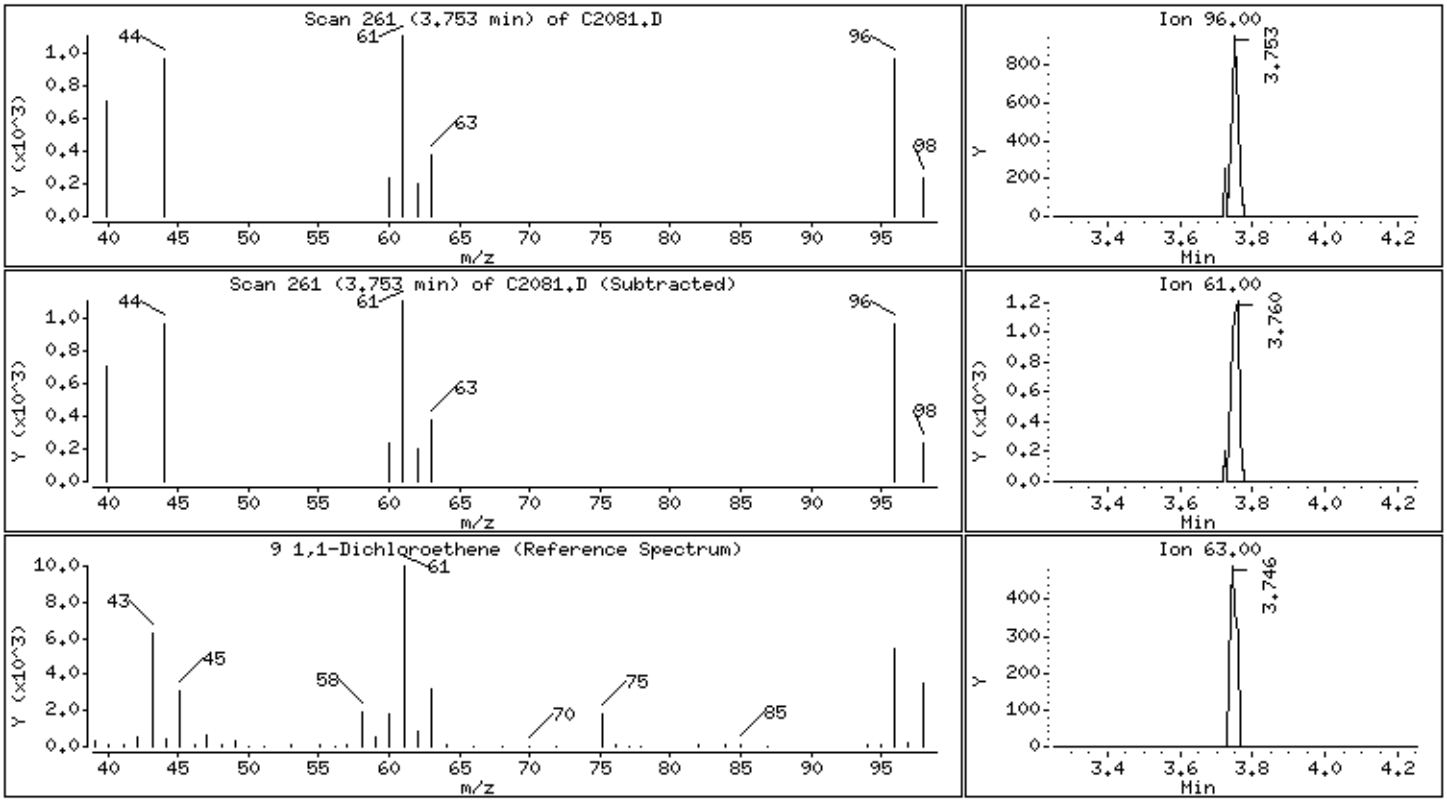
Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2081.D

Date : 03-APR-2015 19:39

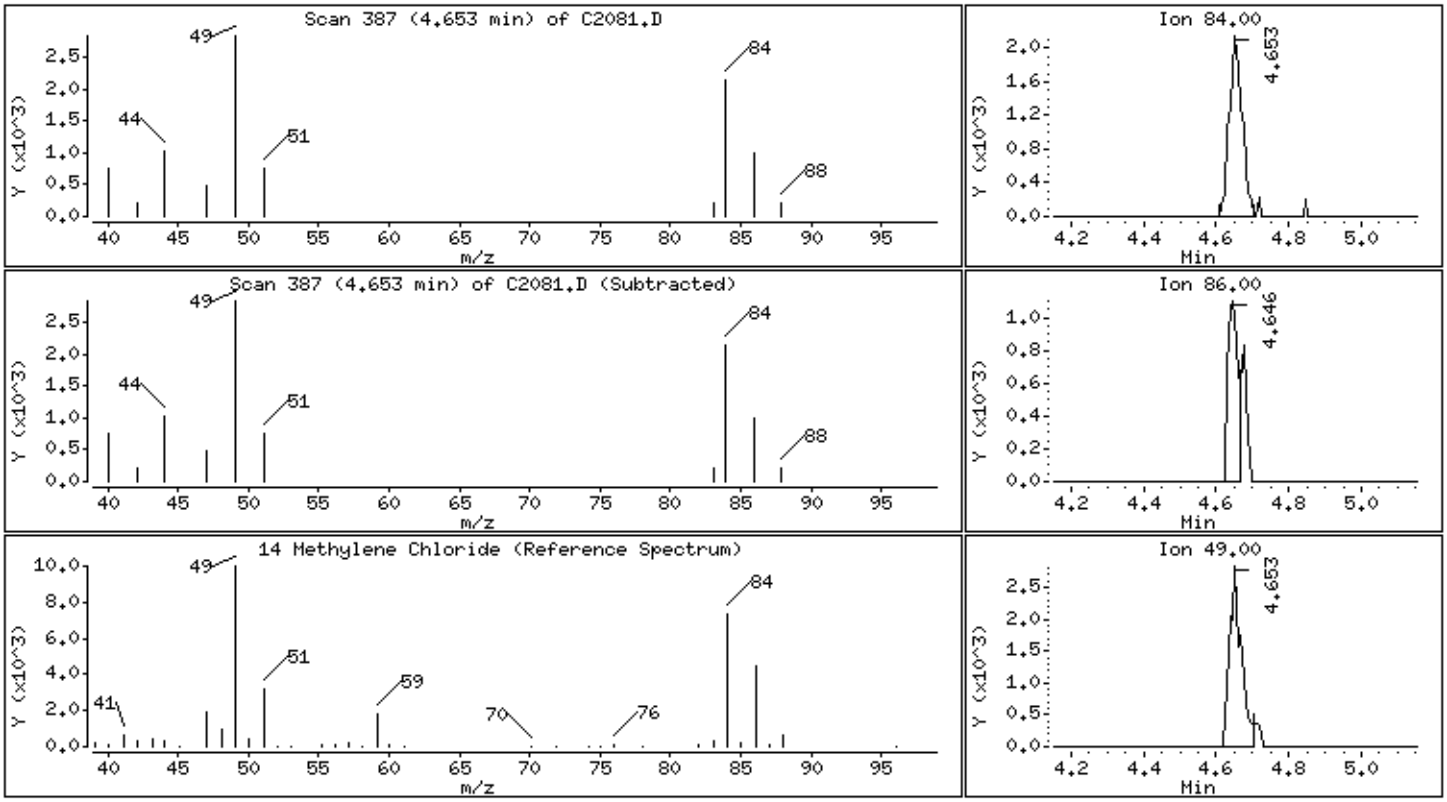
Client ID: RE108D2-GW-032715 Instrument: gcms-c.i

Sample Info: SI2008-6DL

9 1,1-Dichloroethene Concentration: 7.0 ug/l

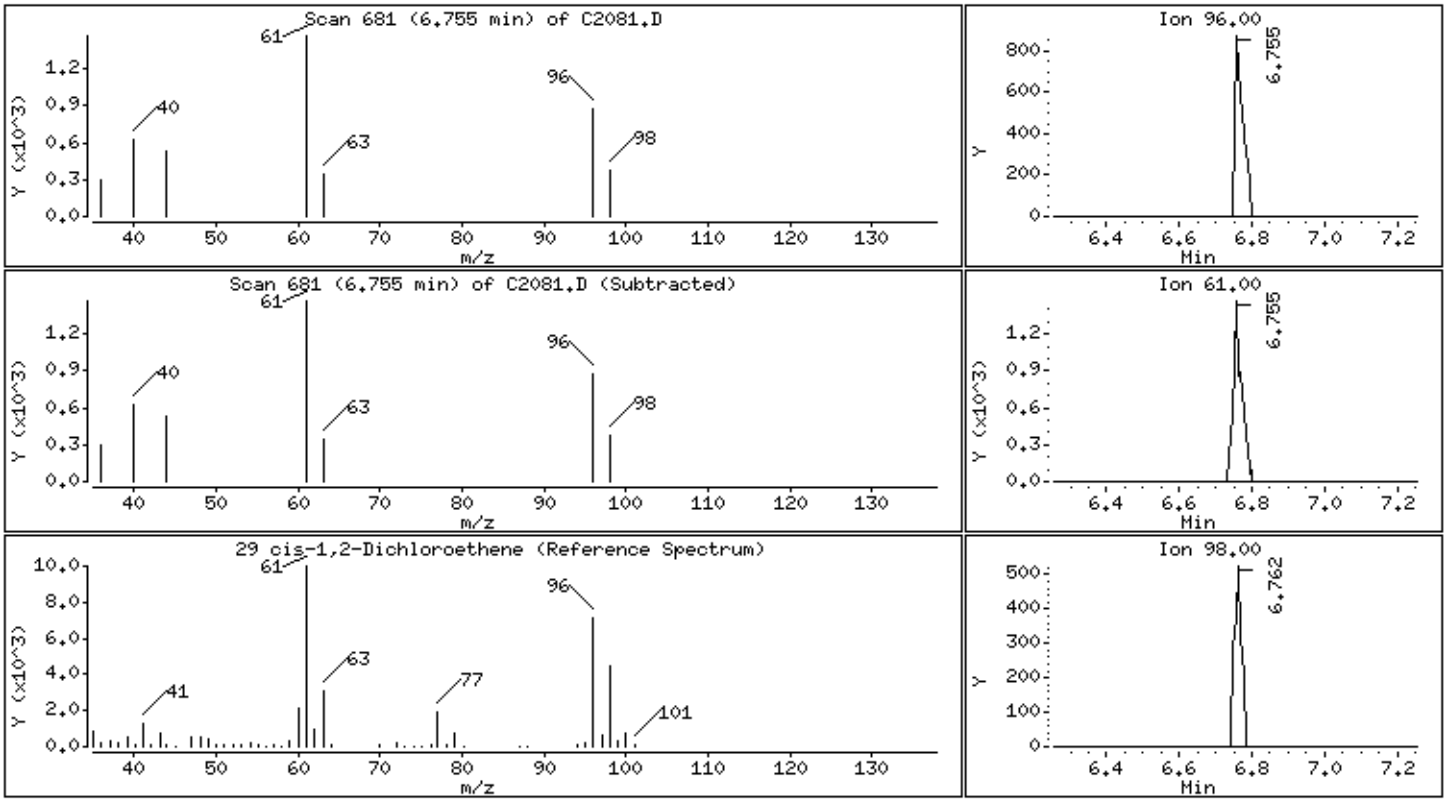


14 Methylene Chloride Concentration: 24.9 ug/l

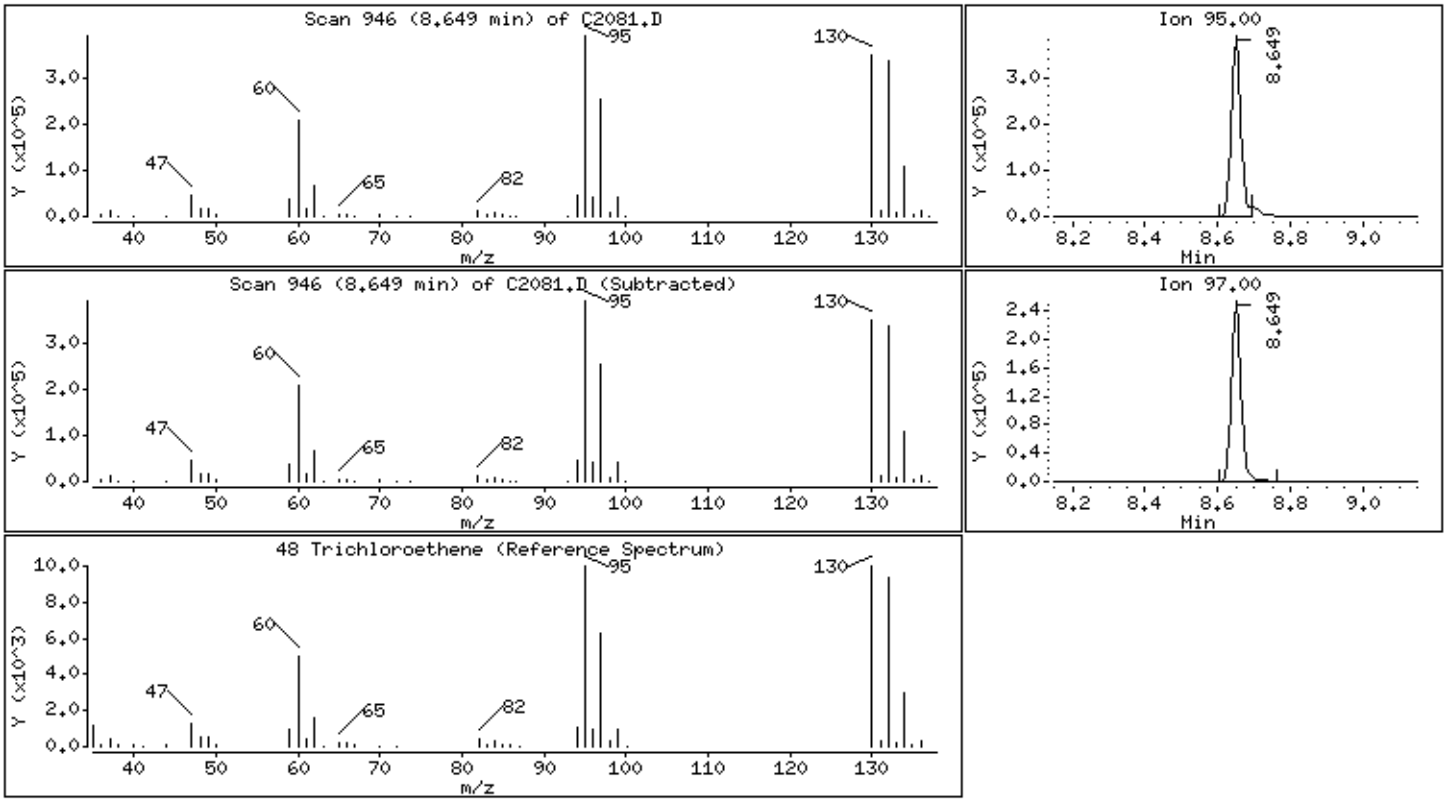


Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2081.D
Date : 03-APR-2015 19:39
Client ID: RE108D2-GW-032715 Instrument: gcms-c.i
Sample Info: SI2008-6DL

29 cis-1,2-Dichloroethene Concentration: 6.6 ug/l



48 Trichloroethene Concentration: 3330 ug/l



Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-6DL2
Client ID: RE108D2-GW-032715
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2126.D

Sample Date: 27-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160815

Analysis Date: 06-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	2.0	ug/L	2	2	4.0	0.48	2.0
Chloromethane	U	2.0	ug/L	2	2	4.0	0.72	2.0
Vinyl Chloride	U	2.0	ug/L	2	2	4.0	0.50	2.0
Bromomethane	U	2.0	ug/L	2	2	4.0	0.98	2.0
Chloroethane	U	2.0	ug/L	2	2	4.0	1.1	2.0
Trichlorofluoromethane	U	2.0	ug/L	2	2	4.0	0.48	2.0
1,1-Dichloroethene		5.3	ug/L	2	1	2.0	0.70	1.0
Carbon Disulfide	U	1.0	ug/L	2	1	2.0	0.50	1.0
Freon-113		3.1	ug/L	2	1	2.0	0.62	1.0
Methylene Chloride	U	5.0	ug/L	2	5	10.	2.3	5.0
Acetone	U	5.0	ug/L	2	5	10.	4.4	5.0
trans-1,2-Dichloroethene	U	1.0	ug/L	2	1	2.0	0.50	1.0
Methyl tert-butyl Ether	U	1.0	ug/L	2	1	2.0	0.72	1.0
1,1-Dichloroethane		4.4	ug/L	2	1	2.0	0.42	1.0
cis-1,2-Dichloroethene		8.4	ug/L	2	1	2.0	0.42	1.0
Chloroform		3.1	ug/L	2	1	2.0	0.64	1.0
1,1,1-Trichloroethane	J	1.0	ug/L	2	1	2.0	0.40	1.0
2-Butanone	U	5.0	ug/L	2	5	10.	2.6	5.0
Cyclohexane	U	1.0	ug/L	2	1	2.0	0.62	1.0
Carbon Tetrachloride	J	1.1	ug/L	2	1	2.0	0.44	1.0
Benzene	U	1.0	ug/L	2	1	2.0	0.52	1.0
1,2-Dichloroethane	U	1.0	ug/L	2	1	2.0	0.40	1.0
Trichloroethene	E	2200	ug/L	2	1	2.0	0.56	1.0
1,2-Dichloropropane	U	1.0	ug/L	2	1	2.0	0.50	1.0
Bromodichloromethane	U	1.0	ug/L	2	1	2.0	0.66	1.0
cis-1,3-Dichloropropene	U	1.0	ug/L	2	1	2.0	0.38	1.0
Toluene	U	1.0	ug/L	2	1	2.0	0.54	1.0
4-Methyl-2-Pentanone	U	5.0	ug/L	2	5	10.	2.6	5.0
trans-1,3-Dichloropropene	U	1.0	ug/L	2	1	2.0	0.40	1.0
1,1,2-Trichloroethane	J	1.1	ug/L	2	1	2.0	0.66	1.0
Tetrachloroethene		2.2	ug/L	2	1	2.0	0.80	1.0
Dibromochloromethane	U	1.0	ug/L	2	1	2.0	0.60	1.0
2-Hexanone	U	5.0	ug/L	2	5	10.	3.4	5.0
Chlorobenzene	U	1.0	ug/L	2	1	2.0	0.44	1.0
Ethylbenzene	U	1.0	ug/L	2	1	2.0	0.42	1.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-6DL2
Client ID: RE108D2-GW-032715
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2126.D

Sample Date: 27-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160815

Analysis Date: 06-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	3.0	ug/L	2	3	6.0	0.50	3.0
Styrene	U	1.0	ug/L	2	1	2.0	0.46	1.0
Bromoform	U	1.0	ug/L	2	1	2.0	0.46	1.0
Isopropylbenzene	U	1.0	ug/L	2	1	2.0	0.46	1.0
1,1,2,2-Tetrachloroethane	U	1.0	ug/L	2	1	2.0	0.76	1.0
1,3-Dichlorobenzene	U	1.0	ug/L	2	1	2.0	0.52	1.0
1,4-Dichlorobenzene	U	1.0	ug/L	2	1	2.0	0.48	1.0
1,2-Dichlorobenzene	U	1.0	ug/L	2	1	2.0	0.30	1.0
1,2,4-Trichlorobenzene	U	1.0	ug/L	2	1	2.0	0.74	1.0
Methyl Acetate	U	1.5	ug/L	2	1	2.0	1.1	1.5
Methylcyclohexane	U	1.0	ug/L	2	1	2.0	0.60	1.0
o-Xylene	U	1.0	ug/L	2	1	2.0	0.50	1.0
M+P-Xylenes	U	2.0	ug/L	2	2	4.0	1.2	2.0
1,2-Dichloroethylene (Total)		8.4	ug/L	2	2	4.0	0.42	2.0
1,2-Dibromoethane	U	1.0	ug/L	2	1	2.0	0.44	1.0
1,2-Dibromo-3-Chloropropane	U	1.5	ug/L	2	1	2.0	1.0	1.5
P-Bromofluorobenzene		99.7	%					
Toluene-d8	*	127.	%					
1,2-Dichloroethane-d4		119.	%					
Dibromofluoromethane		112.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2126.D
Report Date: 13-Apr-2015 14:17

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2126.D
Lab Smp Id: SI2008-6DL2 Client Smp ID: RE108D2-GW-032715
Inj Date : 06-APR-2015 19:55 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2008-6DL2
Misc Info : WG160815,WG160815-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 15:49 Cal File: C2120.D
Als bottle: 14
Dil Factor: 2.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

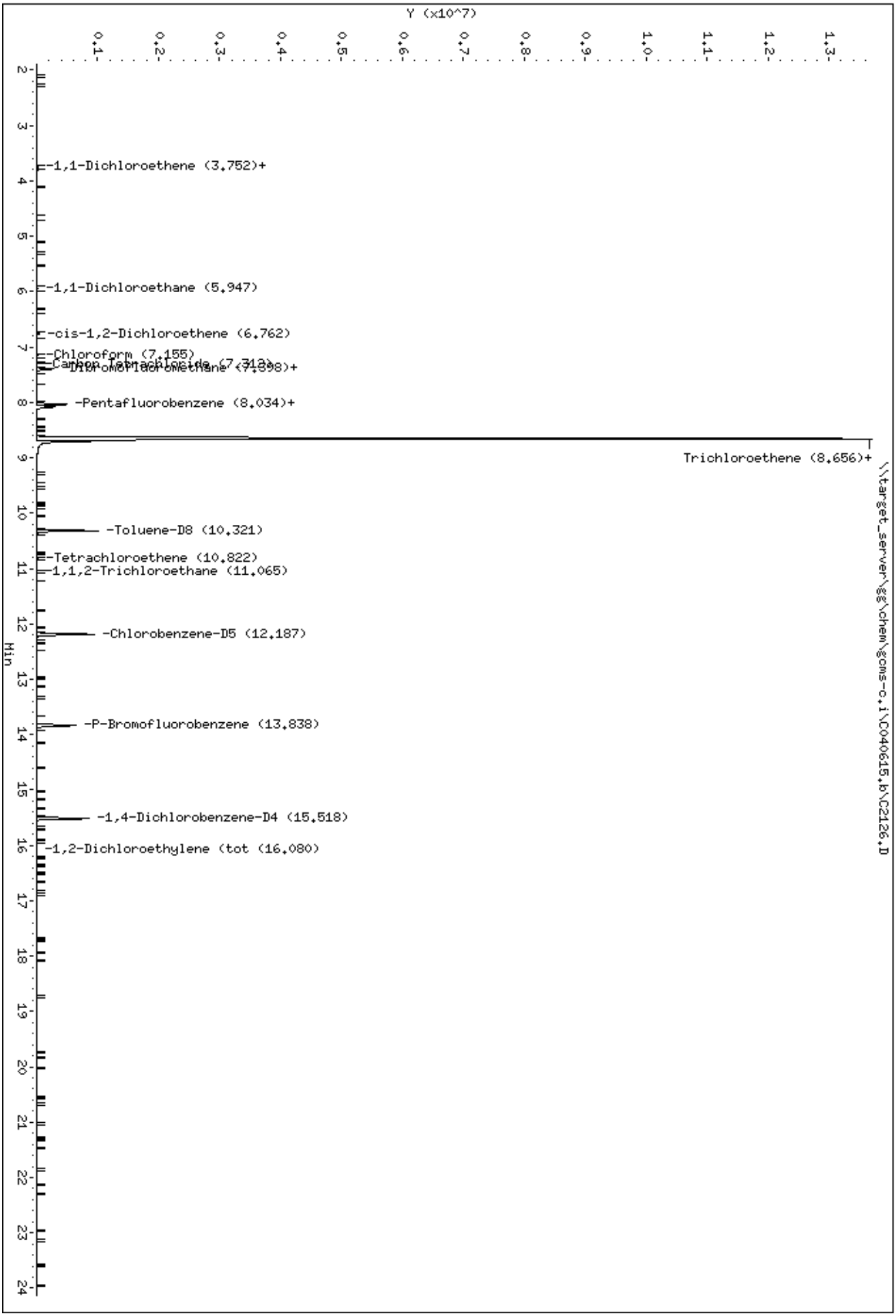
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	2.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	9 1,1-Dichloroethene	96	3.752	3.755	(0.467)	9234	2.63791	5.3	
	11 Freon-113	151	3.809	3.813	(0.474)	3916	1.56934	3.1	
	25 1,1-Dichloroethane	63	5.946	5.950	(0.740)	17674	2.18185	4.4	
	29 cis-1,2-Dichloroethene	96	6.761	6.758	(0.841)	17713	4.18197	8.4	
M	30 1,2-Dichloroethylene (total)	96				17713	4.18197	8.4	
	34 Chloroform	83	7.154	7.151	(0.890)	12828	1.56209	3.1	
	35 Carbon Tetrachloride	117	7.319	7.315	(0.841)	2883	0.54838	1.1(a)	
$	37 Dibromofluoromethane	113	7.397	7.401	(0.920)	173392	55.9013	55.9	
	38 1,1,1-Trichloroethane	97	7.411	7.415	(0.922)	3875	0.51502	1.0(a)	
*	42 Pentafluorobenzene	168	8.041	8.037	(1.000)	276568	50.0000		
$	45 1,2-Dichloroethane-D4	65	8.083	8.087	(1.005)	208070	59.4177	59.4	
	48 Trichloroethene	95	8.655	8.651	(0.995)	4743658	1126.90	2250(A)	
*	49 1,4-Difluorobenzene	114	8.698	8.702	(1.000)	456662	50.0000		
$	55 Toluene-D8	98	10.321	10.317	(1.187)	612553	63.3189	63.3	
	59 Tetrachloroethene	164	10.821	10.818	(0.888)	3385	1.07850	2.2	
	61 1,1,2-Trichloroethane	83	11.050	11.054	(1.270)	1139	0.53268	1.1(a)	
*	66 Chlorobenzene-D5	117	12.186	12.190	(1.000)	467762	50.0000		
$	76 P-Bromofluorobenzene	95	13.838	13.834	(1.591)	261646	49.8656	49.9	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.514	(1.000)	231500	50.0000		

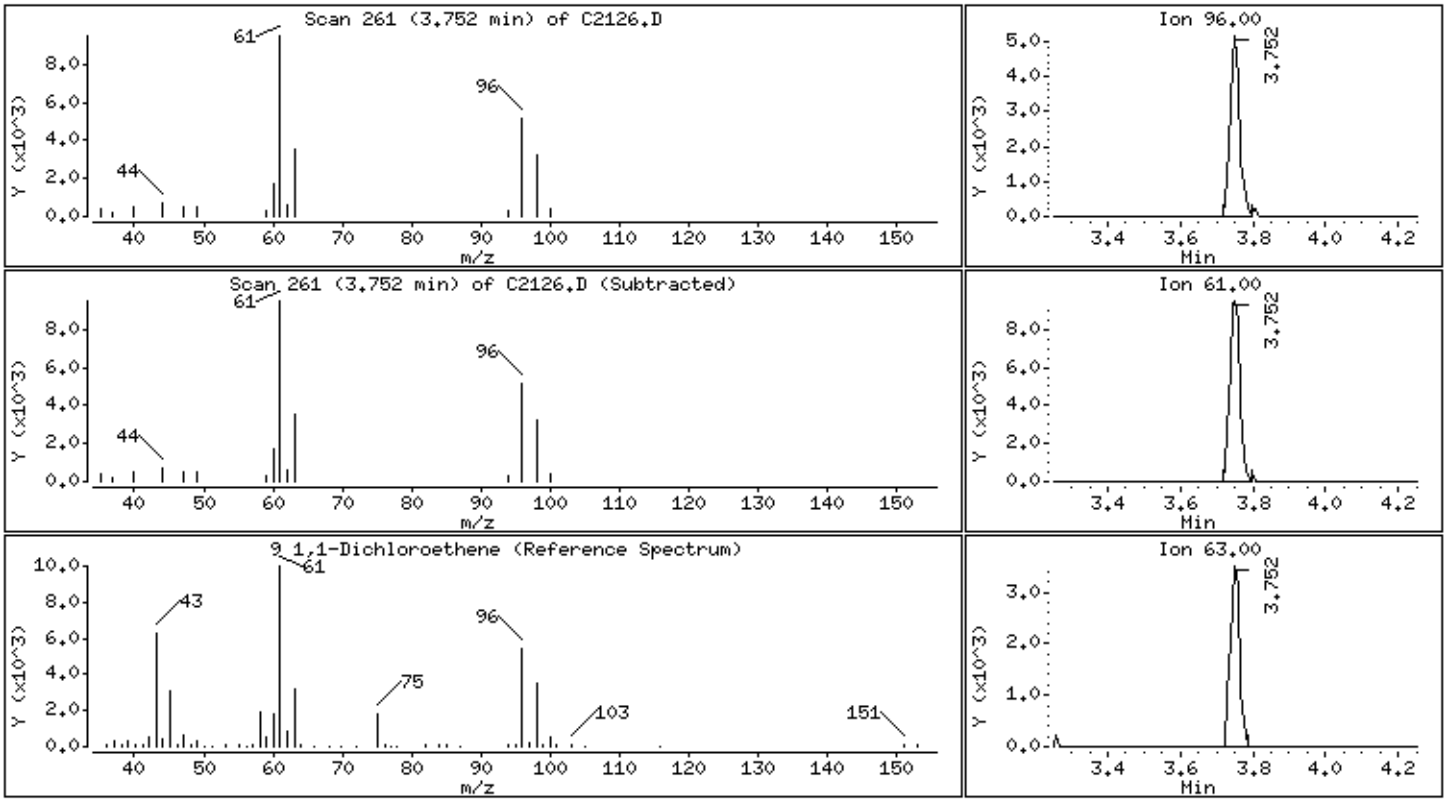
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

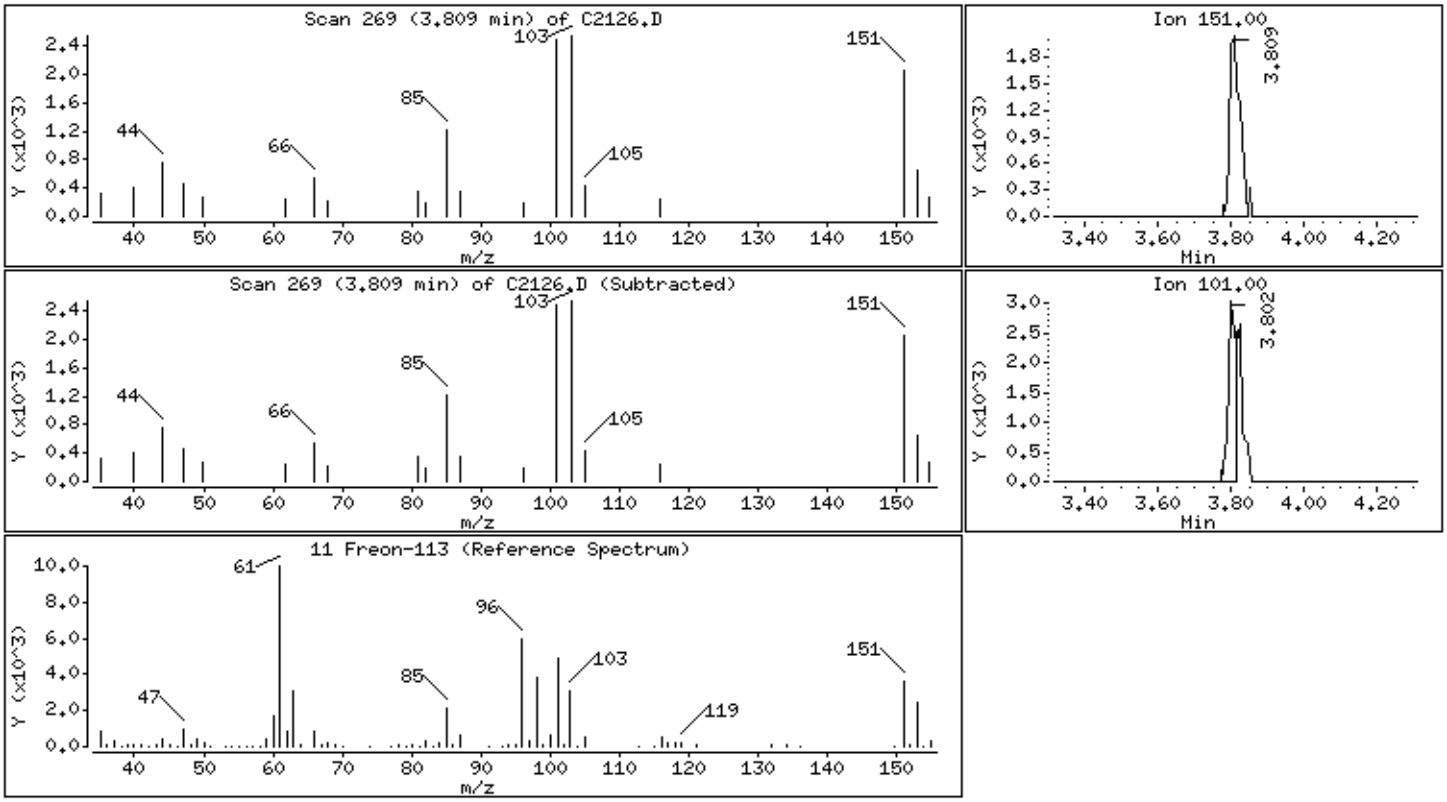

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2126.D
Date : 06-APR-2015 19:55
Client ID: RE108D2-GW-032715
Sample Info: SI2008-6DL2
Instrument: gcms-c.i
Y (x10^7)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
Min
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
-1,1-Dichloroethene (3.752)+
-1,1-Dichloroethane (5.947)
-cis-1,2-Dichloroethene (6.762)
-Chloroform (7.155)
-Carbon Tetrachloride (7.312)
-Bromofluoromethane (7.898)+
-Pentafluorobenzene (8.034)+
Trichloroethene (8.656)+
-Toluene-D8 (10.321)
-Tetrachloroethene (10.822)
-1,1,2-Trichloroethane (11.065)
-Chlorobenzene-D5 (12.187)
-P-Bromofluorobenzene (13.838)
-1,4-Dichlorobenzene-D4 (15.518)
-1,2-Dichloroethylene (tot (16.080)
\\target_server\gg\chem\gcms-c.i\C040615.b\C2126.D

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2126.D
Date : 06-APR-2015 19:55
Client ID: RE108D2-GW-032715 Instrument: gcms-c.i
Sample Info: SI2008-6DL2

9 1,1-Dichloroethene Concentration: 5.3 ug/l



11 Freon-113 Concentration: 3.1 ug/l



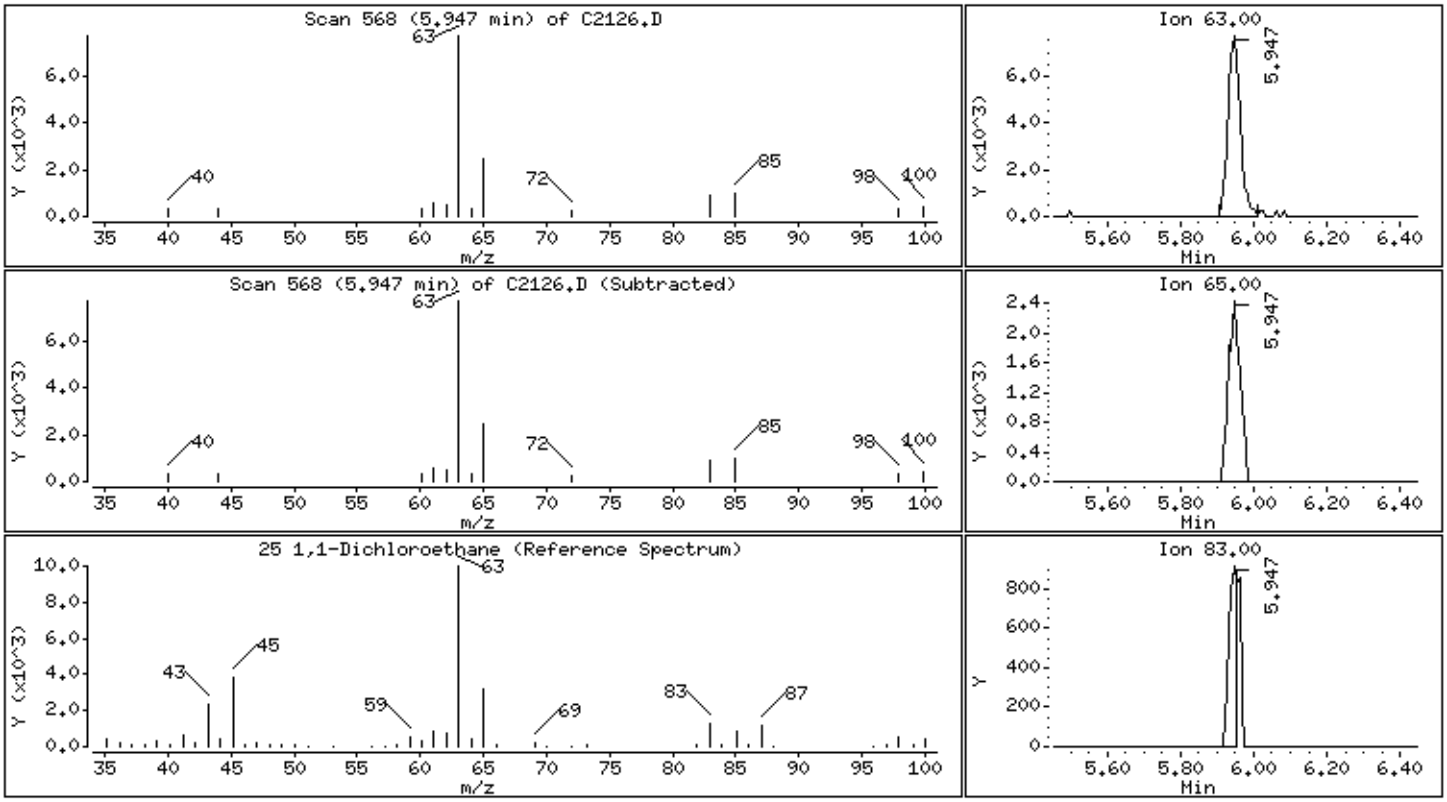
Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2126.D

Date : 06-APR-2015 19:55

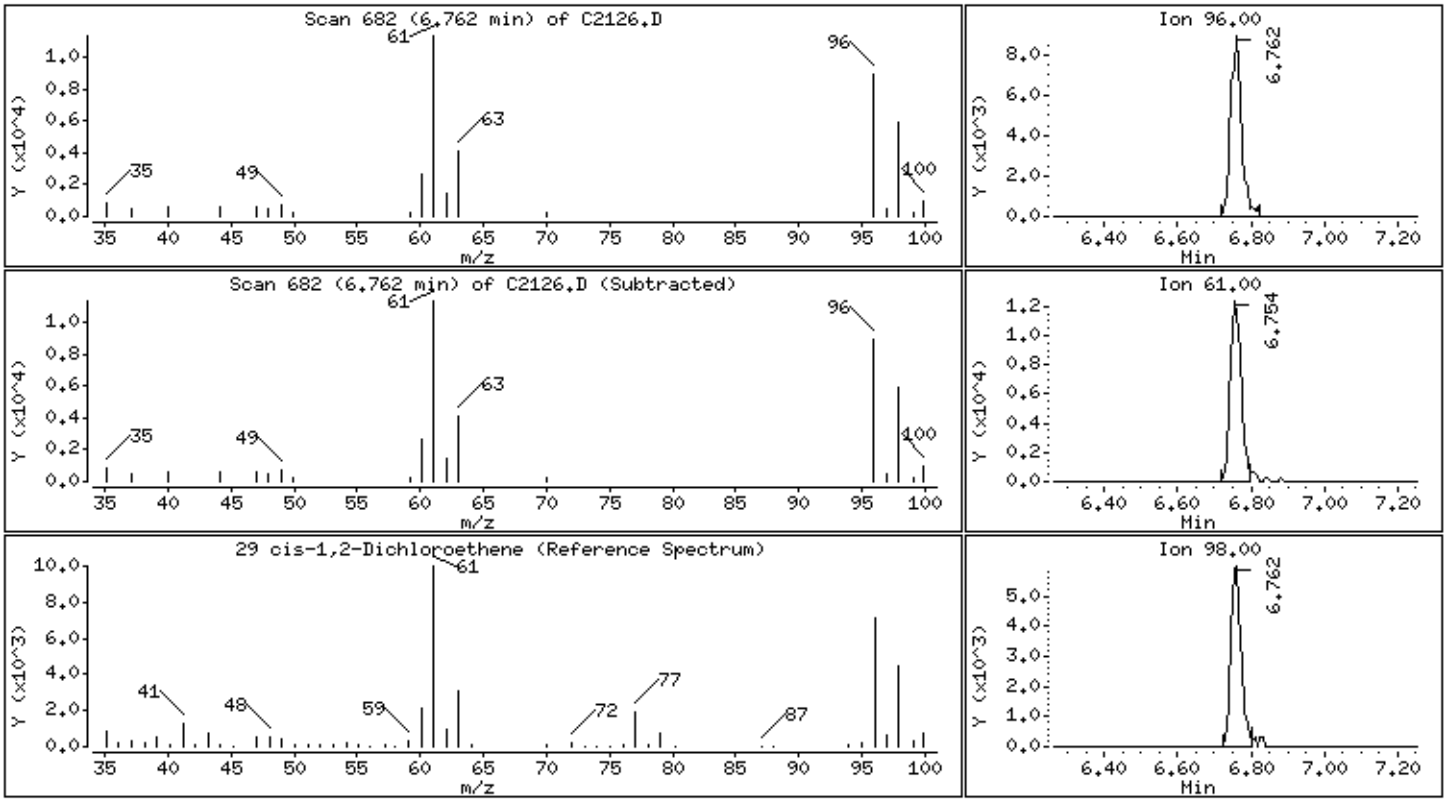
Client ID: RE108D2-GW-032715 Instrument: gcms-c.i

Sample Info: SI2008-6DL2

25 1,1-Dichloroethane Concentration: 4.4 ug/l

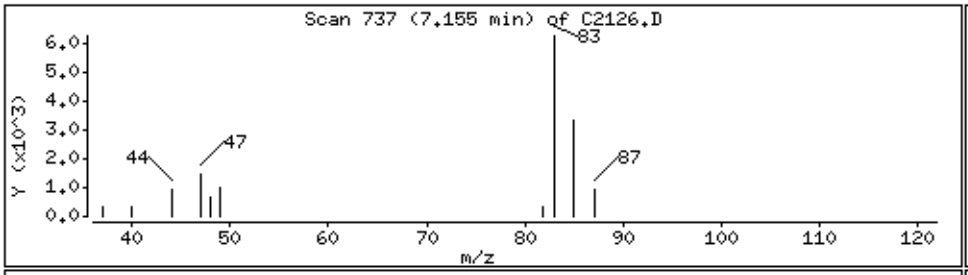


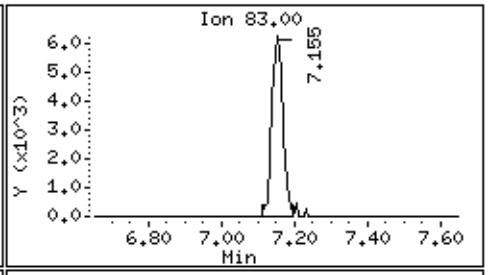
29 cis-1,2-Dichloroethene Concentration: 8.4 ug/l

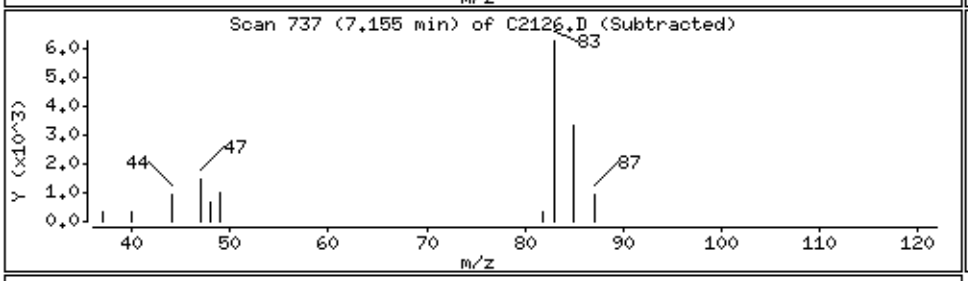


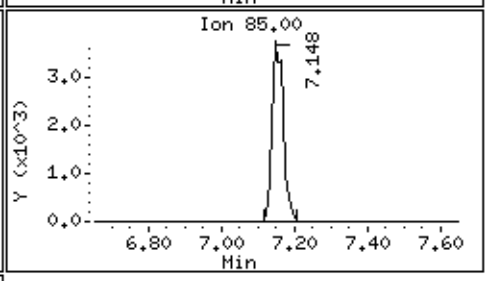
Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2126.D
Date : 06-APR-2015 19:55
Client ID: RE108D2-GW-032715 Instrument: gcms-c.i
Sample Info: SI2008-6DL2

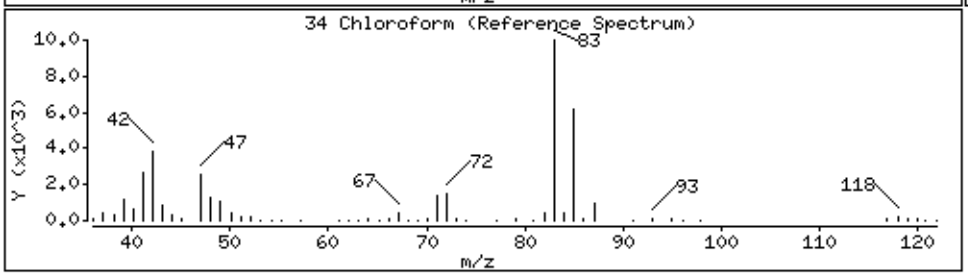
34 Chloroform Concentration: 3.1 ug/l



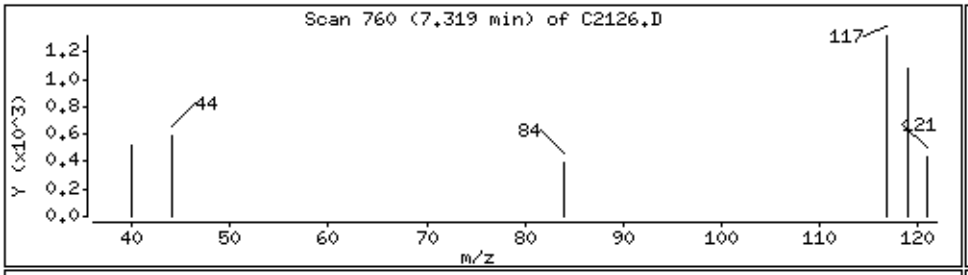


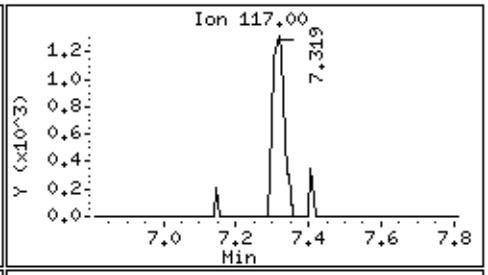


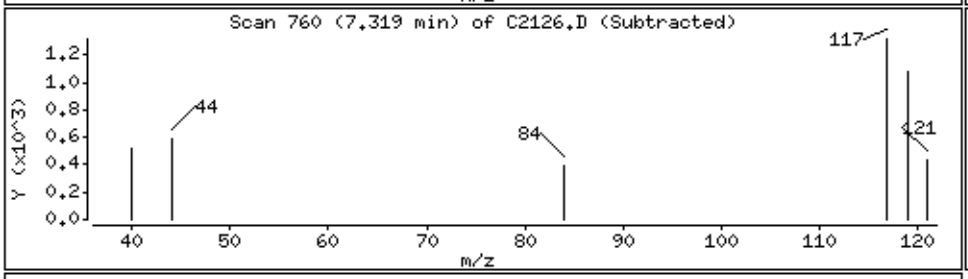


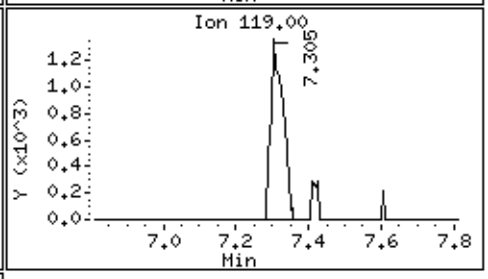


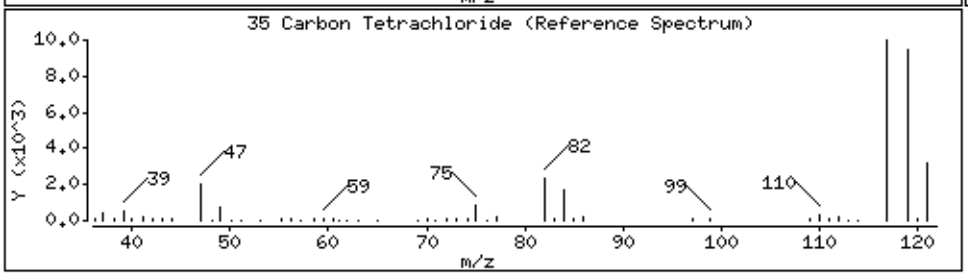
35 Carbon Tetrachloride Concentration: 1.1 ug/l





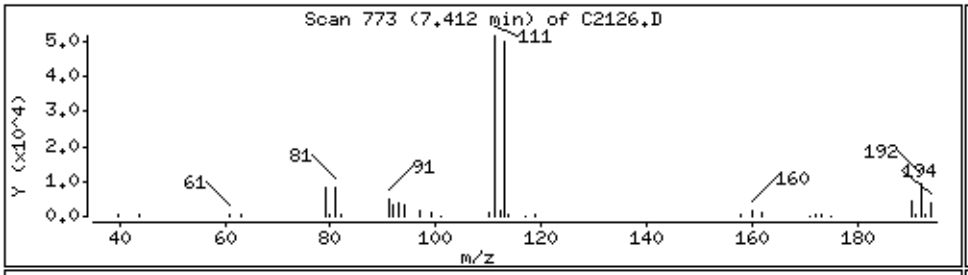


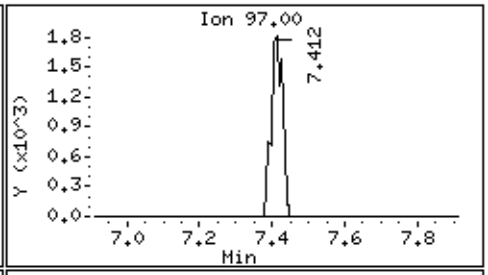


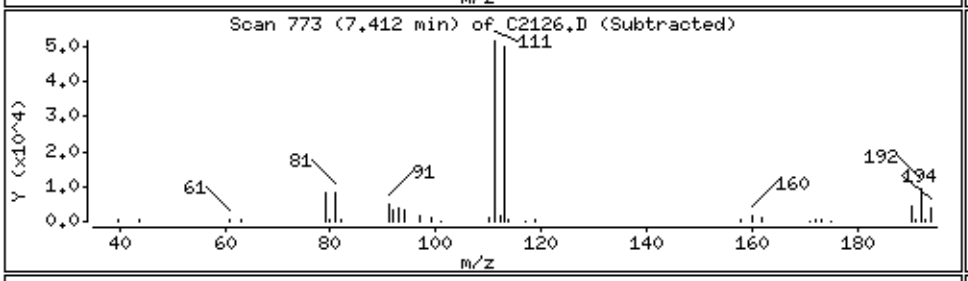


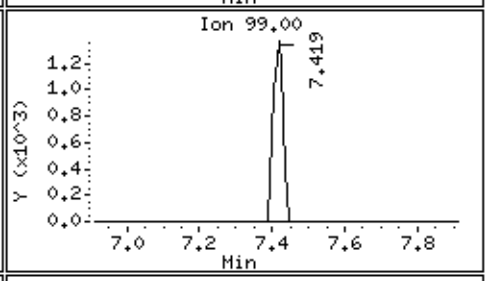
Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2126.D
Date : 06-APR-2015 19:55
Client ID: RE108D2-GW-032715 Instrument: gcms-c.i
Sample Info: SI2008-6DL2

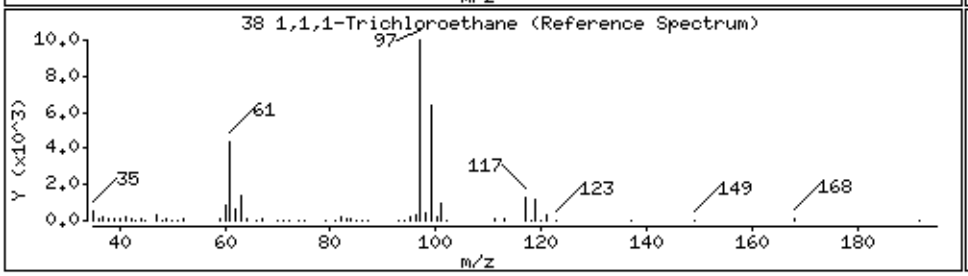
38 1,1,1-Trichloroethane Concentration: 1.0 ug/l

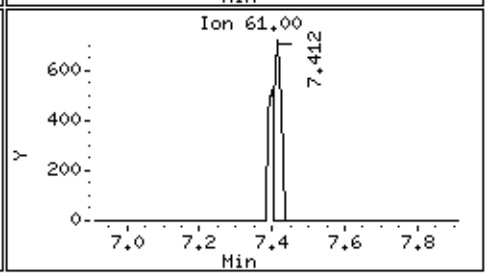




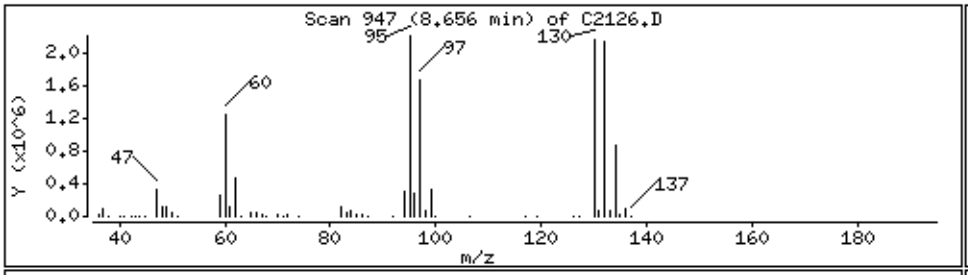


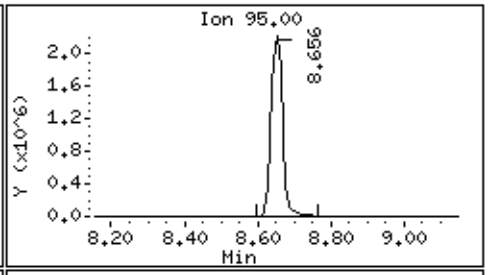


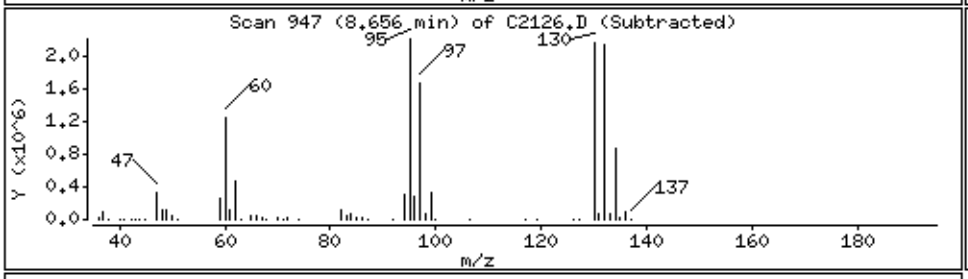


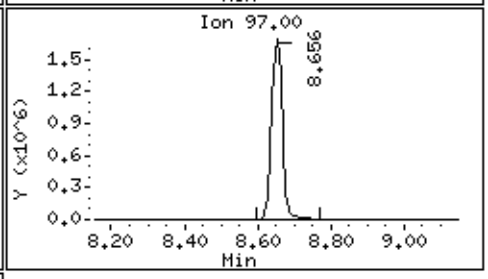


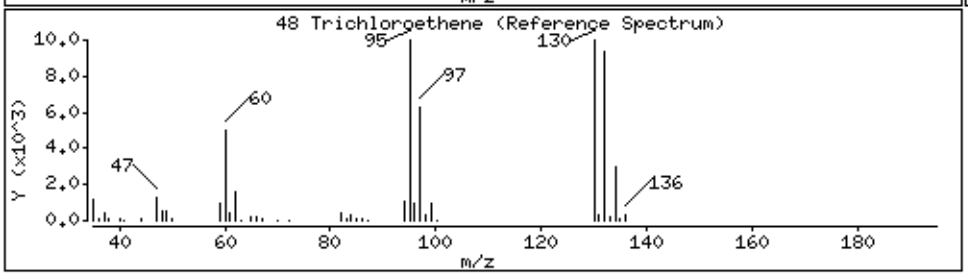
48 Trichloroethene Concentration: 2250 ug/l











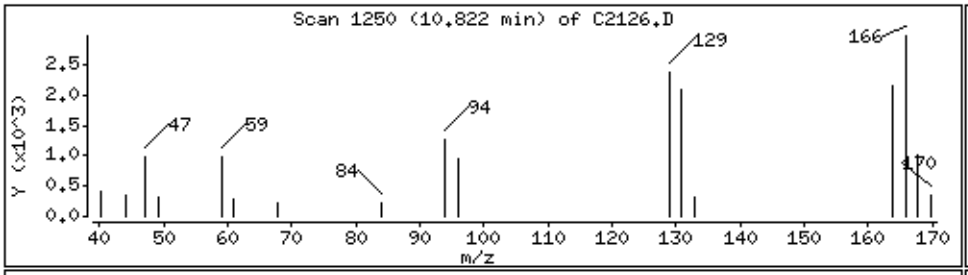
Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2126.D

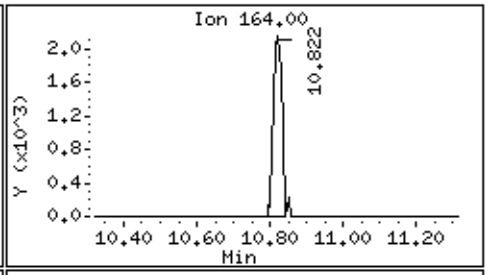
Date : 06-APR-2015 19:55

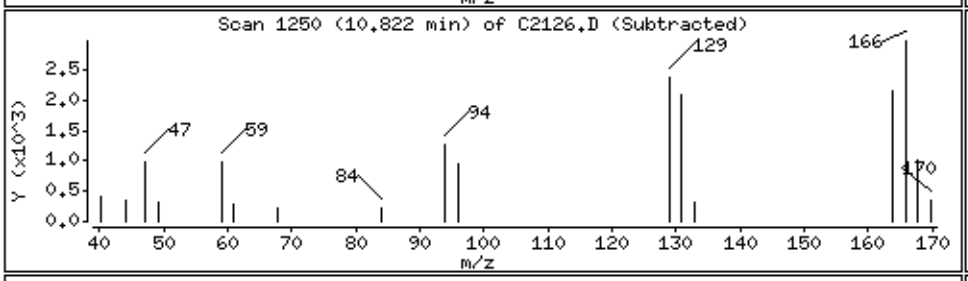
Client ID: RE108D2-GW-032715 Instrument: gcms-c.i

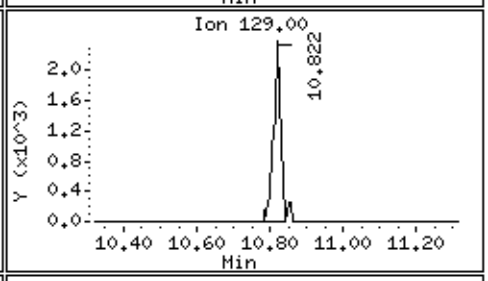
Sample Info: SI2008-6DL2

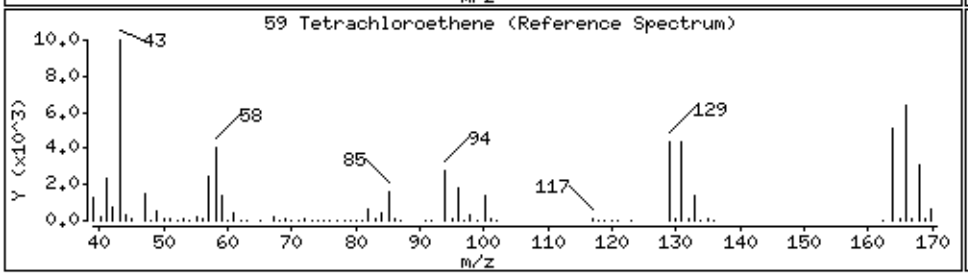
59 Tetrachloroethene Concentration: 2.2 ug/l

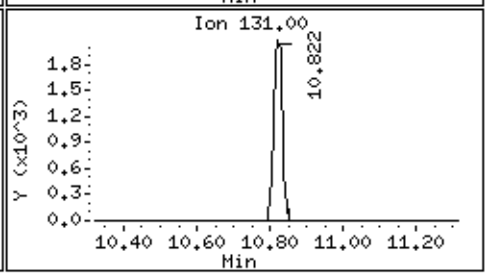




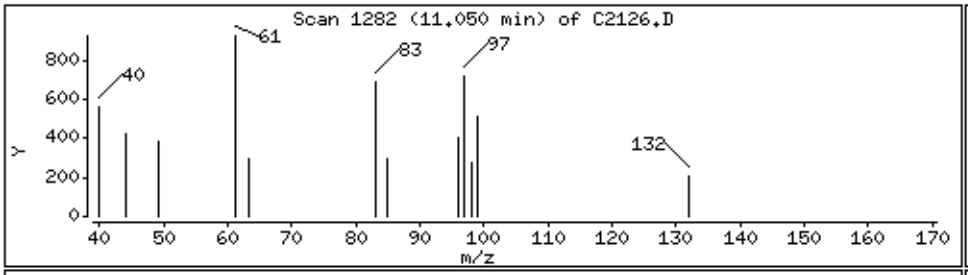


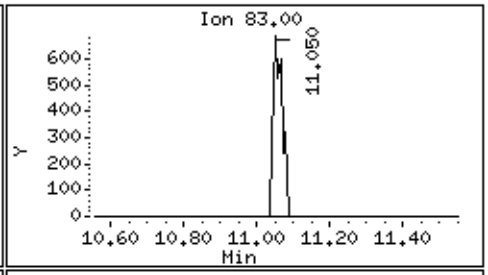


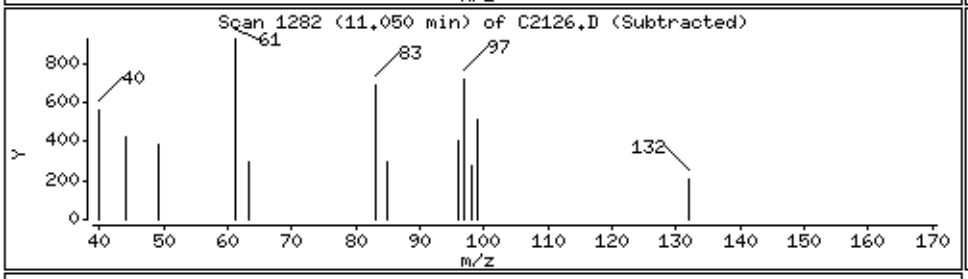


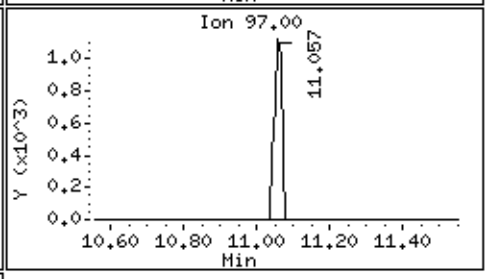


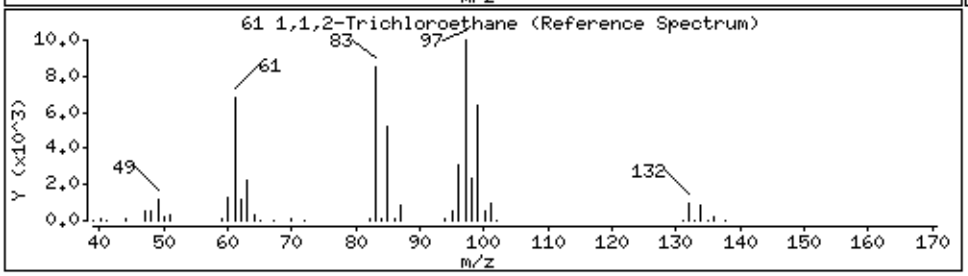
61 1,1,2-Trichloroethane Concentration: 1.1 ug/l











Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-7RA
Client ID: DUPLICATE-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2245.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	J	0.33	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene		4.6	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-7RA
Client ID: DUPLICATE-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2245.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		92.6	%					
Toluene-d8		105.	%					
1,2-Dichloroethane-d4		114.	%					
Dibromofluoromethane		96.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2245.D
Report Date: 13-Apr-2015 14:23

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C041015.b\C2245.D
Lab Smp Id: SI2008-7RA Client Smp ID: DUPLICATE-GW-033115
Inj Date : 10-APR-2015 17:46 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2008-7RA
Misc Info : WG161013,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C041015.b\C826A36.m
Meth Date : 13-Apr-2015 14:13 gcms-c.i Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

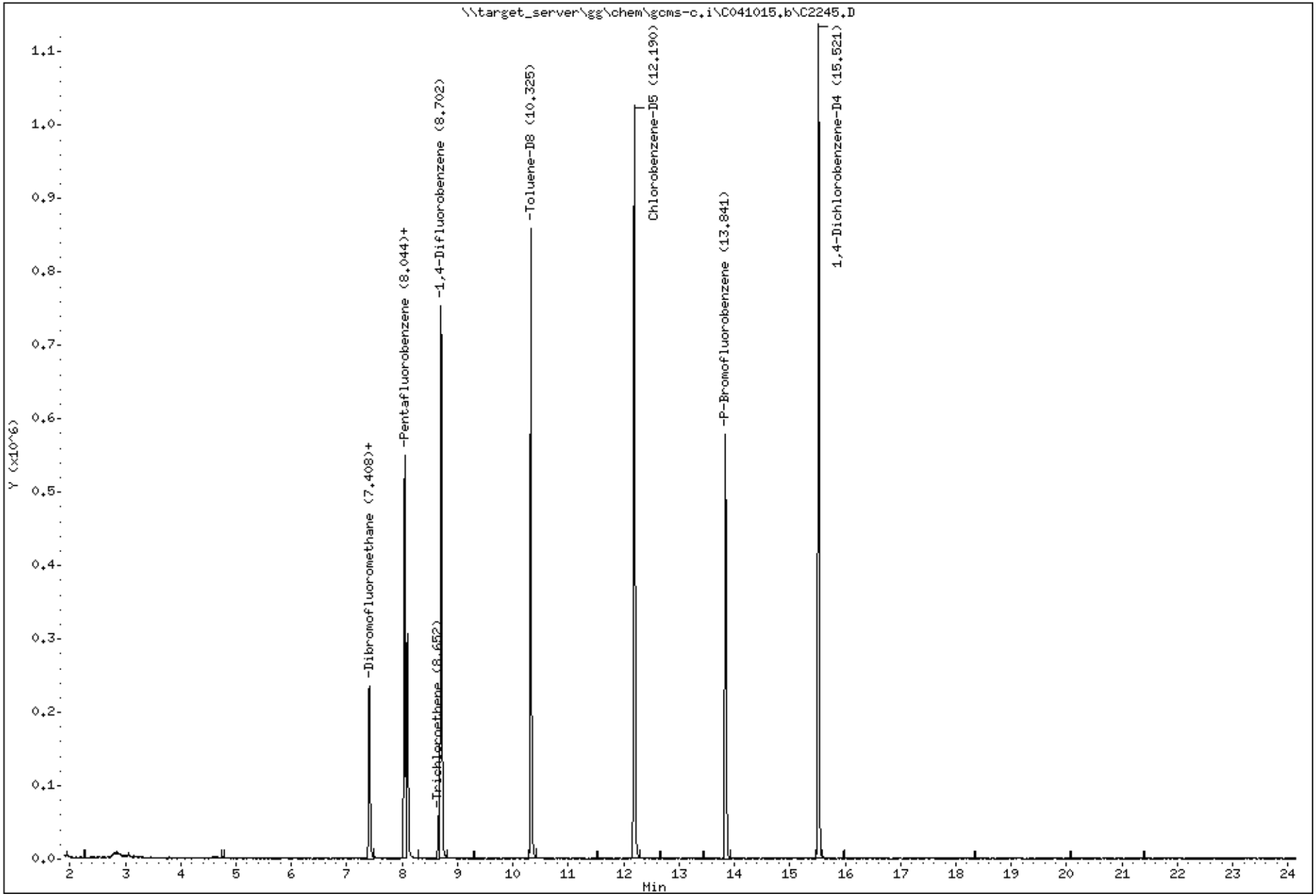
Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.408	7.405	(0.921)	144321	48.0051	48.0	
38 1,1,1-Trichloroethane	97	7.415	7.412	(0.922)	2515	0.33150	0.33(a)	
* 42 Pentafluorobenzene	168	8.044	8.041	(1.000)	299681	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.094	8.090	(1.006)	228904	56.9077	56.9	
48 Trichloroethene	95	8.651	8.648	(0.994)	20169	4.60536	4.6	
* 49 1,4-Difluorobenzene	114	8.701	8.698	(1.000)	510707	50.0000		
$ 55 Toluene-D8	98	10.324	10.321	(1.186)	491592	52.4896	52.5	
* 66 Chlorobenzene-D5	117	12.190	12.187	(1.000)	510074	50.0000		
$ 76 P-Bromofluorobenzene	95	13.841	13.838	(1.591)	228179	46.3035	46.3	
* 91 1,4-Dichlorobenzene-D4	152	15.521	15.518	(1.000)	292189	50.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2245.D
Date : 10-APR-2015 17:46
Client ID: DUPLICATE-GW-033115 Instrument: gcms-c.i
Sample Info: SI2008-7RA



0000092

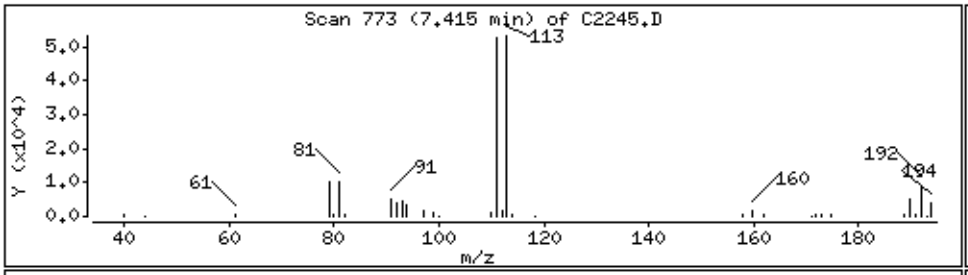
Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2245.D

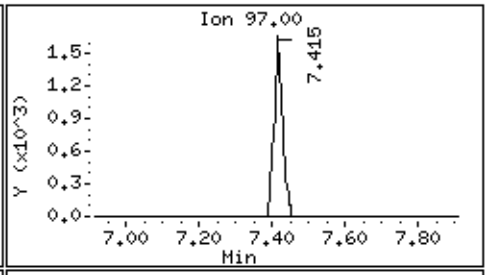
Date : 10-APR-2015 17:46

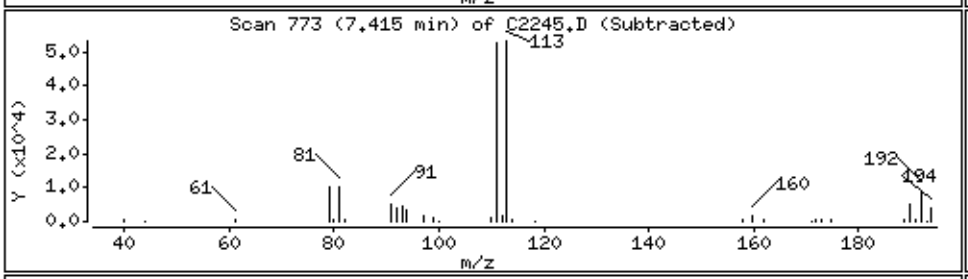
Client ID: DUPLICATE-GW-033115 Instrument: gcms-c.i

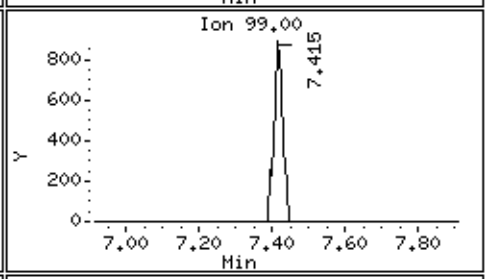
Sample Info: SI2008-7RA

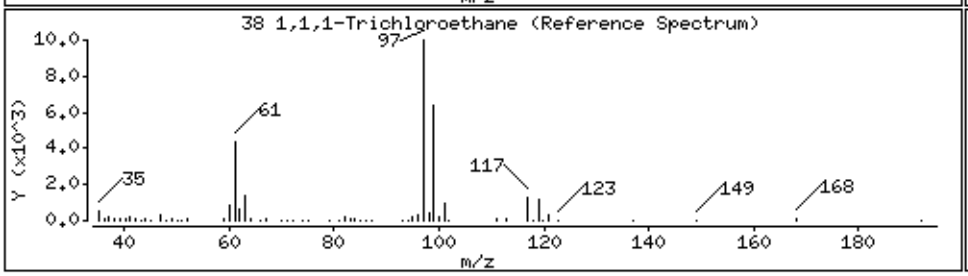
38 1,1,1-Trichloroethane Concentration: 0.33 ug/l

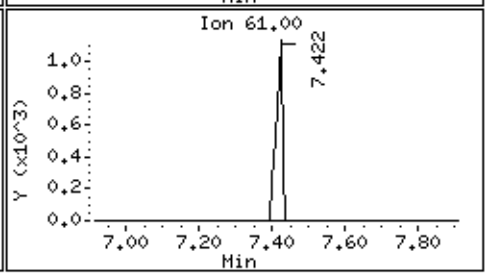




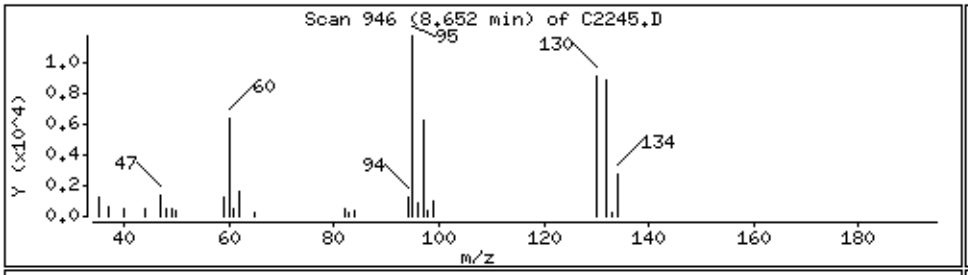


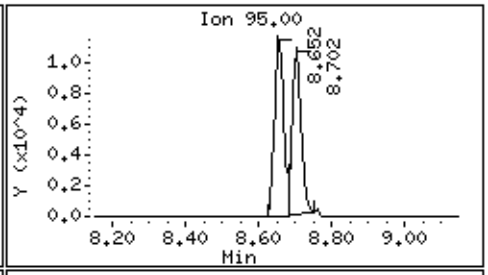


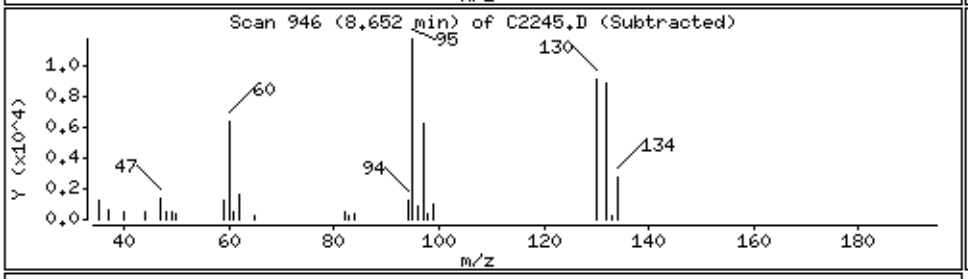


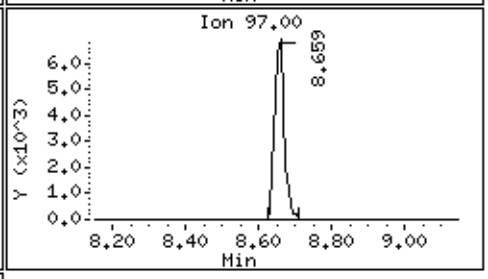


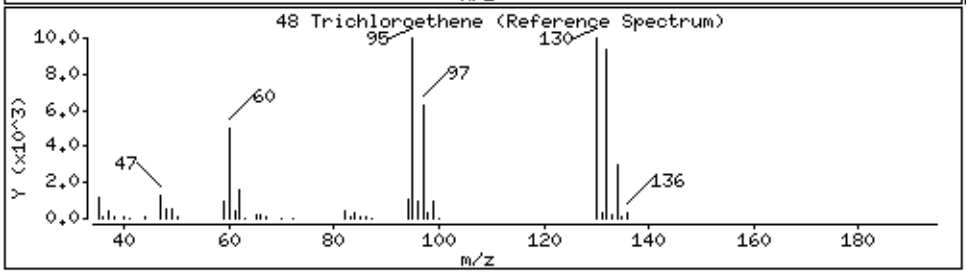
48 Trichloroethene Concentration: 4.6 ug/l











Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-8
Client ID: TRIP BLANK
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2083.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 03-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160723

Analysis Date: 03-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-8
Client ID: TRIP BLANK
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: C2083.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 03-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160723

Analysis Date: 03-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		104.	%					
Toluene-d8		103.	%					
1,2-Dichloroethane-d4	*	127.	%					
Dibromofluoromethane	*	118.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2083.D
Report Date: 06-Apr-2015 13:17

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040315.b\C2083.D
Lab Smp Id: SI2008-8 Client Smp ID: TRIP BLANK
Inj Date : 03-APR-2015 20:47 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2008-8
Misc Info : WG160723,WG160458-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040315.b\C826A34.m
Meth Date : 03-Apr-2015 11:41 eeverett Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

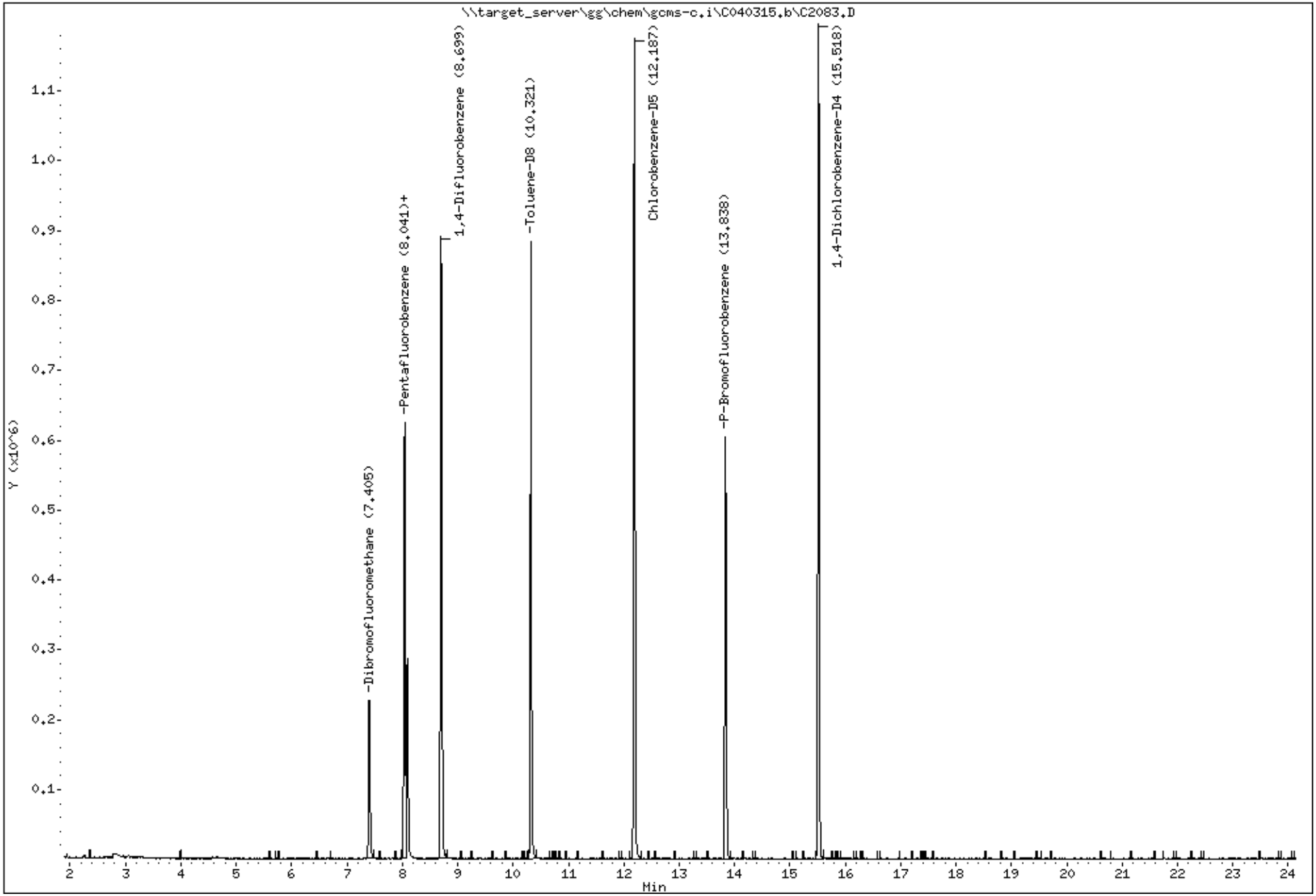
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.404	7.397	(0.921)	143978	58.7645	58.8	
* 42 Pentafluorobenzene	168	8.041	8.039	(1.000)	352707	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.091	8.090	(1.006)	203450	63.7478	63.7	
* 49 1,4-Difluorobenzene	114	8.698	8.696	(1.000)	620157	50.0000		
$ 55 Toluene-D8	98	10.321	10.320	(1.187)	500659	51.6431	51.6	
* 66 Chlorobenzene-D5	117	12.186	12.193	(1.000)	593275	50.0000		
$ 76 P-Bromofluorobenzene	95	13.838	13.837	(1.591)	231097	52.2276	52.2	
* 91 1,4-Dichlorobenzene-D4	152	15.517	15.517	(1.000)	314797	50.0000		

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2083.D
Date : 03-APR-2015 20:47
Client ID: TRIP BLANK
Sample Info: SI2008-8

Instrument: gcms-c.i



0000097

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-C
Lab File IDs : C1960.D C1959.D C1958.D C1957.D C1963.D C1962.D **Column ID:**
Calibration Date(s): 28-MAR-15 11:07 28-MAR-15 14:44

	1.0000 Level 1	5.0000 Level 2	20.0000 Level 3	50.0000 Level 4	100.0000 Level 5	200.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.51701	0.55439	0.61148	0.57774	0.53708	0.51265	AVG		0.55172		6.87848	15.00000	O
Chloromethane	11354	42676	164480	353621	768562	1367066	LNR	-0.05540	0.74529		0.99753	0.99000	O
Vinyl chloride	0.81412	0.69034	0.69954	0.62273	0.62858	0.59220	AVG		0.67459		11.8467(	15.00000	O
Bromomethane	4164	16228	57222	127173	271875	515902	LNR	-0.03351	0.27859		0.99963	0.99000	O
Chloroethane	3563	14630	58019	117916	198531	374693	LNR	-0.11367	0.20144		0.99110	0.99000	O
Trichlorofluoromethane	0.69024	0.72540	0.70979	0.66479	0.57883	0.64668	AVG		0.66929		7.88987	15.00000	O
1,1-Dichloroethene	0.42974	0.49616	0.47854	0.44905	0.44428	0.43754	AVG		0.45589		5.66678	15.00000	O
Carbon Disulfide	4263	14820	59713	130155	282937	566267	LNR	-0.00598	0.30446		0.99976	0.99000	O
Freon-113	0.19948	0.23646	0.23437	0.23071	0.21941	0.20739	AVG		0.22130		6.88970	15.00000	O
Methylene Chloride	0.70364	0.55838	0.57341	0.51854	0.53449	0.53002	AVG		0.56975		12.0358!	15.00000	O
Acetone	0.16308	0.15307	0.18120	0.15444	0.14060	0.13055	AVG		0.15382		11.4560!	15.00000	O
trans-1,2-Dichloroethene	0.59498	0.57769	0.57173	0.52194	0.52681	0.48878	AVG		0.54699		7.44001	15.00000	O
Methyl tert-butyl ether	1.01112	1.15653	1.14975	1.16445	1.08801	1.02703	AVG		1.09948		6.19433	15.00000	O
1,1-Dichloroethane	0.99146	1.03088	1.07020	0.99108	0.96882	0.92002	AVG		0.99541		5.17675	15.00000	O
cis-1,2-Dichloroethene	0.59196	0.58410	0.60105	0.53939	0.55347	0.52772	AVG		0.56628		5.33274	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
Chloroform	0.97602	1.01252	1.05659	0.99659	0.94790	0.89970	AVG		0.98155		5.52003	15.00000	O
Carbon Tetrachloride	3366	23962	114431	272722	574980	1113520	LNR	-0.01393	0.34329		0.99958	0.99000	O
1,1,1-Trichloroethane	0.85819	0.95055	0.96582	0.90811	0.85848	0.81798	AVG		0.89319		6.50420	15.00000	O
2-Butanone	0.17291	0.20696	0.22717	0.22025	0.19953	0.18278	AVG		0.20160		10.4323!	15.00000	O
Benzene	1.17021	1.23202	1.22065	1.13557	1.07643	0.99348	AVG		1.13806		7.99454	15.00000	O
Cyclohexane	0.34561	0.46078	0.51233	0.47522	0.46612	0.45894	AVG		0.45317		12.4106/	15.00000	O
1,2-Dichloroethane	0.42675	0.43733	0.44472	0.42471	0.38725	0.38517	AVG		0.41765		6.08742	15.00000	O
Trichloroethene	0.33411	0.36542	0.34288	0.31418	0.29702	0.29114	AVG		0.32412		8.81119	15.00000	O
1,2-Dichloropropane	0.27928	0.29368	0.31014	0.29154	0.27970	0.27041	AVG		0.28746		4.88961	15.00000	O
Bromodichloromethane	0.31943	0.40250	0.42818	0.42996	0.40214	0.39924	AVG		0.39691		10.1640(	15.00000	O
cis-1,3-dichloropropene	0.42246	0.47097	0.52461	0.49652	0.48593	0.46430	AVG		0.47746		7.19301	15.00000	O
Toluene	0.76476	0.78115	0.80387	0.73654	0.69893	0.65460	AVG		0.73998		7.49444	15.00000	O
4-methyl-2-pentanone	0.22866	0.24432	0.24946	0.24654	0.21251	0.17991	AVG		0.22690		11.8522!	15.00000	O
Tetrachloroethene	0.23646	0.27475	0.28082	0.25617	0.24717	0.23334	AVG		0.25478		7.71549	15.00000	O
trans-1,3-Dichloropropene	0.35529	0.39747	0.44326	0.44298	0.41351	0.41053	AVG		0.41051		7.97209	15.00000	O
1,1,2-Trichloroethane	0.21139	0.20010	0.22582	0.21106	0.19921	0.19464	AVG		0.20704		5.51153	15.00000	O
Dibromochloromethane	0.23977	0.28035	0.33084	0.32589	0.32030	0.32043	AVG		0.30293		11.8218!	15.00000	O
1,2-Dibromoethane	0.30650	0.27400	0.28610	0.27757	0.26298	0.25974	AVG		0.27781		6.13607	15.00000	O
2-Hexanone	0.14786	0.17278	0.20358	0.19645	0.18137	0.16380	AVG		0.17764		11.6535!	15.00000	O
Chlorobenzene	0.84132	0.84880	0.89196	0.81722	0.79176	0.74846	AVG		0.82325		6.02999	15.00000	O
Ethylbenzene	0.49182	0.52375	0.54076	0.47917	0.47113	0.45568	AVG		0.49372		6.58594	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-C
Lab File IDs : C1960.D C1959.D C1958.D C1957.D C1963.D C1962.D **Column ID:**
Calibration Date(s): 28-MAR-15 11:07
28-MAR-15 14:44

Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.58958	0.62365	0.63578	0.56380	0.54148	0.49777	AVG		0.57534		9.02690	15.00000	O
o-Xylene	0.53499	0.57079	0.59247	0.53737	0.53828	0.52147	AVG		0.54923		4.86359	15.00000	O
Styrene	0.80952	0.95455	1.04109	0.96140	0.94129	0.88655	AVG		0.93240		8.36616	15.00000	O
Bromoform	0.16426	0.17626	0.21616	0.21398	0.20447	0.20903	AVG		0.19736		11.0007(	15.00000	O
Isopropylbenzene	2.81828	3.09360	3.09448	2.65082	2.52681	2.25416	AVG		2.73969		12.0646(	15.00000	O
1,1,2,2-Tetrachloroethane	0.73597	0.74764	0.75318	0.69418	0.69133	0.66079	AVG		0.71385		5.19886	15.00000	O
1,3-Dichlorobenzene	1.25461	1.26681	1.29633	1.14077	1.09181	1.03607	AVG		1.18107		9.01307	15.00000	O
1,4-Dichlorobenzene	1.43314	1.32439	1.35659	1.21436	1.15818	1.08750	AVG		1.26236		10.3666(	15.00000	O
1,2-Dichlorobenzene	1.12731	1.08941	1.14173	1.03343	1.00985	0.94928	AVG		1.05850		7.01165	15.00000	O
1,2-Dibromo-3-Chloropropane	0.11798	0.10946	0.12387	0.12750	0.12496	0.12132	AVG		0.12085		5.34344	15.00000	O
1,2,4-Trichlorobenzene	2313	21082	106662	260064	526680	1001057	LNR	-0.02456	0.59886		0.99909	0.99000	O
Methyl Acetate	0.31310	0.33650	0.29612	0.30815	0.32156	0.30134	AVG		0.31280		4.67647	15.00000	O
Methylcyclohexane	0.48374	0.58827	0.64183	0.58182	0.56990	0.55428	AVG		0.56997		9.05583	15.00000	O
Dibromofluoromethane	0.29614	0.35515	0.37346	0.36894	0.34362	0.34665	AVG		0.34733		7.98447	15.00000	
1,2-Dichloroethane-D4	0.46992	0.48838	0.47236	0.46144	0.40888	0.41358	AVG		0.45243		7.31921	15.00000	
Toluene-D8	0.81609	0.83626	0.85038	0.77701	0.71639	0.69362	AVG		0.78162		8.27583	15.00000	
P-Bromofluorobenzene	0.39453	0.37046	0.37108	0.34957	0.32782	0.32703	AVG		0.35675		7.51425	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1964.D
Report Date: 01-Apr-2015 14:57

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG160458-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C826A34.m
Misc Info: WG160458,WG160458-4

Client SDG: WG160458
Fraction: VOA
Client Smp ID: Independent Source
Operator: REC
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	66.3	132.53*	80-120
	2 Chloromethane	50.0	60.9	121.77*	80-120
	3 Vinyl chloride	50.0	53.0	106.04	80-120
	4 Bromomethane	50.0	65.0	130.01*	80-120
	5 Chloroethane	50.0	58.7	117.36	80-120
	6 Trichlorofluoromet	50.0	49.2	98.31	80-120
	7 Diethyl Ether	50.0	51.6	103.20	80-120
	8 Tertiary-butyl alc	250	262	104.99	80-120
	9 1,1-Dichloroethene	50.0	55.8	111.67	80-120
	10 Carbon Disulfide	50.0	272	544.89*	80-120
	11 Freon-113	50.0	51.8	103.64	80-120
	12 Iodomethane	50.0	73.6	147.11*	80-120
	13 Acrolein	250	247	98.77	80-120
	14 Methylene Chloride	50.0	50.7	101.33	80-120
	15 Acetone	50.0	86.7	173.34*	80-120
	16 Isobutyl Alcohol	1000	977	97.70	80-120
	17 trans-1,2-Dichloro	50.0	50.1	100.19	80-120
	18 Allyl Chloride	50.0	51.5	103.06	80-120
	19 Methyl tert-butyl	100	113	113.48	80-120
	20 Acetonitrile	500	421	84.24	80-120
	21 Di-isopropyl ether	50.0	52.1	104.21	80-120
	22 Chloroprene	50.0	51.4	102.82	80-120
	23 Propionitrile	500	506	101.14	80-120
	24 Methacrylonitrile	500	502	100.51	80-120
	25 1,1-Dichloroethane	50.0	53.2	106.41	80-120
	26 Acrylonitrile	250	246	98.22	80-120
	27 Ethyl tertiary-but	50.0	52.5	104.98	80-120
	28 Vinyl Acetate	50.0	60.2	120.32*	80-120
	29 cis-1,2-Dichloroet	50.0	52.5	105.02	80-120
M	30 1,2-Dichloroethyle	100	103	102.60	80-120
	31 Methyl Methacrylat	50.0	51.3	102.68	80-120
	32 2,2-Dichloropropan	50.0	52.7	105.34	80-120
	33 Bromochloromethane	50.0	65.0	129.98*	80-120
	34 Chloroform	50.0	52.5	105.00	80-120
	35 Carbon Tetrachlori	50.0	52.4	104.91	80-120
	36 Tetrahydrofuran	50.0	61.5	122.96*	80-120
	38 1,1,1-Trichloroeth	50.0	51.1	102.19	80-120
	39 1,1-Dichloropropen	50.0	54.8	109.63	80-120
	40 2-Butanone	50.0	67.3	134.65*	80-120
	41 Benzene	50.0	51.5	103.08	80-120

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1964.D
Report Date: 01-Apr-2015 14:57

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	43 Cyclohexane	50.0	96.7	193.37*	80-120
	44 Ethyl Methacrylate	50.0	53.8	107.65	80-120
	46 Tertiary-amyl meth	50.0	53.5	107.09	80-120
	47 1,2-Dichloroethane	50.0	50.4	100.76	80-120
	48 Trichloroethene	50.0	49.8	99.66	80-120
	50 Dibromomethane	50.0	51.0	101.90	80-120
	51 1,2-Dichloropropan	50.0	54.3	108.62	80-120
	52 Bromodichlorometha	50.0	56.4	112.90	80-120
	53 cis-1,3-dichloropr	50.0	52.0	103.95	80-120
	54 1,4-Dioxane	1000	831	83.12	80-120
	56 2-Chloroethylvinyl	50.0	49.4	98.81	80-120
	57 Toluene	50.0	51.5	103.01	80-120
	58 4-methyl-2-pentano	50.0	58.8	117.51	80-120
	59 Tetrachloroethene	50.0	62.5	124.99*	80-120
	60 trans-1,3-Dichloro	50.0	56.3	112.53	80-120
	61 1,1,2-Trichloroeth	50.0	52.1	104.28	80-120
	62 Dibromochlorometha	50.0	55.5	111.06	80-120
	63 1,3-Dichloropropan	50.0	52.4	104.71	80-120
	64 1,2-Dibromoethane	50.0	51.4	102.82	80-120
	65 2-Hexanone	50.0	65.5	130.94*	80-120
	67 Chlorobenzene	50.0	56.1	112.12	80-120
	152 1-Chlorohexane	50.0	49.2	98.31	80-120
	68 Ethylbenzene	50.0	50.4	100.80	80-120
	69 1,1,1,2-Tetrachlor	50.0	54.3	108.57	80-120
M	70 Xylenes (total)	150	161	107.36	80-120
	71 m+p-Xylenes	100	105	104.82	80-120
	72 o-Xylene	50.0	56.2	112.43	80-120
	73 Styrene	50.0	54.7	109.32	80-120
	74 Bromoform	50.0	53.4	106.73	80-120
	75 Isopropylbenzene	50.0	54.6	109.15	80-120
	77 cis-1,4-Dichloro-2	50.0	50.2	100.43	80-120
	78 trans-1,4-Dichloro	50.0	49.6	99.12	80-120
	79 Bromobenzene	50.0	51.3	102.57	80-120
	80 N-Propylbenzene	50.0	55.1	110.21	80-120
	81 1,1,2,2-Tetrachlor	50.0	50.9	101.77	80-120
	82 1,3,5-Trimethylben	50.0	50.3	100.63	80-120
	83 2-Chlorotoluene	50.0	54.0	108.01	80-120
	84 1,2,3-Trichloropro	50.0	51.2	102.43	80-120
	85 4-Chlorotoluene	50.0	56.4	112.84	80-120
	86 tert-Butylbenzene	50.0	52.8	105.58	80-120
	87 Pentachloroethane	50.0	43.0	85.97	80-120
	88 1,2,4-Trimethylben	50.0	51.6	103.29	80-120
	89 P-Isopropyltoluene	50.0	54.8	109.65	80-120
	90 1,3-Dichlorobenzen	50.0	55.3	110.58	80-120
	92 1,4-Dichlorobenzen	50.0	49.9	99.72	80-120
	93 N-Butylbenzene	50.0	52.6	105.28	80-120
	94 sec-Butylbenzene	50.0	54.7	109.47	80-120
	95 1,2-Dichlorobenzen	50.0	55.5	111.05	80-120
	96 1,2-Dibromo-3-Chlo	50.0	52.3	104.62	80-120
	97 1,3,5-Trichloroben	50.0	50.3	100.68	80-120
	98 Hexachlorobutadien	50.0	56.5	113.09	80-120
	99 1,2,4-Trichloroben	50.0	53.4	106.76	80-120
	100 1,2,3-Trimethylben	50.0	49.6	99.29	80-120
	101 Naphthalene	50.0	52.9	105.73	80-120

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1964.D
Report Date: 01-Apr-2015 14:57

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	54.4	108.84	80-120
103 Methyl Acetate	50.0	48.8	97.66	80-120
104 Methylcyclohexane	50.0	54.2	108.49	80-120
M 153 Total Alkylbenzene	350	372	106.30	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	51.6	103.14	68-128
$ 45 1,2-Dichloroethane	50.0	49.7	99.49	67-135
$ 55 Toluene-D8	50.0	48.9	97.89	65-128
$ 76 P-Bromofluorobenze	50.0	48.4	96.88	56-133

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1957.D
Report Date: 01-Apr-2015 14:29

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C032815B.b\C1957.D
Lab Smp Id: WG160458-4 Client Smp ID: Initial Calibration
Inj Date : 28-MAR-2015 11:07 MS Autotune Date: 03-FEB-2015 11:03
Operator : REC Inst ID: gcms-c.i
Smp Info : WG160458-4
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C032815B.b\C826A34.m
Meth Date : 30-Mar-2015 07:38 rcrocker Quant Type: ISTD
Cal Date : 28-MAR-2015 11:07 Cal File: C1957.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.985	1.986	(0.247)	246136	50.0000	52.4	
2 Chloromethane	50	2.228	2.229	(0.277)	353621	50.0000	45.6	
3 Vinyl chloride	62	2.328	2.329	(0.290)	265302	50.0000	46.2	
4 Bromomethane	94	2.728	2.729	(0.339)	127173	50.0000	45.0	
5 Chloroethane	64	2.879	2.879	(0.358)	117916	50.0000	48.3	
6 Trichlorofluoromethane	101	3.057	3.058	(0.380)	283222	50.0000	49.7	
7 Diethyl Ether	59	3.486	3.487	(0.434)	89435	50.0000	52.4	
8 Tertiary-butyl alcohol	59	5.337	5.338	(0.664)	107354	250.000	213	
9 1,1-Dichloroethene	96	3.751	3.751	(0.467)	191308	50.0000	49.2	
10 Carbon Disulfide	76	3.779	3.780	(0.470)	130155	50.0000	45.2	
11 Freon-113	151	3.815	3.815	(0.475)	98289	50.0000	52.1	
12 Iodomethane	142	3.958	3.958	(0.492)	136121	50.0000	50.6	
13 Acrolein	56	4.265	4.266	(0.531)	132156	250.000	254	
14 Methylene Chloride	84	4.651	4.652	(0.579)	220914	50.0000	45.5	
15 Acetone	43	4.744	4.745	(0.590)	328984	250.000	251	
16 Isobutyl Alcohol	43	8.247	8.247	(1.026)	144867	1000.00	899	
17 trans-1,2-Dichloroethene	96	4.916	4.916	(0.611)	222361	50.0000	47.7	
18 Allyl Chloride	41	4.473	4.473	(0.556)	255241	50.0000	50.5	
19 Methyl tert-butyl ether	73	5.123	5.123	(0.637)	992180	100.000	106	
20 Acetonitrile	39	5.538	5.538	(0.689)	45043	500.000	424	
21 Di-isopropyl ether	45	5.781	5.781	(0.719)	654056	50.0000	52.9	
22 Chloroprene	53	5.909	5.910	(0.735)	362726	50.0000	52.7	
23 Propionitrile	54	7.961	7.961	(0.990)	309395	500.000	516	
24 Methacrylonitrile	41	7.982	7.983	(0.993)	1136720	500.000	530	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1957.D
Report Date: 01-Apr-2015 14:29

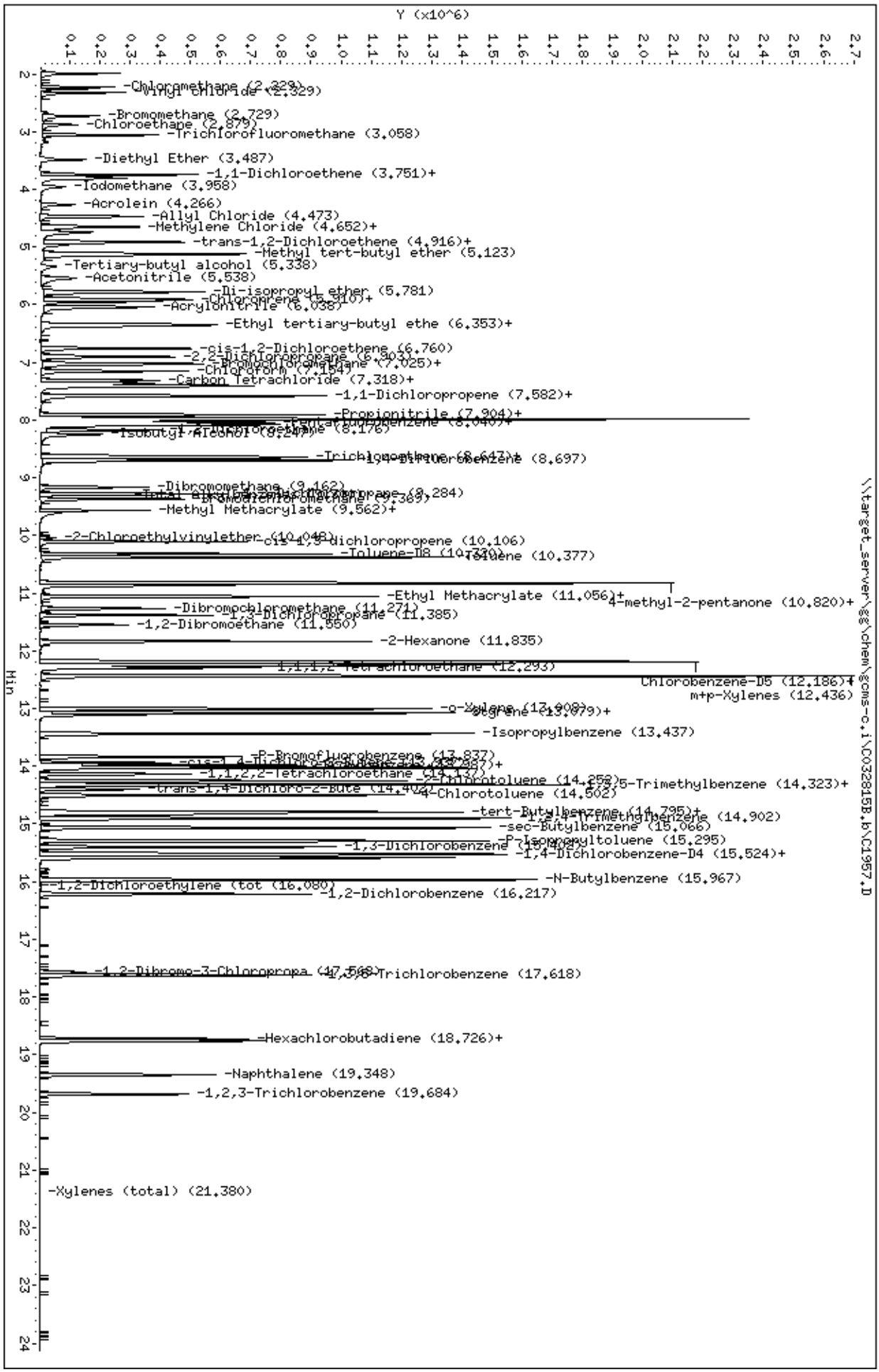
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.945	5.946	(0.740)	422230	50.0000	49.8	
	26 Acrylonitrile	52	6.038	6.038	(0.751)	331100	250.000	255	
	27 Ethyl tertiary-butyl ether	59	6.345	6.346	(0.789)	626175	50.0000	54.1	
	28 Vinyl Acetate	43	6.367	6.367	(0.732)	418564	50.0000	54.5	
	29 cis-1,2-Dichloroethene	96	6.753	6.753	(0.840)	229795	50.0000	47.6	
	31 Methyl Methacrylate	41	9.562	9.562	(1.099)	166450	50.0000	54.2	
	32 2,2-Dichloropropane	77	6.903	6.903	(0.859)	366790	50.0000	54.5	
	33 Bromochloromethane	128	7.032	7.032	(0.875)	77097	50.0000	48.7	
	34 Chloroform	83	7.153	7.154	(0.890)	424579	50.0000	50.8	
	35 Carbon Tetrachloride	117	7.317	7.318	(0.841)	272722	50.0000	56.7	
	36 Tetrahydrofuran	42	7.360	7.361	(0.916)	251314	250.000	265	
$	37 Dibromofluoromethane	113	7.396	7.397	(0.920)	157180	50.0000	53.1	
	38 1,1,1-Trichloroethane	97	7.410	7.411	(0.922)	386884	50.0000	50.8	
	39 1,1-Dichloropropene	75	7.582	7.582	(0.872)	325261	50.0000	51.1	
	40 2-Butanone	43	7.575	7.575	(0.942)	469163	250.000	273	
	41 Benzene	78	7.911	7.911	(0.910)	838673	50.0000	49.9	
*	42 Pentafluorobenzene	168	8.039	8.039	(1.000)	426030	50.0000		
	43 Cyclohexane	56	7.017	7.018	(0.873)	202459	50.0000	52.4	
	44 Ethyl Methacrylate	69	11.056	11.056	(1.271)	247704	50.0000	55.4	
$	45 1,2-Dichloroethane-D4	65	8.089	8.090	(1.006)	196589	50.0000	51.0	
	46 Tertiary-amyl methyl ether	73	8.075	8.076	(1.004)	486075	50.0000	54.3	
	47 1,2-Dichloroethane	62	8.175	8.176	(0.940)	313669	50.0000	50.8	
	48 Trichloroethene	95	8.647	8.647	(0.994)	232034	50.0000	48.5	
*	49 1,4-Difluorobenzene	114	8.697	8.696	(1.000)	738549	50.0000		
	50 Dibromomethane	93	9.162	9.162	(1.053)	134794	50.0000	50.7	
	51 1,2-Dichloropropane	63	9.283	9.284	(1.067)	215320	50.0000	50.7	
	52 Bromodichloromethane	83	9.369	9.369	(1.077)	317547	50.0000	54.2	
	53 cis-1,3-dichloropropene	75	10.105	10.106	(1.162)	366704	50.0000	52.0	
	54 1,4-Dioxane	88	9.612	9.612	(1.105)	58811	1000.00	665	
$	55 Toluene-D8	98	10.320	10.320	(1.187)	573860	50.0000	49.7	
	56 2-Chloroethylvinylether	63	10.048	10.048	(1.155)	20409	50.0000	41.9	
	57 Toluene	92	10.377	10.377	(1.193)	543971	50.0000	49.8	
	58 4-methyl-2-pentanone	43	10.827	10.828	(1.245)	910393	250.000	272	
	59 Tetrachloroethene	164	10.820	10.820	(0.887)	177423	50.0000	50.3	
	60 trans-1,3-Dichloropropene	75	10.870	10.871	(1.250)	327162	50.0000	54.0	
	61 1,1,2-Trichloroethane	83	11.056	11.056	(1.271)	155876	50.0000	51.0	
	62 Dibromochloromethane	129	11.270	11.271	(0.924)	225714	50.0000	53.8	
	63 1,3-Dichloropropane	76	11.385	11.385	(0.934)	345878	50.0000	49.9	
	64 1,2-Dibromoethane	107	11.549	11.550	(1.328)	205001	50.0000	50.0	
	65 2-Hexanone	43	11.835	11.835	(0.971)	680326	250.000	276	
*	66 Chlorobenzene-D5	117	12.192	12.193	(1.000)	692607	50.0000		
	67 Chlorobenzene	112	12.214	12.214	(1.002)	566010	50.0000	49.6	
	152 1-Chlorohexane	91	12.185	12.186	(0.999)	350228	50.0000	49.7	
	68 Ethylbenzene	106	12.242	12.243	(1.004)	331877	50.0000	48.5	
	69 1,1,1,2-Tetrachloroethane	131	12.292	12.293	(1.008)	215727	50.0000	51.4	
	71 m+p-Xylenes	106	12.435	12.436	(1.020)	780988	100.000	98.0	
	72 o-Xylene	106	13.007	13.008	(1.067)	372184	50.0000	48.9	
	73 Styrene	104	13.079	13.079	(1.073)	665874	50.0000	51.6	
	74 Bromoform	173	13.114	13.115	(1.076)	148201	50.0000	54.2	
	75 Isopropylbenzene	105	13.436	13.437	(0.866)	1046182	50.0000	48.4	
$	76 P-Bromofluorobenzene	95	13.836	13.837	(1.591)	258177	50.0000	49.0	
	77 cis-1,4-Dichloro-2-Butene	53	13.936	13.937	(0.898)	105066	50.0000	55.5	
	78 trans-1,4-Dichloro-2-Butene	53	14.394	14.394	(0.928)	83190	50.0000	54.9	
	79 Bromobenzene	156	13.987	13.987	(0.901)	257169	50.0000	48.6	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1957.D
Report Date: 01-Apr-2015 14:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.029	14.030	(0.904)	1268025	50.0000	48.4	
81 1,1,2,2-Tetrachloroethane	83	14.137	14.137	(0.911)	273969	50.0000	48.6	
82 1,3,5-Trimethylbenzene	105	14.315	14.316	(0.923)	977011	50.0000	49.2	
83 2-Chlorotoluene	91	14.251	14.252	(0.918)	801627	50.0000	49.0	
84 1,2,3-Trichloropropane	75	14.337	14.337	(0.924)	228679	50.0000	49.5	
85 4-Chlorotoluene	91	14.501	14.502	(0.935)	814411	50.0000	49.5	
86 tert-Butylbenzene	119	14.794	14.795	(0.953)	882771	50.0000	49.4	
87 Pentachloroethane	117	14.823	14.823	(0.955)	183900	50.0000	52.1	
88 1,2,4-Trimethylbenzene	105	14.901	14.902	(0.960)	965709	50.0000	49.4	
89 P-Isopropyltoluene	119	15.295	15.295	(0.986)	963762	50.0000	49.4	
90 1,3-Dichlorobenzene	146	15.402	15.402	(0.993)	450221	50.0000	48.3	
* 91 1,4-Dichlorobenzene-D4	152	15.516	15.517	(1.000)	394663	50.0000		
92 1,4-Dichlorobenzene	146	15.545	15.545	(1.002)	479261	50.0000	48.1	
93 N-Butylbenzene	91	15.967	15.967	(1.029)	1040154	50.0000	51.9	
94 sec-Butylbenzene	105	15.066	15.066	(0.971)	1169734	50.0000	49.3	
95 1,2-Dichlorobenzene	146	16.217	16.216	(1.045)	407857	50.0000	48.8	
96 1,2-Dibromo-3-Chloropropane	75	17.568	17.568	(1.132)	50319	50.0000	52.8	
97 1,3,5-Trichlorobenzene	180	17.625	17.625	(1.136)	325445	50.0000	51.0	
98 Hexachlorobutadiene	225	18.726	18.726	(1.207)	160722	50.0000	47.3	
99 1,2,4-Trichlorobenzene	180	18.761	18.762	(1.209)	260064	50.0000	58.4	
100 1,2,3-Trimethylbenzene	105	15.581	15.581	(1.004)	902210	50.0000	49.5	
101 Naphthalene	128	19.348	19.348	(1.247)	518832	50.0000	67.4	
102 1,2,3-Trichlorobenzene	180	19.683	19.684	(1.269)	170244	50.0000	60.1	
103 Methyl Acetate	43	4.973	4.973	(0.619)	131283	50.0000	49.2	
104 Methylcyclohexane	83	8.626	8.625	(1.073)	247874	50.0000	51.0	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1957.D
Date : 28-MAR-2015 11:07
Client ID: Initial Calibration
Sample Info: WG160458-4
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: REC
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1958.D
Report Date: 01-Apr-2015 14:29

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C032815B.b\C1958.D
Lab Smp Id: WG160458-3 Client Smp ID: Initial Calibration
Inj Date : 28-MAR-2015 11:51 MS Autotune Date: 03-FEB-2015 11:03
Operator : REC Inst ID: gcms-c.i
Smp Info : WG160458-3
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C032815B.b\C826A34.m
Meth Date : 30-Mar-2015 07:38 rcrocker Quant Type: ISTD
Cal Date : 28-MAR-2015 11:51 Cal File: C1958.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.989	1.986	(0.248)	110733	20.0000	22.2	
2 Chloromethane	50	2.232	2.229	(0.278)	164480	20.0000	20.0	
3 Vinyl chloride	62	2.325	2.329	(0.289)	126680	20.0000	20.7	
4 Bromomethane	94	2.725	2.729	(0.339)	57222	20.0000	19.0	
5 Chloroethane	64	2.882	2.879	(0.359)	58019	20.0000	22.4	
6 Trichlorofluoromethane	101	3.061	3.058	(0.381)	128536	20.0000	21.2	
7 Diethyl Ether	59	3.483	3.487	(0.433)	39153	20.0000	21.6	
8 Tertiary-butyl alcohol	59	5.334	5.338	(0.664)	50484	100.000	94.2	
9 1,1-Dichloroethene	96	3.747	3.751	(0.466)	86660	20.0000	21.0	
10 Carbon Disulfide	76	3.783	3.780	(0.471)	59713	20.0000	19.5	
11 Freon-113	151	3.811	3.815	(0.474)	42442	20.0000	21.2	
12 Iodomethane	142	3.954	3.958	(0.492)	60429	20.0000	21.1	
13 Acrolein	56	4.262	4.266	(0.530)	58555	100.000	106	
14 Methylene Chloride	84	4.648	4.652	(0.578)	103839	20.0000	20.1	
15 Acetone	43	4.748	4.745	(0.591)	164068	100.000	118	
16 Isobutyl Alcohol	43	8.250	8.247	(1.027)	73388	400.000	429	
17 trans-1,2-Dichloroethene	96	4.919	4.916	(0.612)	103535	20.0000	20.9	
18 Allyl Chloride	41	4.476	4.473	(0.557)	118188	20.0000	22.0	
19 Methyl tert-butyl ether	73	5.127	5.123	(0.638)	416420	40.0000	41.8	
20 Acetonitrile	39	5.541	5.538	(0.690)	21414	200.000	190	
21 Di-isopropyl ether	45	5.777	5.781	(0.719)	280456	20.0000	21.3	
22 Chloroprene	53	5.906	5.910	(0.735)	160892	20.0000	22.0	
23 Propionitrile	54	7.957	7.961	(0.990)	134011	200.000	210	
24 Methacrylonitrile	41	7.986	7.983	(0.994)	508192	200.000	223	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1958.D
Report Date: 01-Apr-2015 14:29

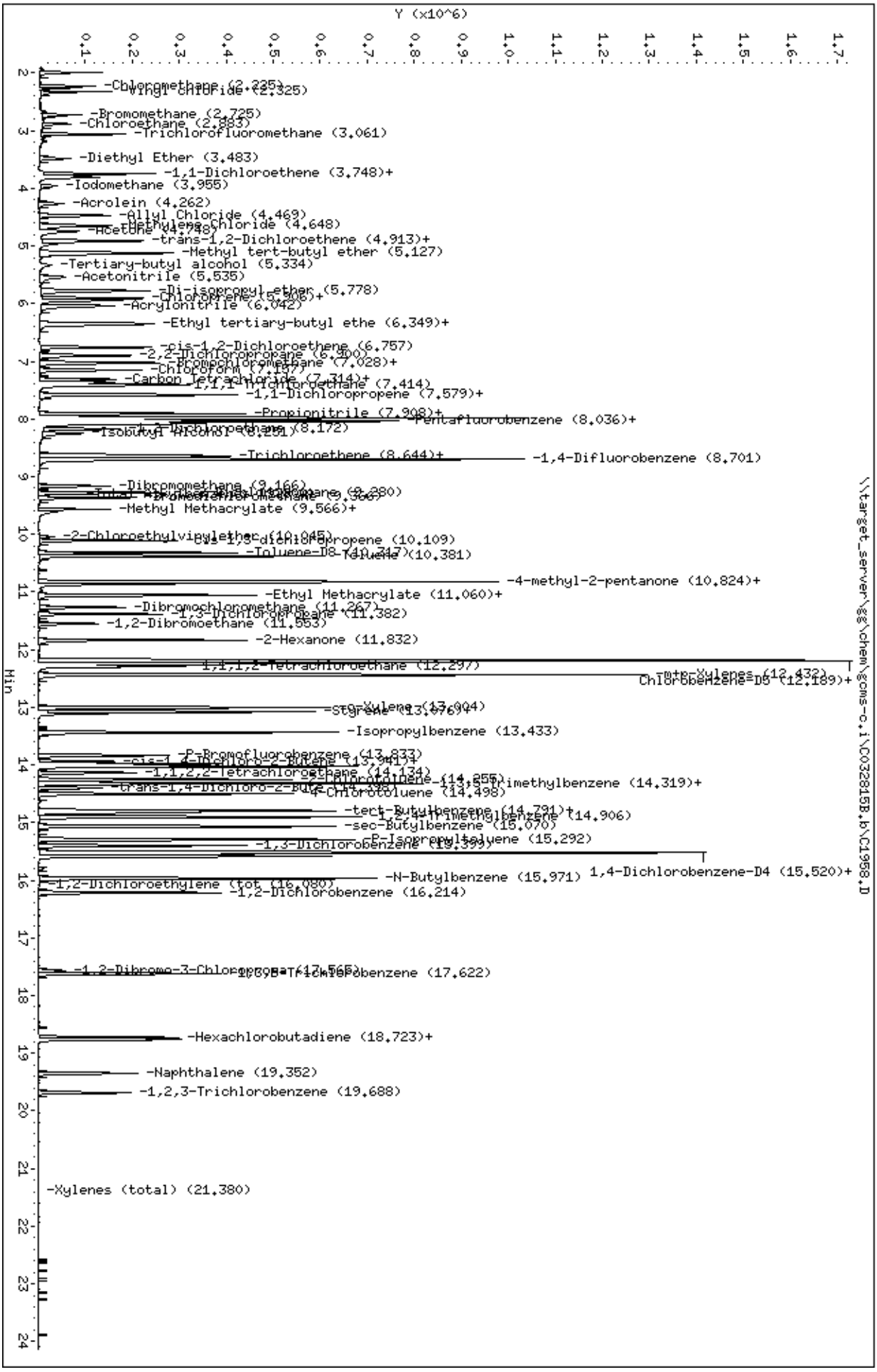
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.949	5.946	(0.740)	193803	20.0000	21.5	
	26 Acrylonitrile	52	6.034	6.038	(0.751)	144191	100.000	105	
	27 Ethyl tertiary-butyl ether	59	6.349	6.346	(0.790)	259759	20.0000	21.1	
	28 Vinyl Acetate	43	6.370	6.367	(0.732)	175523	20.0000	21.7	
	29 cis-1,2-Dichloroethene	96	6.756	6.753	(0.841)	108844	20.0000	21.2	
	31 Methyl Methacrylate	41	9.566	9.562	(1.099)	68789	20.0000	21.2	
	32 2,2-Dichloropropane	77	6.899	6.903	(0.859)	156601	20.0000	21.9	
	33 Bromochloromethane	128	7.035	7.032	(0.875)	35080	20.0000	20.9	
	34 Chloroform	83	7.157	7.154	(0.891)	191338	20.0000	21.5	
	35 Carbon Tetrachloride	117	7.314	7.318	(0.841)	114431	20.0000	22.6	
	36 Tetrahydrofuran	42	7.357	7.361	(0.916)	105890	100.000	105	
$	37 Dibromofluoromethane	113	7.400	7.397	(0.921)	67630	20.0000	21.5	
	38 1,1,1-Trichloroethane	97	7.414	7.411	(0.923)	174901	20.0000	21.6	
	39 1,1-Dichloropropene	75	7.578	7.582	(0.871)	144620	20.0000	21.6	
	40 2-Butanone	43	7.578	7.575	(0.943)	205689	100.000	113	
	41 Benzene	78	7.907	7.911	(0.909)	380278	20.0000	21.4	
*	42 Pentafluorobenzene	168	8.036	8.039	(1.000)	452727	50.0000		
	43 Cyclohexane	56	7.021	7.018	(0.874)	92779	20.0000	22.6	
	44 Ethyl Methacrylate	69	11.059	11.056	(1.271)	105057	20.0000	22.3	
$	45 1,2-Dichloroethane-D4	65	8.086	8.090	(1.006)	85540	20.0000	20.9	
	46 Tertiary-amyl methyl ether	73	8.079	8.076	(1.005)	195715	20.0000	20.6	
	47 1,2-Dichloroethane	62	8.172	8.176	(0.939)	138546	20.0000	21.3	
	48 Trichloroethene	95	8.651	8.647	(0.994)	106820	20.0000	21.2	
*	49 1,4-Difluorobenzene	114	8.701	8.696	(1.000)	778846	50.0000		
	50 Dibromomethane	93	9.165	9.162	(1.053)	56554	20.0000	20.2	
	51 1,2-Dichloropropane	63	9.280	9.284	(1.067)	96622	20.0000	21.6	
	52 Bromodichloromethane	83	9.365	9.369	(1.076)	133395	20.0000	21.6	
	53 cis-1,3-dichloropropene	75	10.109	10.106	(1.162)	163435	20.0000	22.0	
	54 1,4-Dioxane	88	9.616	9.612	(1.105)	33518	400.000	359	
$	55 Toluene-D8	98	10.316	10.320	(1.186)	264927	20.0000	21.8	
	56 2-Chloroethylvinylether	63	10.044	10.048	(1.154)	13098	20.0000	25.5	
	57 Toluene	92	10.380	10.377	(1.193)	250435	20.0000	21.7	
	58 4-methyl-2-pentanone	43	10.824	10.828	(1.244)	388580	100.000	110	
	59 Tetrachloroethene	164	10.816	10.820	(0.887)	80617	20.0000	22.0	
	60 trans-1,3-Dichloropropene	75	10.866	10.871	(1.249)	138092	20.0000	21.6	
	61 1,1,2-Trichloroethane	83	11.052	11.056	(1.270)	70351	20.0000	21.8	
	62 Dibromochloromethane	129	11.267	11.271	(0.924)	94977	20.0000	21.8	
	63 1,3-Dichloropropane	76	11.381	11.385	(0.934)	154743	20.0000	21.5	
	64 1,2-Dibromoethane	107	11.553	11.550	(1.328)	89130	20.0000	20.6	
	65 2-Hexanone	43	11.831	11.835	(0.971)	292219	100.000	115	
*	66 Chlorobenzene-D5	117	12.189	12.193	(1.000)	717691	50.0000		
	67 Chlorobenzene	112	12.210	12.214	(1.002)	256061	20.0000	21.7	
	152 1-Chlorohexane	91	12.182	12.186	(0.999)	159493	20.0000	21.8	
	68 Ethylbenzene	106	12.246	12.243	(1.005)	155238	20.0000	21.9	
	69 1,1,1,2-Tetrachloroethane	131	12.296	12.293	(1.009)	96159	20.0000	22.1	
	71 m+p-Xylenes	106	12.432	12.436	(1.020)	365035	40.0000	44.2	
	72 o-Xylene	106	13.004	13.008	(1.067)	170083	20.0000	21.6	
	73 Styrene	104	13.075	13.079	(1.073)	298872	20.0000	22.3	
	74 Bromoform	173	13.118	13.115	(1.076)	62055	20.0000	21.9	
	75 Isopropylbenzene	105	13.433	13.437	(0.866)	490240	20.0000	22.6	
$	76 P-Bromofluorobenzene	95	13.840	13.837	(1.591)	115607	20.0000	20.8	
	77 cis-1,4-Dichloro-2-Butene	53	13.933	13.937	(0.898)	41378	20.0000	21.8	
	78 trans-1,4-Dichloro-2-Butene	53	14.398	14.394	(0.928)	33261	20.0000	21.9	
	79 Bromobenzene	156	13.983	13.987	(0.901)	114227	20.0000	21.5	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1958.D
Report Date: 01-Apr-2015 14:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.026	14.030	(0.904)	592407	20.0000	22.6	
81 1,1,2,2-Tetrachloroethane	83	14.133	14.137	(0.911)	119321	20.0000	21.1	
82 1,3,5-Trimethylbenzene	105	14.319	14.316	(0.923)	451790	20.0000	22.7	
83 2-Chlorotoluene	91	14.255	14.252	(0.918)	364882	20.0000	22.2	
84 1,2,3-Trichloropropane	75	14.333	14.337	(0.924)	97800	20.0000	21.1	
85 4-Chlorotoluene	91	14.498	14.502	(0.934)	366109	20.0000	22.2	
86 tert-Butylbenzene	119	14.791	14.795	(0.953)	392108	20.0000	21.9	
87 Pentachloroethane	117	14.819	14.823	(0.955)	75368	20.0000	21.3	
88 1,2,4-Trimethylbenzene	105	14.905	14.902	(0.960)	448046	20.0000	22.8	
89 P-Isopropyltoluene	119	15.291	15.295	(0.985)	438935	20.0000	22.4	
90 1,3-Dichlorobenzene	146	15.398	15.402	(0.992)	205370	20.0000	22.0	
* 91 1,4-Dichlorobenzene-D4	152	15.520	15.517	(1.000)	396060	50.0000		
92 1,4-Dichlorobenzene	146	15.541	15.545	(1.001)	214917	20.0000	21.5	
93 N-Butylbenzene	91	15.970	15.967	(1.029)	467534	20.0000	23.2	
94 sec-Butylbenzene	105	15.069	15.066	(0.971)	538331	20.0000	22.6	
95 1,2-Dichlorobenzene	146	16.220	16.216	(1.045)	180877	20.0000	21.6	
96 1,2-Dibromo-3-Chloropropane	75	17.571	17.568	(1.132)	19624	20.0000	20.5	
97 1,3,5-Trichlorobenzene	180	17.621	17.625	(1.135)	139968	20.0000	21.8	
98 Hexachlorobutadiene	225	18.722	18.726	(1.206)	70951	20.0000	20.8	
99 1,2,4-Trichlorobenzene	180	18.765	18.762	(1.209)	106662	20.0000	23.9	
100 1,2,3-Trimethylbenzene	105	15.584	15.581	(1.004)	400096	20.0000	21.9	
101 Naphthalene	128	19.351	19.348	(1.247)	188358	20.0000	24.4	
102 1,2,3-Trichlorobenzene	180	19.687	19.684	(1.269)	68783	20.0000	24.2	
103 Methyl Acetate	43	4.969	4.973	(0.618)	53625	20.0000	18.9	
104 Methylcyclohexane	83	8.629	8.625	(1.074)	116230	20.0000	22.5	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1958.D
Date : 28-MAR-2015 11:51
Client ID: Initial Calibration
Sample Info: WG160458-3
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: REC
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1959.D
Report Date: 01-Apr-2015 14:29

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C032815B.b\C1959.D
Lab Smp Id: WG160458-2 Client Smp ID: Initial Calibration
Inj Date : 28-MAR-2015 12:25 MS Autotune Date: 03-FEB-2015 11:03
Operator : REC Inst ID: gcms-c.i
Smp Info : WG160458-2
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C032815B.b\C826A34.m
Meth Date : 30-Mar-2015 07:38 rcrocker Quant Type: ISTD
Cal Date : 28-MAR-2015 12:25 Cal File: C1959.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

WAS

2:46 pm, Apr 13, 2015

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.988	1.986	(0.247)	25004	5.00000	5.0	
2 Chloromethane	50	2.231	2.229	(0.278)	42676	5.00000	5.2	
3 Vinyl chloride	62	2.324	2.329	(0.289)	31136	5.00000	5.1	
4 Bromomethane	94	2.724	2.729	(0.339)	16228	5.00000	5.4	
5 Chloroethane	64	2.889	2.879	(0.360)	14630	5.00000	5.7	
6 Trichlorofluoromethane	101	3.060	3.058	(0.381)	32717	5.00000	5.4	
7 Diethyl Ether	59	3.489	3.487	(0.434)	9616	5.00000	5.3	
8 Tertiary-butyl alcohol	59	5.333	5.338	(0.664)	17341	25.0000	32.5(M)	M9
9 1,1-Dichloroethene	96	3.754	3.751	(0.467)	22378	5.00000	5.4	
10 Carbon Disulfide	76	3.782	3.780	(0.471)	14820	5.00000	4.8	
11 Freon-113	151	3.811	3.815	(0.474)	10665	5.00000	5.3	
12 Iodomethane	142	3.954	3.958	(0.492)	13208	5.00000	4.6	
13 Acrolein	56	4.261	4.266	(0.530)	12959	25.0000	23.5	
14 Methylene Chloride	84	4.647	4.652	(0.578)	25184	5.00000	4.9(a)	
15 Acetone	43	4.747	4.745	(0.591)	34518	25.0000	24.9	
16 Isobutyl Alcohol	43	8.257	8.247	(1.028)	19753	100.000	116(M)	M9
17 trans-1,2-Dichloroethene	96	4.912	4.916	(0.611)	26055	5.00000	5.3	
18 Allyl Chloride	41	4.476	4.473	(0.557)	26602	5.00000	5.0	
19 Methyl tert-butyl ether	73	5.126	5.123	(0.638)	104324	10.0000	10.5	
20 Acetonitrile	39	5.548	5.538	(0.690)	6724	50.0000	59.8(M)	M9
21 Di-isopropyl ether	45	5.784	5.781	(0.720)	65720	5.00000	5.0	
22 Chloroprene	53	5.912	5.910	(0.736)	36647	5.00000	5.0	
23 Propionitrile	54	7.964	7.961	(0.991)	33236	50.0000	52.3	
24 Methacrylonitrile	41	7.985	7.983	(0.994)	123632	50.0000	54.4	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1959.D
Report Date: 01-Apr-2015 14:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.948	5.946	(0.740)	46495	5.00000	5.2	
	26 Acrylonitrile	52	6.041	6.038	(0.752)	34248	25.0000	24.9	
	27 Ethyl tertiary-butyl ether	59	6.341	6.346	(0.789)	60259	5.00000	4.9	
	28 Vinyl Acetate	43	6.370	6.367	(0.732)	36771	5.00000	4.6	
	29 cis-1,2-Dichloroethene	96	6.756	6.753	(0.841)	26344	5.00000	5.2	
	31 Methyl Methacrylate	41	9.572	9.562	(1.100)	15590	5.00000	4.8	
	32 2,2-Dichloropropane	77	6.906	6.903	(0.859)	36236	5.00000	5.1	
	33 Bromochloromethane	128	7.042	7.032	(0.876)	9277	5.00000	5.5	
	34 Chloroform	83	7.156	7.154	(0.891)	45667	5.00000	5.2	
	35 Carbon Tetrachloride	117	7.321	7.318	(0.841)	23962	5.00000	4.8	
	36 Tetrahydrofuran	42	7.363	7.361	(0.916)	24926	25.0000	24.8	
$	37 Dibromofluoromethane	113	7.399	7.397	(0.921)	16018	5.00000	5.1	
	38 1,1,1-Trichloroethane	97	7.414	7.411	(0.923)	42872	5.00000	5.3	
	39 1,1-Dichloropropene	75	7.578	7.582	(0.871)	34871	5.00000	5.2	
	40 2-Butanone	43	7.585	7.575	(0.944)	46672	25.0000	25.7	
	41 Benzene	78	7.907	7.911	(0.909)	95222	5.00000	5.4	
*	42 Pentafluorobenzene	168	8.035	8.039	(1.000)	451021	50.0000		
	43 Cyclohexane	56	7.020	7.018	(0.874)	20782	5.00000	5.1	
	44 Ethyl Methacrylate	69	11.059	11.056	(1.271)	22859	5.00000	4.9	
$	45 1,2-Dichloroethane-D4	65	8.085	8.090	(1.006)	22027	5.00000	5.4	
	46 Tertiary-amyl methyl ether	73	8.078	8.076	(1.005)	45764	5.00000	4.8	
	47 1,2-Dichloroethane	62	8.178	8.176	(0.940)	33801	5.00000	5.2	
	48 Trichloroethene	95	8.650	8.647	(0.994)	28243	5.00000	5.6	
*	49 1,4-Difluorobenzene	114	8.700	8.696	(1.000)	772895	50.0000		
	50 Dibromomethane	93	9.165	9.162	(1.053)	14826	5.00000	5.3	
	51 1,2-Dichloropropane	63	9.286	9.284	(1.067)	22698	5.00000	5.1	
	52 Bromodichloromethane	83	9.372	9.369	(1.077)	31109	5.00000	5.1	
	53 cis-1,3-dichloropropene	75	10.108	10.106	(1.162)	36401	5.00000	4.9	
	54 1,4-Dioxane	88	9.615	9.612	(1.105)	14444	100.000	156(M)	M9
$	55 Toluene-D8	98	10.323	10.320	(1.186)	64634	5.00000	5.3	
	56 2-Chloroethylvinylether	63	10.051	10.048	(1.155)	3393	5.00000	6.6	
	57 Toluene	92	10.380	10.377	(1.193)	60375	5.00000	5.3	
	58 4-methyl-2-pentanone	43	10.830	10.828	(1.245)	94416	25.0000	26.9	
	59 Tetrachloroethene	164	10.823	10.820	(0.888)	20308	5.00000	5.4	
	60 trans-1,3-Dichloropropene	75	10.866	10.871	(1.249)	30720	5.00000	4.8	
	61 1,1,2-Trichloroethane	83	11.052	11.056	(1.270)	15466	5.00000	4.8	
	62 Dibromochloromethane	129	11.266	11.271	(0.924)	20722	5.00000	4.6	
	63 1,3-Dichloropropane	76	11.381	11.385	(0.934)	36880	5.00000	5.0	
	64 1,2-Dibromoethane	107	11.552	11.550	(1.328)	21177	5.00000	4.9	
	65 2-Hexanone	43	11.838	11.835	(0.971)	63854	25.0000	24.3	
*	66 Chlorobenzene-D5	117	12.188	12.193	(1.000)	739135	50.0000		
	67 Chlorobenzene	112	12.210	12.214	(1.002)	62738	5.00000	5.2	
	152 1-Chlorohexane	91	12.181	12.186	(0.999)	39524	5.00000	5.2	
	68 Ethylbenzene	106	12.246	12.243	(1.005)	38712	5.00000	5.3	
	69 1,1,1,2-Tetrachloroethane	131	12.296	12.293	(1.009)	21238	5.00000	4.7	
	71 m+p-Xylenes	106	12.431	12.436	(1.020)	92192	10.0000	10.8	
	72 o-Xylene	106	13.003	13.008	(1.067)	42189	5.00000	5.2	
	73 Styrene	104	13.075	13.079	(1.073)	70554	5.00000	5.1	
	74 Bromoform	173	13.118	13.115	(1.076)	13028	5.00000	4.5	
	75 Isopropylbenzene	105	13.432	13.437	(0.866)	120713	5.00000	5.6	
$	76 P-Bromofluorobenzene	95	13.840	13.837	(1.591)	28633	5.00000	5.2	
	77 cis-1,4-Dichloro-2-Butene	53	13.940	13.937	(0.898)	8423	5.00000	4.5	
	78 trans-1,4-Dichloro-2-Butene	53	14.404	14.394	(0.928)	7185	5.00000	4.8	
	79 Bromobenzene	156	13.990	13.987	(0.901)	27789	5.00000	5.3	

WAS

2:47 pm, Apr 13, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1959.D
Report Date: 01-Apr-2015 14:29

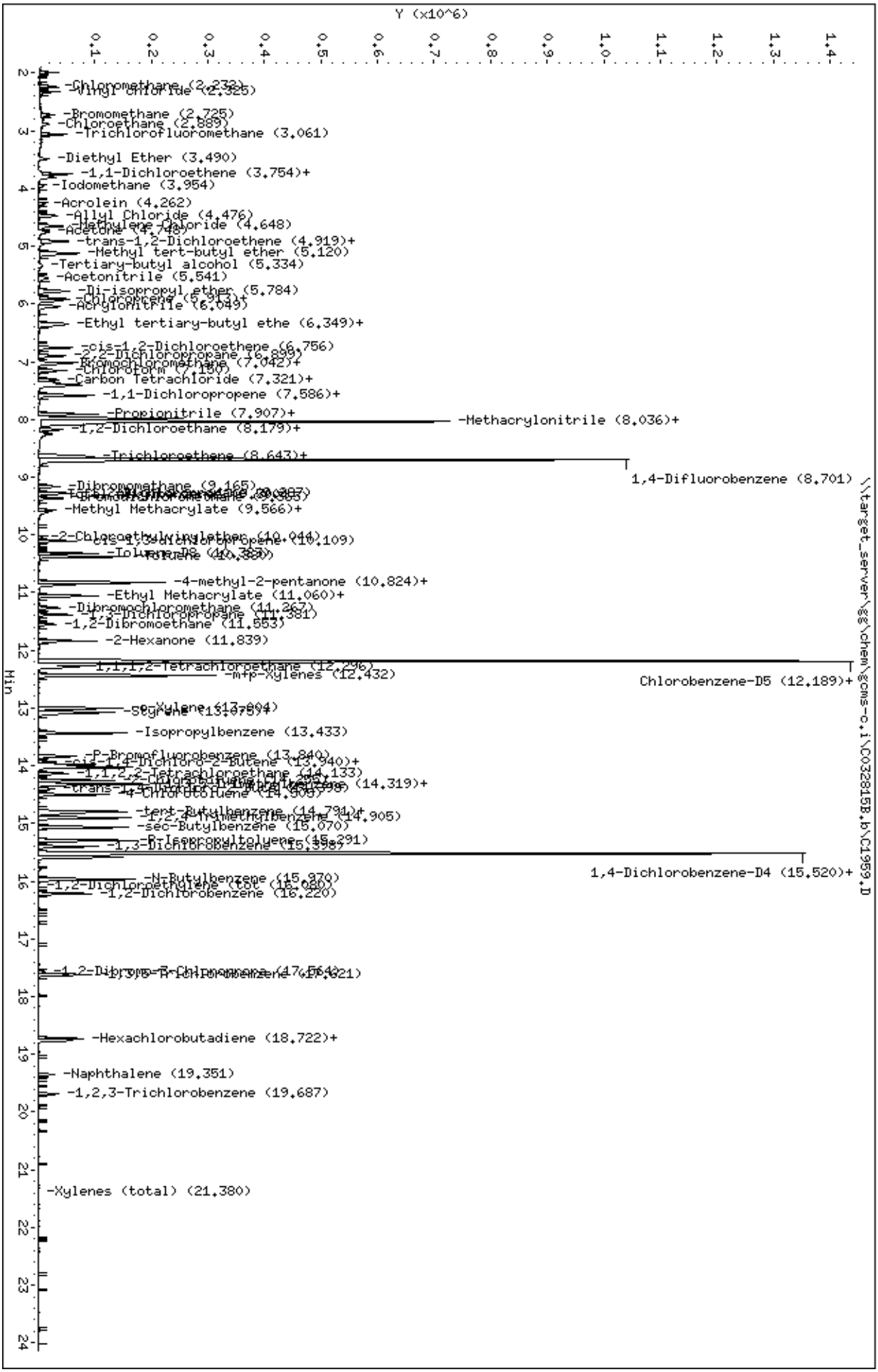
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.025	14.030	(0.904)	147167	5.00000	5.7	
81 1,1,2,2-Tetrachloroethane	83	14.133	14.137	(0.911)	29173	5.00000	5.2	
82 1,3,5-Trimethylbenzene	105	14.311	14.316	(0.922)	107234	5.00000	5.5	
83 2-Chlorotoluene	91	14.254	14.252	(0.918)	89186	5.00000	5.5	
84 1,2,3-Trichloropropane	75	14.326	14.337	(0.923)	24654	5.00000	5.4	
85 4-Chlorotoluene	91	14.504	14.502	(0.935)	90624	5.00000	5.6	
86 tert-Butylbenzene	119	14.790	14.795	(0.953)	97216	5.00000	5.5	
87 Pentachloroethane	117	14.826	14.823	(0.955)	17830	5.00000	5.1	
88 1,2,4-Trimethylbenzene	105	14.905	14.902	(0.960)	106638	5.00000	5.5	
89 P-Isopropyltoluene	119	15.291	15.295	(0.985)	107186	5.00000	5.6	
90 1,3-Dichlorobenzene	146	15.398	15.402	(0.992)	49431	5.00000	5.4	
* 91 1,4-Dichlorobenzene-D4	152	15.519	15.517	(1.000)	390202	50.0000		
92 1,4-Dichlorobenzene	146	15.541	15.545	(1.001)	51678	5.00000	5.2	
93 N-Butylbenzene	91	15.970	15.967	(1.029)	109112	5.00000	5.5	
94 sec-Butylbenzene	105	15.069	15.066	(0.971)	130389	5.00000	5.6	
95 1,2-Dichlorobenzene	146	16.220	16.216	(1.045)	42509	5.00000	5.1	
96 1,2-Dibromo-3-Chloropropane	75	17.564	17.568	(1.132)	4271	5.00000	4.5	
97 1,3,5-Trichlorobenzene	180	17.621	17.625	(1.135)	34017	5.00000	5.4	
98 Hexachlorobutadiene	225	18.722	18.726	(1.206)	19025	5.00000	5.7	
99 1,2,4-Trichlorobenzene	180	18.757	18.762	(1.209)	21082	5.00000	4.8	
100 1,2,3-Trimethylbenzene	105	15.584	15.581	(1.004)	97374	5.00000	5.4	
101 Naphthalene	128	19.351	19.348	(1.247)	24316	5.00000	3.2	
102 1,2,3-Trichlorobenzene	180	19.687	19.684	(1.269)	13564	5.00000	4.8	
103 Methyl Acetate	43	4.976	4.973	(0.619)	15177	5.00000	5.4	
104 Methylcyclohexane	83	8.629	8.625	(1.074)	26532	5.00000	5.2	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1959.D
Date : 28-MAR-2015 12:25
Client ID: Initial Calibration
Sample Info: WG160458-2
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: REC
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Report Date: 01-Apr-2015 14:29

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Lab Smp Id: WG160458-1 Client Smp ID: Initial Calibration
Inj Date : 28-MAR-2015 13:00 MS Autotune Date: 03-FEB-2015 11:03
Operator : REC Inst ID: gcms-c.i
Smp Info : WG160458-1
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C032815B.b\C826A34.m
Meth Date : 30-Mar-2015 07:38 rcrocker Quant Type: ISTD
Cal Date : 28-MAR-2015 13:00 Cal File: C1960.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

WAS

2:47 pm, Apr 13, 2015

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.988	1.986	(0.247)	4787	1.00000	0.94(a)	
2 Chloromethane	50	2.231	2.229	(0.278)	11354	1.00000	1.3	
3 Vinyl chloride	62	2.324	2.329	(0.289)	7538	1.00000	1.2	
4 Bromomethane	94	2.725	2.729	(0.339)	4164	1.00000	1.4	
5 Chloroethane	64	2.882	2.879	(0.359)	3563	1.00000	1.3	
6 Trichlorofluoromethane	101	3.061	3.058	(0.381)	6391	1.00000	1.0	
7 Diethyl Ether	59	3.482	3.487	(0.433)	1444	1.00000	0.78(a)	
8 Tertiary-butyl alcohol	59	5.348	5.338	(0.666)	3622	5.00000	6.6(M)	M9
9 1,1-Dichloroethene	96	3.754	3.751	(0.467)	3979	1.00000	0.94(a)	
10 Carbon Disulfide	76	3.782	3.780	(0.471)	4263	1.00000	1.4	
11 Freon-113	151	3.811	3.815	(0.474)	1847	1.00000	0.90(aM)	M9
12 Iodomethane	142	3.961	3.958	(0.493)	3146	1.00000	1.1	
13 Acrolein	56	4.261	4.266	(0.530)	2577	5.00000	4.6(a)	
14 Methylene Chloride	84	4.655	4.652	(0.579)	6515	1.00000	1.2(a)	
15 Acetone	43	4.755	4.745	(0.592)	7550	5.00000	5.3	
16 Isobutyl Alcohol	43	8.257	8.247	(1.028)	3919	20.0000	22.4(M)	M9
17 trans-1,2-Dichloroethene	96	4.926	4.916	(0.613)	5509	1.00000	1.1	
18 Allyl Chloride	41	4.483	4.473	(0.558)	5657	1.00000	1.0	
19 Methyl tert-butyl ether	73	5.126	5.123	(0.638)	18724	2.00000	1.8	
20 Acetonitrile	39	5.555	5.538	(0.691)	1368	10.0000	11.8(aM)	M9
21 Di-isopropyl ether	45	5.777	5.781	(0.719)	12411	1.00000	0.92(a)	
22 Chloroprene	53	5.920	5.910	(0.737)	7019	1.00000	0.94(aM)	M6
23 Propionitrile	54	7.971	7.961	(0.992)	6680	10.0000	10.2	
24 Methacrylonitrile	41	7.985	7.983	(0.994)	24699	10.0000	10.6	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Report Date: 01-Apr-2015 14:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.941	5.946	(0.739)	9180	1.00000	1.00	
	26 Acrylonitrile	52	6.048	6.038	(0.753)	7082	5.00000	5.0(M)	M9
	27 Ethyl tertiary-butyl ether	59	6.349	6.346	(0.790)	11451	1.00000	0.91(a)	
	28 Vinyl Acetate	43	6.384	6.367	(0.734)	7282	1.00000	0.91(aM)	M9
	29 cis-1,2-Dichloroethene	96	6.756	6.753	(0.841)	5481	1.00000	1.0	
	31 Methyl Methacrylate	41	9.579	9.562	(1.101)	2806	1.00000	0.88(aM)	M9
	32 2,2-Dichloropropane	77	6.899	6.903	(0.859)	6062	1.00000	0.83(a)	
	33 Bromochloromethane	128	7.049	7.032	(0.877)	1694	1.00000	0.98(aM)	M9
	34 Chloroform	83	7.156	7.154	(0.891)	9037	1.00000	0.99(a)	
	35 Carbon Tetrachloride	117	7.314	7.318	(0.841)	3366	1.00000	0.67(a)	
	36 Tetrahydrofuran	42	7.364	7.361	(0.916)	4684	5.00000	4.5(a)	
$	37 Dibromofluoromethane	113	7.399	7.397	(0.921)	2742	1.00000	0.85(a)	
	38 1,1,1-Trichloroethane	97	7.414	7.411	(0.923)	7946	1.00000	0.96(a)	
	39 1,1-Dichloropropene	75	7.585	7.582	(0.872)	6492	1.00000	0.98(a)	
	40 2-Butanone	43	7.599	7.575	(0.946)	8005	5.00000	4.3(a)	
	41 Benzene	78	7.907	7.911	(0.909)	18013	1.00000	1.0	
*	42 Pentafluorobenzene	168	8.036	8.039	(1.000)	462953	50.0000		
	43 Cyclohexane	56	7.020	7.018	(0.874)	3200	1.00000	0.76(a)	
	44 Ethyl Methacrylate	69	11.066	11.056	(1.272)	3442	1.00000	0.74(a)	
$	45 1,2-Dichloroethane-D4	65	8.093	8.090	(1.007)	4351	1.00000	1.0	
	46 Tertiary-amyl methyl ether	73	8.078	8.076	(1.005)	8635	1.00000	0.89(a)	
	47 1,2-Dichloroethane	62	8.178	8.176	(0.940)	6569	1.00000	1.0	
	48 Trichloroethene	95	8.650	8.647	(0.994)	5143	1.00000	1.0	
*	49 1,4-Difluorobenzene	114	8.700	8.696	(1.000)	769650	50.0000		
	50 Dibromomethane	93	9.165	9.162	(1.053)	2922	1.00000	1.0	
	51 1,2-Dichloropropane	63	9.279	9.284	(1.067)	4299	1.00000	0.97(aM)	M6
	52 Bromodichloromethane	83	9.372	9.369	(1.077)	4917	1.00000	0.80(aM)	M6
	53 cis-1,3-dichloropropene	75	10.108	10.106	(1.162)	6503	1.00000	0.88(a)	
	54 1,4-Dioxane	88	9.615	9.612	(1.105)	3567	20.0000	38.7	
$	55 Toluene-D8	98	10.323	10.320	(1.186)	12562	1.00000	1.0	
	56 2-Chloroethylvinylether	63	10.051	10.048	(1.155)	624	1.00000	1.2(M)	M6
	57 Toluene	92	10.380	10.377	(1.193)	11772	1.00000	1.0	
	58 4-methyl-2-pentanone	43	10.823	10.828	(1.244)	17599	5.00000	5.0	
	59 Tetrachloroethene	164	10.816	10.820	(0.887)	3429	1.00000	0.93(a)	
	60 trans-1,3-Dichloropropene	75	10.873	10.871	(1.250)	5469	1.00000	0.86(a)	
	61 1,1,2-Trichloroethane	83	11.052	11.056	(1.270)	3254	1.00000	1.0	
	62 Dibromochloromethane	129	11.266	11.271	(0.924)	3477	1.00000	0.79(a)	
	63 1,3-Dichloropropane	76	11.381	11.385	(0.934)	7345	1.00000	1.0	
	64 1,2-Dibromoethane	107	11.559	11.550	(1.329)	4718	1.00000	1.1(M)	M6
	65 2-Hexanone	43	11.838	11.835	(0.971)	10721	5.00000	4.2(a)	
*	66 Chlorobenzene-D5	117	12.188	12.193	(1.000)	725055	50.0000		
	67 Chlorobenzene	112	12.210	12.214	(1.002)	12200	1.00000	1.0	
	152 1-Chlorohexane	91	12.181	12.186	(0.999)	7010	1.00000	0.95(a)	
	68 Ethylbenzene	106	12.246	12.243	(1.005)	7132	1.00000	1.00	
	69 1,1,1,2-Tetrachloroethane	131	12.289	12.293	(1.008)	3819	1.00000	0.87(a)	
	71 m+p-Xylenes	106	12.432	12.436	(1.020)	17099	2.00000	2.0	
	72 o-Xylene	106	13.003	13.008	(1.067)	7758	1.00000	0.97(a)	
	73 Styrene	104	13.082	13.079	(1.073)	11739	1.00000	0.87(a)	
	74 Bromoform	173	13.111	13.115	(1.076)	2382	1.00000	0.83(aM)	M6
	75 Isopropylbenzene	105	13.432	13.437	(0.866)	21785	1.00000	1.0	
$	76 P-Bromofluorobenzene	95	13.833	13.837	(1.590)	6073	1.00000	1.1	
	77 cis-1,4-Dichloro-2-Butene	53	13.940	13.937	(0.898)	1534	1.00000	0.83(a)	
	78 trans-1,4-Dichloro-2-Butene	53	14.404	14.394	(0.928)	1220	1.00000	0.82(a)	
	79 Bromobenzene	156	13.990	13.987	(0.901)	5394	1.00000	1.0	

WAS

2:47 pm, Apr 13, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Report Date: 01-Apr-2015 14:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.026	14.030	(0.904)	27314	1.00000	1.1	
81 1,1,2,2-Tetrachloroethane	83	14.140	14.137	(0.911)	5689	1.00000	1.0	
82 1,3,5-Trimethylbenzene	105	14.319	14.316	(0.923)	20625	1.00000	1.1	
83 2-Chlorotoluene	91	14.254	14.252	(0.918)	16783	1.00000	1.0	
84 1,2,3-Trichloropropane	75	14.333	14.337	(0.924)	4779	1.00000	1.0	
85 4-Chlorotoluene	91	14.504	14.502	(0.935)	16220	1.00000	1.0	
86 tert-Butylbenzene	119	14.790	14.795	(0.953)	17684	1.00000	1.0	
88 1,2,4-Trimethylbenzene	105	14.905	14.902	(0.960)	19457	1.00000	1.0	
89 P-Isopropyltoluene	119	15.291	15.295	(0.985)	19558	1.00000	1.0	
90 1,3-Dichlorobenzene	146	15.398	15.402	(0.992)	9698	1.00000	1.1	
* 91 1,4-Dichlorobenzene-D4	152	15.519	15.517	(1.000)	386495	50.0000		
92 1,4-Dichlorobenzene	146	15.541	15.545	(1.001)	11078	1.00000	1.1	
93 N-Butylbenzene	91	15.970	15.967	(1.029)	17940	1.00000	0.91(a)	
94 sec-Butylbenzene	105	15.062	15.066	(0.971)	24494	1.00000	1.0	
95 1,2-Dichlorobenzene	146	16.220	16.216	(1.045)	8714	1.00000	1.1	
96 1,2-Dibromo-3-Chloropropane	75	17.578	17.568	(1.133)	912	1.00000	0.98(aM)	M9
97 1,3,5-Trichlorobenzene	180	17.621	17.625	(1.135)	6051	1.00000	0.97(a)	
98 Hexachlorobutadiene	225	18.729	18.726	(1.207)	4279	1.00000	1.3	
99 1,2,4-Trichlorobenzene	180	18.758	18.762	(1.209)	2313	1.00000	0.53(a)	
100 1,2,3-Trimethylbenzene	105	15.584	15.581	(1.004)	19507	1.00000	1.1	
102 1,2,3-Trichlorobenzene	180	19.701	19.684	(1.269)	970	1.00000	0.35(aM)	M9
103 Methyl Acetate	43	4.983	4.973	(0.620)	2899	1.00000	1.0	
104 Methylcyclohexane	83	8.622	8.625	(1.073)	4479	1.00000	0.85(a)	

QC Flag Legend

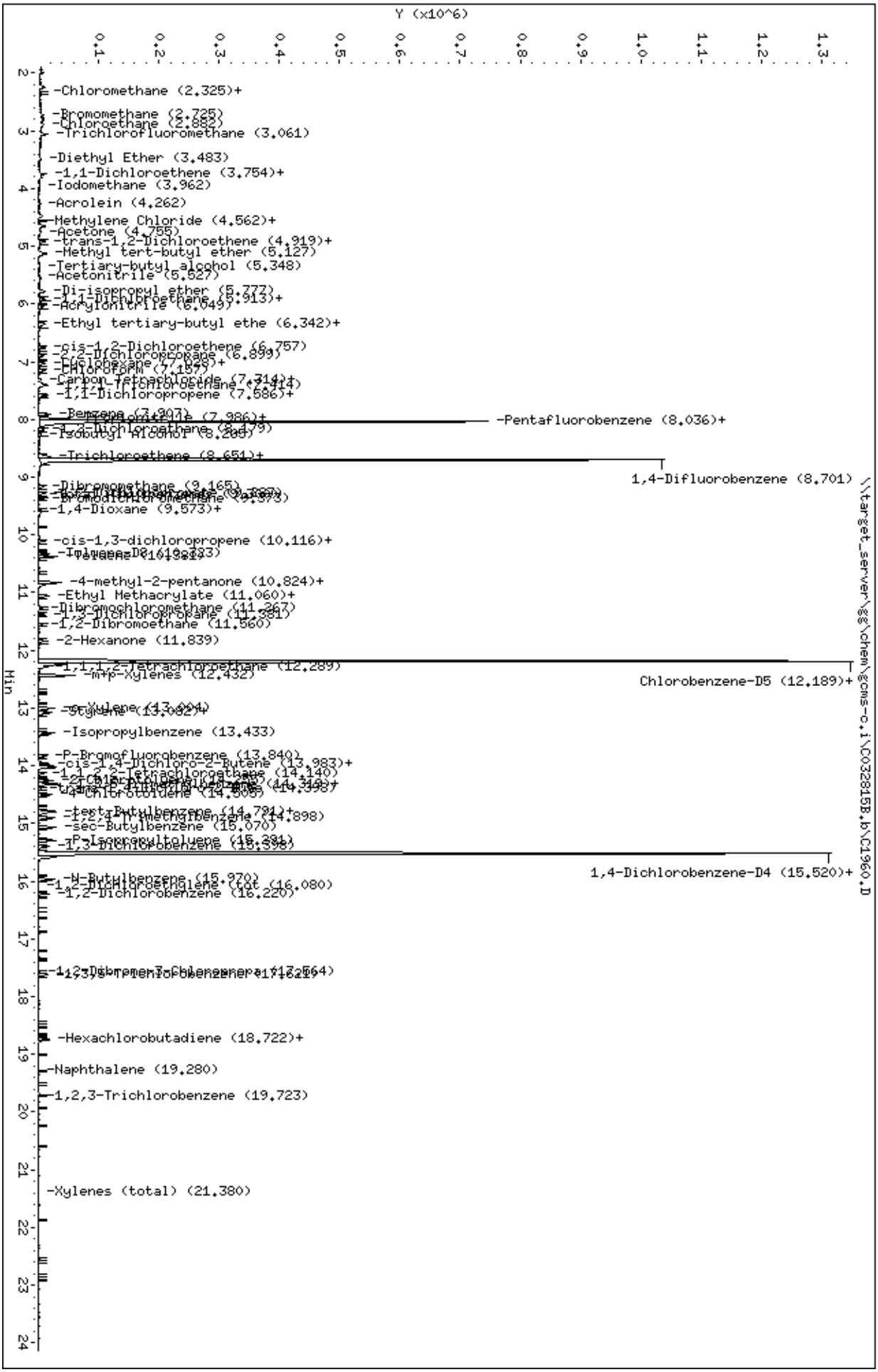
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

WAS

2:47 pm, Apr 13, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Date : 28-MAR-2015 13:00
Client ID: Initial Calibration
Sample Info: WG160458-1
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: REC
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1962.D
Report Date: 01-Apr-2015 14:29

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C032815B.b\C1962.D
Lab Smp Id: WG160458-6 Client Smp ID: Initial Calibration
Inj Date : 28-MAR-2015 14:09 MS Autotune Date: 03-FEB-2015 11:03
Operator : REC Inst ID: gcms-c.i
Smp Info : WG160458-6
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C032815B.b\C826A34.m
Meth Date : 30-Mar-2015 07:38 rcrocker Quant Type: ISTD
Cal Date : 28-MAR-2015 14:09 Cal File: C1962.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.988	1.986	(0.247)	947546	200.000	186	
2 Chloromethane	50	2.224	2.229	(0.277)	1367066	200.000	162	
3 Vinyl chloride	62	2.324	2.329	(0.289)	1094591	200.000	176	
4 Bromomethane	94	2.724	2.729	(0.339)	515902	200.000	168	
5 Chloroethane	64	2.881	2.879	(0.358)	374693	200.000	142	
6 Trichlorofluoromethane	101	3.053	3.058	(0.380)	1195271	200.000	193	
7 Diethyl Ether	59	3.489	3.487	(0.434)	376236	200.000	203(A)	
8 Tertiary-butyl alcohol	59	5.340	5.338	(0.664)	359013	1000.00	657	
9 1,1-Dichloroethene	96	3.746	3.751	(0.466)	808726	200.000	192	
10 Carbon Disulfide	76	3.782	3.780	(0.470)	566267	200.000	181	
11 Freon-113	151	3.811	3.815	(0.474)	383327	200.000	187	
12 Iodomethane	142	3.954	3.958	(0.492)	559510	200.000	192	
13 Acrolein	56	4.268	4.266	(0.531)	570100	1000.00	1010(A)	
14 Methylene Chloride	84	4.647	4.652	(0.578)	979655	200.000	186	
15 Acetone	43	4.747	4.745	(0.590)	1206476	1000.00	849	
16 Isobutyl Alcohol	43	8.250	8.247	(1.026)	505946	4000.00	2900	
17 trans-1,2-Dichloroethene	96	4.911	4.916	(0.611)	903435	200.000	179	
18 Allyl Chloride	41	4.475	4.473	(0.556)	967628	200.000	176	
19 Methyl tert-butyl ether	73	5.126	5.123	(0.637)	3796583	400.000	374	
20 Acetonitrile	39	5.541	5.538	(0.689)	205536	2000.00	1780	
21 Di-isopropyl ether	45	5.784	5.781	(0.719)	2564189	200.000	191	
22 Chloroprene	53	5.905	5.910	(0.734)	1389868	200.000	186	
23 Propionitrile	54	7.971	7.961	(0.991)	1138713	2000.00	1750	
24 Methacrylonitrile	41	7.999	7.983	(0.995)	3586412	2000.00	1540	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1962.D
Report Date: 01-Apr-2015 14:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.948	5.946	(0.740)	1700500	200.000	185	
	26 Acrylonitrile	52	6.048	6.038	(0.752)	1296977	1000.00	922	
	27 Ethyl tertiary-butyl ether	59	6.348	6.346	(0.789)	2410747	200.000	192	
	28 Vinyl Acetate	43	6.370	6.367	(0.732)	1657332	200.000	196	
	29 cis-1,2-Dichloroethene	96	6.756	6.753	(0.840)	975407	200.000	186	
	31 Methyl Methacrylate	41	9.565	9.562	(1.099)	669537	200.000	198	
	32 2,2-Dichloropropane	77	6.906	6.903	(0.859)	1432374	200.000	196	
	33 Bromochloromethane	128	7.034	7.032	(0.875)	320882	200.000	187	
	34 Chloroform	83	7.156	7.154	(0.890)	1662941	200.000	183	
	35 Carbon Tetrachloride	117	7.313	7.318	(0.841)	1113520	200.000	211(A)	
	36 Tetrahydrofuran	42	7.356	7.361	(0.915)	975180	1000.00	947	
$	37 Dibromofluoromethane	113	7.399	7.397	(0.920)	640719	200.000	200	
	38 1,1,1-Trichloroethane	97	7.413	7.411	(0.922)	1511899	200.000	183	
	39 1,1-Dichloropropene	75	7.585	7.582	(0.872)	1269039	200.000	181	
	40 2-Butanone	43	7.578	7.575	(0.942)	1689196	1000.00	907	
	41 Benzene	78	7.906	7.911	(0.909)	3225819	200.000	174	
*	42 Pentafluorobenzene	168	8.042	8.039	(1.000)	462083	50.0000		
	43 Cyclohexane	56	7.020	7.018	(0.873)	848276	200.000	202(A)	
	44 Ethyl Methacrylate	69	11.059	11.056	(1.271)	988555	200.000	201(A)	
$	45 1,2-Dichloroethane-D4	65	8.092	8.090	(1.006)	764438	200.000	183	
	46 Tertiary-amyl methyl ether	73	8.078	8.076	(1.004)	1936849	200.000	199	
	47 1,2-Dichloroethane	62	8.178	8.176	(0.940)	1250634	200.000	184	
	48 Trichloroethene	95	8.650	8.647	(0.994)	945331	200.000	180	
*	49 1,4-Difluorobenzene	114	8.700	8.696	(1.000)	811745	50.0000		
	50 Dibromomethane	93	9.165	9.162	(1.053)	539047	200.000	184	
	51 1,2-Dichloropropane	63	9.286	9.284	(1.067)	878013	200.000	188	
	52 Bromodichloromethane	83	9.365	9.369	(1.076)	1296329	200.000	201(A)	
	53 cis-1,3-dichloropropene	75	10.108	10.106	(1.162)	1507568	200.000	194	
	54 1,4-Dioxane	88	9.608	9.612	(1.104)	105530	4000.00	1080	
$	55 Toluene-D8	98	10.323	10.320	(1.186)	2252186	200.000	177	
	56 2-Chloroethylvinylether	63	10.044	10.048	(1.154)	63296	200.000	118	
	57 Toluene	92	10.380	10.377	(1.193)	2125480	200.000	177	
	58 4-methyl-2-pentanone	43	10.830	10.828	(1.245)	2920794	1000.00	793	
	59 Tetrachloroethene	164	10.823	10.820	(0.888)	682026	200.000	183	
	60 trans-1,3-Dichloropropene	75	10.873	10.871	(1.250)	1332998	200.000	200(A)	
	61 1,1,2-Trichloroethane	83	11.059	11.056	(1.271)	631977	200.000	188	
	62 Dibromochloromethane	129	11.266	11.271	(0.924)	936591	200.000	212(A)	
	63 1,3-Dichloropropane	76	11.380	11.385	(0.934)	1385559	200.000	189	
	64 1,2-Dibromoethane	107	11.552	11.550	(1.328)	843374	200.000	187	
	65 2-Hexanone	43	11.838	11.835	(0.971)	2393804	1000.00	922	
*	66 Chlorobenzene-D5	117	12.188	12.193	(1.000)	730727	50.0000		
	67 Chlorobenzene	112	12.217	12.214	(1.002)	2187685	200.000	182	
	152 1-Chlorohexane	91	12.188	12.186	(1.000)	1413469	200.000	190	
	68 Ethylbenzene	106	12.252	12.243	(1.005)	1331912	200.000	184	
	69 1,1,1,2-Tetrachloroethane	131	12.295	12.293	(1.009)	912409	200.000	206(A)	
	71 m+p-Xylenes	106	12.438	12.436	(1.021)	2909848	400.000	346	
	72 o-Xylene	106	13.010	13.008	(1.067)	1524221	200.000	190	
	73 Styrene	104	13.082	13.079	(1.073)	2591296	200.000	190	
	74 Bromoform	173	13.117	13.115	(1.076)	610963	200.000	212(A)	
	75 Isopropylbenzene	105	13.439	13.437	(0.866)	3782060	200.000	164	
$	76 P-Bromofluorobenzene	95	13.839	13.837	(1.591)	1061846	200.000	183	
	77 cis-1,4-Dichloro-2-Butene	53	13.939	13.937	(0.898)	413670	200.000	206(A)	
	78 trans-1,4-Dichloro-2-Butene	53	14.397	14.394	(0.928)	325624	200.000	202(A)	
	79 Bromobenzene	156	13.989	13.987	(0.901)	1010263	200.000	180	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1962.D
Report Date: 01-Apr-2015 14:29

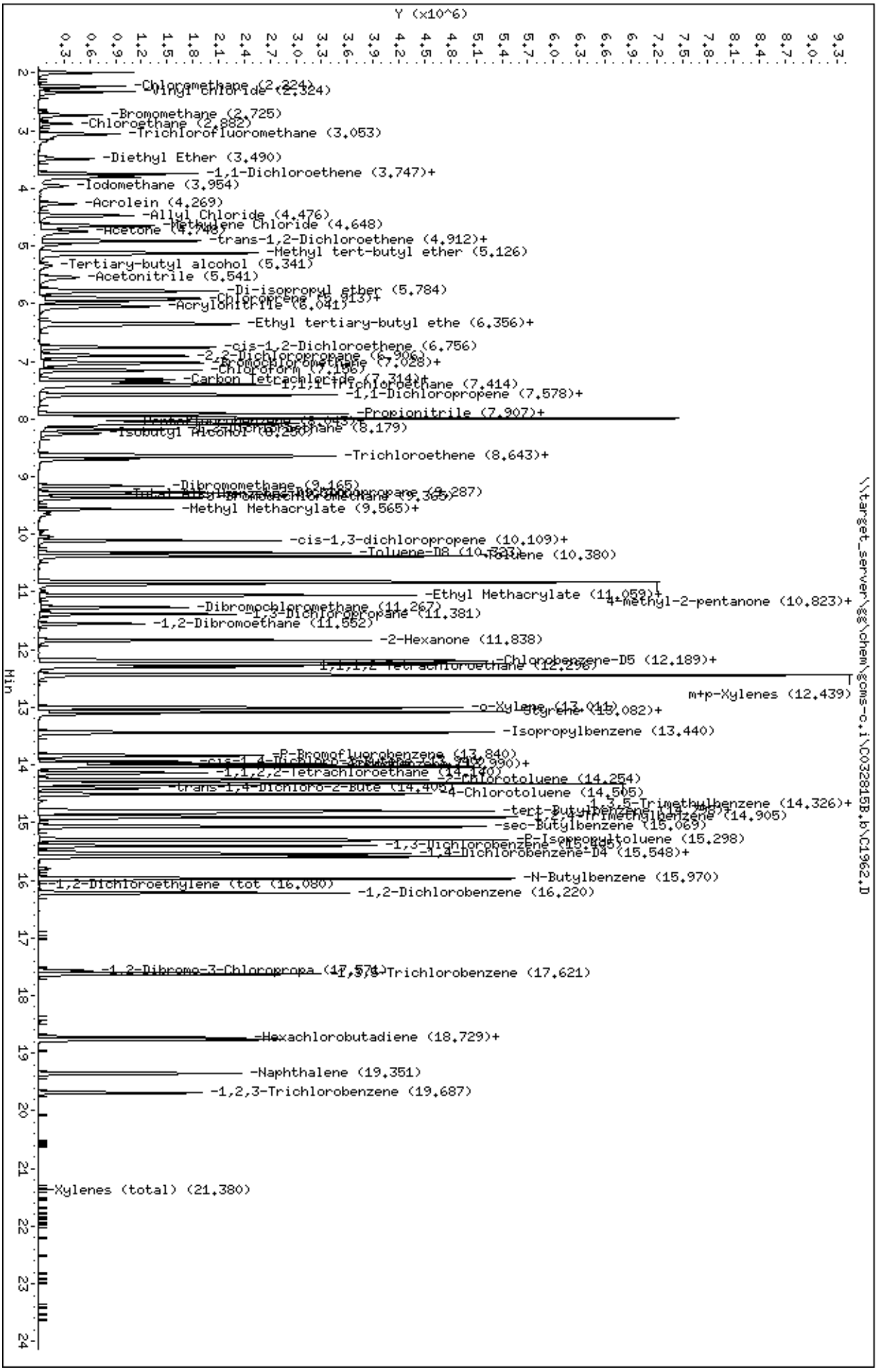
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.032	14.030	(0.904)	4413434	200.000	159	
81 1,1,2,2-Tetrachloroethane	83	14.140	14.137	(0.911)	1108688	200.000	185	
82 1,3,5-Trimethylbenzene	105	14.325	14.316	(0.923)	3402815	200.000	161	
83 2-Chlorotoluene	91	14.254	14.252	(0.918)	2930860	200.000	168	
84 1,2,3-Trichloropropane	75	14.333	14.337	(0.924)	860210	200.000	175	
85 4-Chlorotoluene	91	14.504	14.502	(0.935)	2950088	200.000	169	
86 tert-Butylbenzene	119	14.797	14.795	(0.953)	3275606	200.000	173	
87 Pentachloroethane	117	14.826	14.823	(0.955)	741285	200.000	198	
88 1,2,4-Trimethylbenzene	105	14.904	14.902	(0.960)	3428086	200.000	165	
89 P-Isopropyltoluene	119	15.298	15.295	(0.986)	3450510	200.000	166	
90 1,3-Dichlorobenzene	146	15.405	15.402	(0.993)	1738343	200.000	175	
* 91 1,4-Dichlorobenzene-D4	152	15.519	15.517	(1.000)	419454	50.0000		
92 1,4-Dichlorobenzene	146	15.548	15.545	(1.002)	1824625	200.000	172	
93 N-Butylbenzene	91	15.969	15.967	(1.029)	3557450	200.000	167	
94 sec-Butylbenzene	105	15.069	15.066	(0.971)	4046186	200.000	160	
95 1,2-Dichlorobenzene	146	16.220	16.216	(1.045)	1592710	200.000	179	
96 1,2-Dibromo-3-Chloropropane	75	17.571	17.568	(1.132)	203549	200.000	201(A)	
97 1,3,5-Trichlorobenzene	180	17.628	17.625	(1.136)	1223539	200.000	180	
98 Hexachlorobutadiene	225	18.729	18.726	(1.207)	547084	200.000	152	
99 1,2,4-Trichlorobenzene	180	18.764	18.762	(1.209)	1001057	200.000	212(A)	
100 1,2,3-Trimethylbenzene	105	15.591	15.581	(1.005)	3179219	200.000	164	
101 Naphthalene	128	19.350	19.348	(1.247)	2071571	200.000	253(A)	
102 1,2,3-Trichlorobenzene	180	19.686	19.684	(1.269)	664752	200.000	221(A)	
103 Methyl Acetate	43	4.969	4.973	(0.618)	556970	200.000	193	
104 Methylcyclohexane	83	8.628	8.625	(1.073)	1024485	200.000	194	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1962.D
Date : 28-MAR-2015 14:09
Client ID: Initial Calibration
Sample Info: WG160458-6
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: REC
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1963.D
Report Date: 01-Apr-2015 14:29

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C032815B.b\C1963.D
Lab Smp Id: WG160458-5 Client Smp ID: Initial Calibration
Inj Date : 28-MAR-2015 14:44 MS Autotune Date: 03-FEB-2015 11:03
Operator : REC Inst ID: gcms-c.i
Smp Info : WG160458-5
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C032815B.b\C826A34.m
Meth Date : 30-Mar-2015 07:38 rcrocker Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.988	1.986	(0.247)	508768	100.000	97.3	
2 Chloromethane	50	2.224	2.229	(0.277)	768562	100.000	89.1	
3 Vinyl chloride	62	2.324	2.329	(0.289)	595445	100.000	93.2	
4 Bromomethane	94	2.724	2.729	(0.339)	271875	100.000	86.5	
5 Chloroethane	64	2.882	2.879	(0.358)	198531	100.000	73.2	
6 Trichlorofluoromethane	101	3.053	3.058	(0.380)	548313	100.000	86.5	
7 Diethyl Ether	59	3.489	3.487	(0.434)	192691	100.000	102	
8 Tertiary-butyl alcohol	59	5.348	5.338	(0.665)	259521	500.000	463	
9 1,1-Dichloroethene	96	3.747	3.751	(0.466)	420862	100.000	97.4	
10 Carbon Disulfide	76	3.782	3.780	(0.470)	282937	100.000	88.3	
11 Freon-113	151	3.811	3.815	(0.474)	207845	100.000	99.1	
12 Iodomethane	142	3.954	3.958	(0.492)	289809	100.000	96.9	
13 Acrolein	56	4.268	4.266	(0.531)	309537	500.000	534	
14 Methylene Chloride	84	4.647	4.652	(0.578)	506313	100.000	93.8	
15 Acetone	43	4.747	4.745	(0.590)	665958	500.000	457	
16 Isobutyl Alcohol	43	8.250	8.247	(1.026)	368064	2000.00	2060	
17 trans-1,2-Dichloroethene	96	4.912	4.916	(0.611)	499037	100.000	96.3	
18 Allyl Chloride	41	4.468	4.473	(0.556)	550906	100.000	98.1	
19 Methyl tert-butyl ether	73	5.126	5.123	(0.637)	2061304	200.000	198	
20 Acetonitrile	39	5.548	5.538	(0.690)	109715	1000.00	929	
21 Di-isopropyl ether	45	5.784	5.781	(0.719)	1365059	100.000	99.3	
22 Chloroprene	53	5.905	5.910	(0.734)	746352	100.000	97.5	
23 Propionitrile	54	7.964	7.961	(0.990)	647792	1000.00	971	
24 Methacrylonitrile	41	7.985	7.983	(0.993)	2164339	1000.00	907	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1963.D
Report Date: 01-Apr-2015 14:29

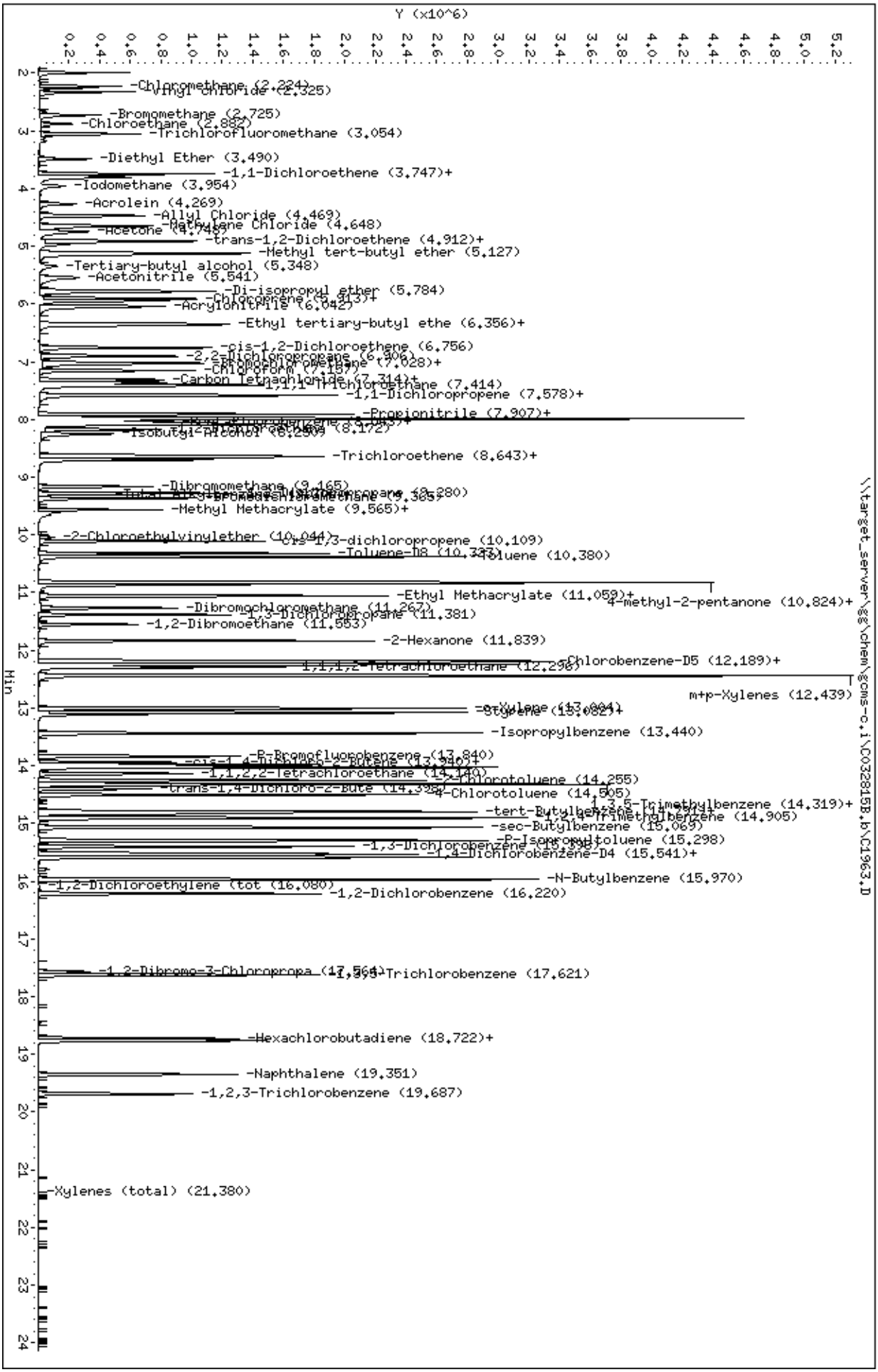
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.948	5.946	(0.740)	917748	100.000	97.3	
	26 Acrylonitrile	52	6.041	6.038	(0.751)	725522	500.000	503	
	27 Ethyl tertiary-butyl ether	59	6.348	6.346	(0.789)	1296437	100.000	101	
	28 Vinyl Acetate	43	6.370	6.367	(0.732)	879452	100.000	102	
	29 cis-1,2-Dichloroethene	96	6.756	6.753	(0.840)	524291	100.000	97.7	
	31 Methyl Methacrylate	41	9.565	9.562	(1.099)	350755	100.000	101	
	32 2,2-Dichloropropane	77	6.906	6.903	(0.859)	737239	100.000	98.6	
	33 Bromochloromethane	128	7.035	7.032	(0.875)	167553	100.000	95.3	
	34 Chloroform	83	7.156	7.154	(0.890)	897933	100.000	96.6	
	35 Carbon Tetrachloride	117	7.313	7.318	(0.841)	574980	100.000	106	
	36 Tetrahydrofuran	42	7.356	7.361	(0.915)	551260	500.000	522	
$	37 Dibromofluoromethane	113	7.399	7.397	(0.920)	325501	100.000	98.9	
	38 1,1,1-Trichloroethane	97	7.413	7.411	(0.922)	813222	100.000	96.1	
	39 1,1-Dichloropropene	75	7.578	7.582	(0.871)	691402	100.000	96.6	
	40 2-Butanone	43	7.578	7.575	(0.942)	945074	500.000	495	
	41 Benzene	78	7.907	7.911	(0.909)	1789645	100.000	94.6	
*	42 Pentafluorobenzene	168	8.042	8.039	(1.000)	473641	50.0000		
	43 Cyclohexane	56	7.020	7.018	(0.873)	441543	100.000	103	
	44 Ethyl Methacrylate	69	11.059	11.056	(1.271)	530869	100.000	106	
$	45 1,2-Dichloroethane-D4	65	8.092	8.090	(1.006)	387322	100.000	90.4	
	46 Tertiary-amyl methyl ether	73	8.078	8.076	(1.004)	1031394	100.000	104	
	47 1,2-Dichloroethane	62	8.178	8.176	(0.940)	643827	100.000	92.7	
	48 Trichloroethene	95	8.650	8.647	(0.994)	493820	100.000	91.6	
*	49 1,4-Difluorobenzene	114	8.700	8.696	(1.000)	831289	50.0000		
	50 Dibromomethane	93	9.165	9.162	(1.053)	278794	100.000	93.2	
	51 1,2-Dichloropropane	63	9.286	9.284	(1.067)	465015	100.000	97.3	
	52 Bromodichloromethane	83	9.365	9.369	(1.076)	668595	100.000	101	
	53 cis-1,3-dichloropropene	75	10.108	10.106	(1.162)	807893	100.000	102	
	54 1,4-Dioxane	88	9.608	9.612	(1.104)	132927	2000.00	1340	
$	55 Toluene-D8	98	10.323	10.320	(1.186)	1191049	100.000	91.6	
	56 2-Chloroethylvinylether	63	10.044	10.048	(1.154)	40384	100.000	73.6	
	57 Toluene	92	10.380	10.377	(1.193)	1162021	100.000	94.4	
	58 4-methyl-2-pentanone	43	10.823	10.828	(1.244)	1766610	500.000	468	
	59 Tetrachloroethene	164	10.823	10.820	(0.888)	374117	100.000	97.0	
	60 trans-1,3-Dichloropropene	75	10.866	10.871	(1.249)	687497	100.000	101	
	61 1,1,2-Trichloroethane	83	11.059	11.056	(1.271)	331198	100.000	96.2	
	62 Dibromochloromethane	129	11.266	11.271	(0.924)	484821	100.000	106	
	63 1,3-Dichloropropane	76	11.381	11.385	(0.934)	734801	100.000	97.0	
	64 1,2-Dibromoethane	107	11.552	11.550	(1.328)	437224	100.000	94.7	
	65 2-Hexanone	43	11.838	11.835	(0.971)	1372658	500.000	510	
*	66 Chlorobenzene-D5	117	12.188	12.193	(1.000)	756815	50.0000		
	67 Chlorobenzene	112	12.210	12.214	(1.002)	1198435	100.000	96.2	
	152 1-Chlorohexane	91	12.181	12.186	(0.999)	742095	100.000	96.3	
	68 Ethylbenzene	106	12.245	12.243	(1.005)	713119	100.000	95.4	
	69 1,1,1,2-Tetrachloroethane	131	12.296	12.293	(1.009)	466384	100.000	102	
	71 m+p-Xylenes	106	12.438	12.436	(1.021)	1639207	200.000	188	
	72 o-Xylene	106	13.003	13.008	(1.067)	814764	100.000	98.0	
	73 Styrene	104	13.082	13.079	(1.073)	1424767	100.000	101	
	74 Bromoform	173	13.118	13.115	(1.076)	309495	100.000	104	
	75 Isopropylbenzene	105	13.439	13.437	(0.866)	2161258	100.000	92.2	
$	76 P-Bromofluorobenzene	95	13.839	13.837	(1.591)	545020	100.000	91.9	
	77 cis-1,4-Dichloro-2-Butene	53	13.940	13.937	(0.898)	214259	100.000	104	
	78 trans-1,4-Dichloro-2-Butene	53	14.397	14.394	(0.928)	166066	100.000	101	
	79 Bromobenzene	156	13.982	13.987	(0.901)	544056	100.000	94.9	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1963.D
Report Date: 01-Apr-2015 14:29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	80 N-Propylbenzene	91	14.025	14.030	(0.904)	2570071	100.000	90.6	
	81 1,1,2,2-Tetrachloroethane	83	14.140	14.137	(0.911)	591316	100.000	96.8	
	82 1,3,5-Trimethylbenzene	105	14.318	14.316	(0.923)	1979926	100.000	92.1	
	83 2-Chlorotoluene	91	14.254	14.252	(0.918)	1630601	100.000	91.9	
	84 1,2,3-Trichloropropane	75	14.333	14.337	(0.924)	471909	100.000	94.3	
	85 4-Chlorotoluene	91	14.504	14.502	(0.935)	1666327	100.000	93.5	
	86 tert-Butylbenzene	119	14.790	14.795	(0.953)	1819504	100.000	94.0	
	87 Pentachloroethane	117	14.826	14.823	(0.955)	382218	100.000	99.9	
	88 1,2,4-Trimethylbenzene	105	14.905	14.902	(0.960)	1962763	100.000	92.6	
	89 P-Isopropyltoluene	119	15.298	15.295	(0.986)	1960834	100.000	92.7	
	90 1,3-Dichlorobenzene	146	15.398	15.402	(0.992)	933858	100.000	92.4	
*	91 1,4-Dichlorobenzene-D4	152	15.519	15.517	(1.000)	427665	50.0000		
	92 1,4-Dichlorobenzene	146	15.541	15.545	(1.001)	990622	100.000	91.7	
	93 N-Butylbenzene	91	15.970	15.967	(1.029)	2054991	100.000	94.7	
	94 sec-Butylbenzene	105	15.069	15.066	(0.971)	2349013	100.000	91.4	
	95 1,2-Dichlorobenzene	146	16.220	16.216	(1.045)	863759	100.000	95.4	
	96 1,2-Dibromo-3-Chloropropane	75	17.564	17.568	(1.132)	106884	100.000	103	
	97 1,3,5-Trichlorobenzene	180	17.621	17.625	(1.135)	650060	100.000	94.0	
	98 Hexachlorobutadiene	225	18.722	18.726	(1.206)	306367	100.000	83.3	
	99 1,2,4-Trichlorobenzene	180	18.764	18.762	(1.209)	526680	100.000	109	
	100 1,2,3-Trimethylbenzene	105	15.584	15.581	(1.004)	1814663	100.000	91.9	
	101 Naphthalene	128	19.351	19.348	(1.247)	1132881	100.000	136	
	102 1,2,3-Trichlorobenzene	180	19.687	19.684	(1.269)	358731	100.000	117	
	103 Methyl Acetate	43	4.969	4.973	(0.618)	304611	100.000	103	
	104 Methylcyclohexane	83	8.629	8.625	(1.073)	539860	100.000	100	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1963.D
Date : 28-MAR-2015 14:44
Client ID: Initial Calibration
Sample Info: WG160458-5
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: REC
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1964.D
Report Date: 01-Apr-2015 14:57

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C032815B.b\C1964.D
Lab Smp Id: WG160458-7 Client Smp ID: Independent Source
Inj Date : 28-MAR-2015 15:18 MS Autotune Date: 03-FEB-2015 11:03
Operator : REC Inst ID: gcms-c.i
Smp Info : WG160458-7
Misc Info : WG160458,WG160458-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C032815B.b\C826A34.m
Meth Date : 30-Mar-2015 07:38 rcrocker Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 8 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.993	1.986	(0.248)	348944	66.2635	66.3(R)	
2 Chloromethane	50	2.229	2.229	(0.277)	452826	60.8866	60.9(R)	
3 Vinyl chloride	62	2.329	2.329	(0.290)	341392	53.0220	53.0	
4 Bromomethane	94	2.729	2.729	(0.339)	177310	65.0061	65.0(R)	
5 Chloroethane	64	2.879	2.879	(0.358)	123753	58.6819	58.7	
6 Trichlorofluoromethane	101	3.058	3.058	(0.380)	314009	49.1552	49.2	
7 Diethyl Ether	59	3.487	3.487	(0.434)	98687	51.6003	51.6	
8 Tertiary-butyl alcohol	59	5.338	5.338	(0.664)	135723	262.466	262	
9 1,1-Dichloroethene	96	3.751	3.751	(0.467)	242960	55.8364	55.8	
10 Carbon Disulfide	76	3.787	3.780	(0.471)	792585	272.444	272(AR)	
11 Freon-113	151	3.816	3.815	(0.475)	109460	51.8211	51.8	
12 Iodomethane	142	3.958	3.958	(0.492)	221672	73.5552	73.6(R)	
13 Acrolein	56	4.266	4.266	(0.531)	144107	246.918	247	
14 Methylene Chloride	84	4.652	4.652	(0.579)	275513	50.6642	50.7	
15 Acetone	43	4.752	4.745	(0.591)	127247	86.6692	86.7(R)	
16 Isobutyl Alcohol	43	8.254	8.247	(1.027)	186049	977.036	977	
17 trans-1,2-Dichloroethene	96	4.916	4.916	(0.612)	261527	50.0931	50.1	
18 Allyl Chloride	41	4.473	4.473	(0.556)	291624	51.5294	51.5	
19 Methyl tert-butyl ether	73	5.124	5.123	(0.637)	1190827	113.475	113	
20 Acetonitrile	39	5.538	5.538	(0.689)	50107	421.199	421	
21 Di-isopropyl ether	45	5.781	5.781	(0.719)	721927	52.1046	52.1	
22 Chloroprene	53	5.910	5.910	(0.735)	396663	51.4095	51.4	
23 Propionitrile	54	7.961	7.961	(0.990)	339859	505.722	506	
24 Methacrylonitrile	41	7.983	7.983	(0.993)	1207871	502.570	502	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1964.D
Report Date: 01-Apr-2015 14:57

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	25	1,1-Dichloroethane	63	5.946	5.946	(0.740)	505503	53.2062	53.2	
	26	Acrylonitrile	52	6.039	6.038	(0.751)	356638	245.543	246	
	27	Ethyl tertiary-butyl ether	59	6.346	6.346	(0.789)	680481	52.4877	52.5	
	28	Vinyl Acetate	43	6.367	6.367	(0.732)	525041	60.1588	60.2(R)	
	29	cis-1,2-Dichloroethene	96	6.761	6.753	(0.841)	283804	52.5082	52.5	
M	30	1,2-Dichloroethylene (total)	96				545331	102.601	103	
	31	Methyl Methacrylate	41	9.563	9.562	(1.099)	179232	51.3404	51.3	
	32	2,2-Dichloropropane	77	6.903	6.903	(0.859)	396906	52.6708	52.7	
	33	Bromochloromethane	128	7.039	7.032	(0.876)	115153	64.9914	65.0(R)	
	34	Chloroform	83	7.154	7.154	(0.890)	491859	52.5009	52.5	
	35	Carbon Tetrachloride	117	7.318	7.318	(0.841)	306394	52.4535	52.4	
	36	Tetrahydrofuran	42	7.361	7.361	(0.916)	65382	61.4782	61.5(R)	
$	37	Dibromofluoromethane	113	7.397	7.397	(0.920)	170952	51.5677	51.6	
	38	1,1,1-Trichloroethane	97	7.411	7.411	(0.922)	435583	51.0938	51.1	
	39	1,1-Dichloropropene	75	7.583	7.582	(0.872)	396452	54.8139	54.8	
	40	2-Butanone	43	7.583	7.575	(0.943)	129551	67.3270	67.3(R)	
	41	Benzene	78	7.904	7.911	(0.909)	984940	51.5379	51.5	
*	42	Pentafluorobenzene	168	8.040	8.039	(1.000)	477232	50.0000		
	43	Cyclohexane	56	7.018	7.018	(0.873)	418182	96.6826	96.7(R)	
	44	Ethyl Methacrylate	69	11.056	11.056	(1.271)	273528	53.8247	53.8	
$	45	1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	214821	49.7472	49.7	
	46	Tertiary-amyl methyl ether	73	8.076	8.076	(1.004)	537100	53.5447	53.5	
	47	1,2-Dichloroethane	62	8.176	8.176	(0.940)	353356	50.3823	50.4	
	48	Trichloroethene	95	8.648	8.647	(0.994)	271207	49.8276	49.8	
*	49	1,4-Difluorobenzene	114	8.698	8.696	(1.000)	839631	50.0000		
	50	Dibromomethane	93	9.162	9.162	(1.053)	153922	50.9510	51.0	
	51	1,2-Dichloropropane	63	9.284	9.284	(1.067)	262158	54.3087	54.3	
	52	Bromodichloromethane	83	9.370	9.369	(1.077)	376241	56.4490	56.4	
	53	cis-1,3-dichloropropene	75	10.106	10.106	(1.162)	416737	51.9760	52.0	
	54	1,4-Dioxane	88	9.605	9.612	(1.104)	83551	831.226	831	
$	55	Toluene-D8	98	10.320	10.320	(1.187)	642441	48.9459	48.9	
	56	2-Chloroethylvinylether	63	10.049	10.048	(1.155)	24293	49.4028	49.4	
	57	Toluene	92	10.377	10.377	(1.193)	639980	51.5028	51.5	
	58	4-methyl-2-pentanone	43	10.828	10.828	(1.245)	223862	58.7528	58.8	
	59	Tetrachloroethene	164	10.821	10.820	(0.888)	245662	62.4930	62.5(R)	
	60	trans-1,3-Dichloropropene	75	10.871	10.871	(1.250)	387847	56.2628	56.3	
	61	1,1,2-Trichloroethane	83	11.056	11.056	(1.271)	181278	52.1411	52.1	
	62	Dibromochloromethane	129	11.264	11.271	(0.924)	259548	55.5314	55.5	
	63	1,3-Dichloropropane	76	11.385	11.385	(0.934)	404333	52.3537	52.4	
	64	1,2-Dibromoethane	107	11.550	11.550	(1.328)	239847	51.4115	51.4	
	65	2-Hexanone	43	11.836	11.835	(0.971)	179445	65.4717	65.5(R)	
*	66	Chlorobenzene-D5	117	12.186	12.193	(1.000)	771441	50.0000		
	67	Chlorobenzene	112	12.214	12.214	(1.002)	712072	56.0606	56.1	
	152	1-Chlorohexane	91	12.186	12.186	(1.000)	385914	49.1527	49.2	
	68	Ethylbenzene	106	12.243	12.243	(1.005)	383925	50.4005	50.4	
	69	1,1,1,2-Tetrachloroethane	131	12.293	12.293	(1.009)	253702	54.2863	54.3	
M	70	Xylenes (total)	106				1406833	161.035	161	
	71	m+p-Xylenes	106	12.436	12.436	(1.021)	930465	104.819	105	
	72	o-Xylene	106	13.008	13.008	(1.067)	476368	56.2155	56.2	
	73	Styrene	104	13.079	13.079	(1.073)	786361	54.6622	54.7	
	74	Bromoform	173	13.115	13.115	(1.076)	162499	53.3653	53.4	
	75	Isopropylbenzene	105	13.437	13.437	(0.866)	1286520	54.5749	54.6	
$	76	P-Bromofluorobenzene	95	13.837	13.837	(1.591)	290179	48.4378	48.4	
	77	cis-1,4-Dichloro-2-Butene	53	13.937	13.937	(0.898)	103606	50.2139	50.2	

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1964.D
Report Date: 01-Apr-2015 14:57

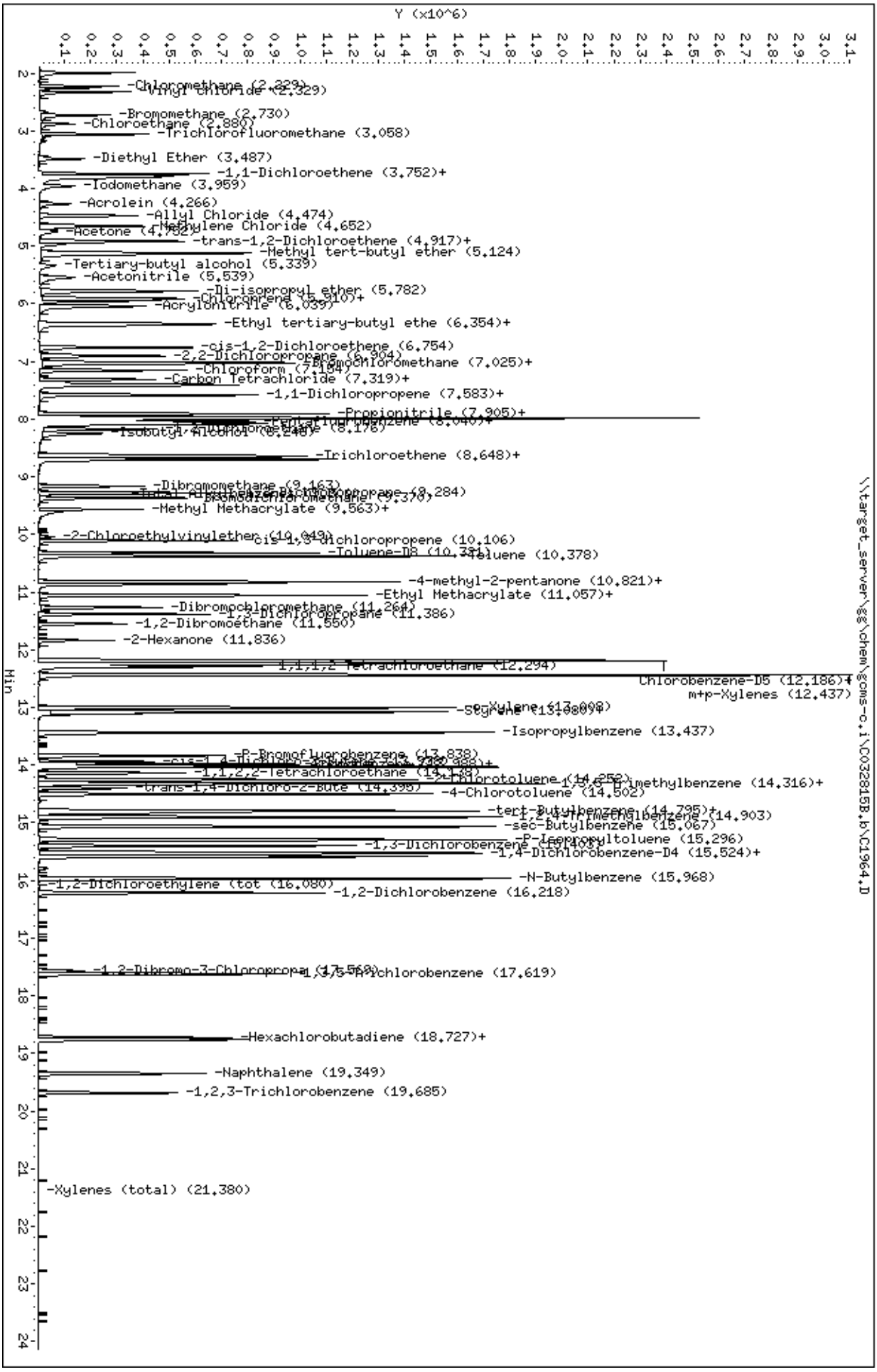
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.394	(0.928)	81801	49.5609	49.6	
	79 Bromobenzene	156	13.987	13.987	(0.901)	295710	51.2838	51.3	
	80 N-Propylbenzene	91	14.030	14.030	(0.904)	1572013	55.1053	55.1	
	81 1,1,2,2-Tetrachloroethane	83	14.137	14.137	(0.911)	312553	50.8857	50.9	
	82 1,3,5-Trimethylbenzene	105	14.316	14.316	(0.923)	1088588	50.3154	50.3	
	83 2-Chlorotoluene	91	14.252	14.252	(0.918)	963816	54.0069	54.0	
	84 1,2,3-Trichloropropane	75	14.330	14.337	(0.924)	257892	51.2159	51.2	
	85 4-Chlorotoluene	91	14.502	14.502	(0.935)	1011540	56.4209	56.4	
	86 tert-Butylbenzene	119	14.795	14.795	(0.953)	1027397	52.7923	52.8	
	87 Pentachloroethane	117	14.823	14.823	(0.955)	165441	42.9829	43.0	
	88 1,2,4-Trimethylbenzene	105	14.902	14.902	(0.960)	1100801	51.6455	51.6	
	89 P-Isopropyltoluene	119	15.295	15.295	(0.986)	1166714	54.8272	54.8	
	90 1,3-Dichlorobenzene	146	15.402	15.402	(0.993)	561900	55.2921	55.3	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.517	(1.000)	430221	50.0000		
	92 1,4-Dichlorobenzene	146	15.545	15.545	(1.002)	541575	49.8602	49.9	
	93 N-Butylbenzene	91	15.967	15.967	(1.029)	1149436	52.6391	52.6	
	94 sec-Butylbenzene	105	15.066	15.066	(0.971)	1415248	54.7348	54.7	
	95 1,2-Dichlorobenzene	146	16.217	16.216	(1.045)	505708	55.5248	55.5	
	96 1,2-Dibromo-3-Chloropropane	75	17.568	17.568	(1.132)	54395	52.3116	52.3	
	97 1,3,5-Trichlorobenzene	180	17.625	17.625	(1.136)	350268	50.3400	50.3	
	98 Hexachlorobutadiene	225	18.726	18.726	(1.207)	171890	56.5464	56.5	
	99 1,2,4-Trichlorobenzene	180	18.762	18.762	(1.209)	281380	53.3789	53.4	
	100 1,2,3-Trimethylbenzene	105	15.581	15.581	(1.004)	985787	49.6429	49.6	
	101 Naphthalene	128	19.348	19.348	(1.247)	571230	52.8662	52.9	
	102 1,2,3-Trichlorobenzene	180	19.684	19.684	(1.269)	190864	54.4213	54.4	
	103 Methyl Acetate	43	4.966	4.973	(0.618)	145781	48.8292	48.8	
	104 Methylcyclohexane	83	8.626	8.625	(1.073)	295115	54.2471	54.2	
M	153 Total Alkylbenzenes	100				8520197	372.059	372	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1964.D
Date : 28-MAR-2015 15:18
Client ID: Independent Source
Sample Info: WG160458-7
Purge Volume: 5.0
Column phase: RTX-VMS

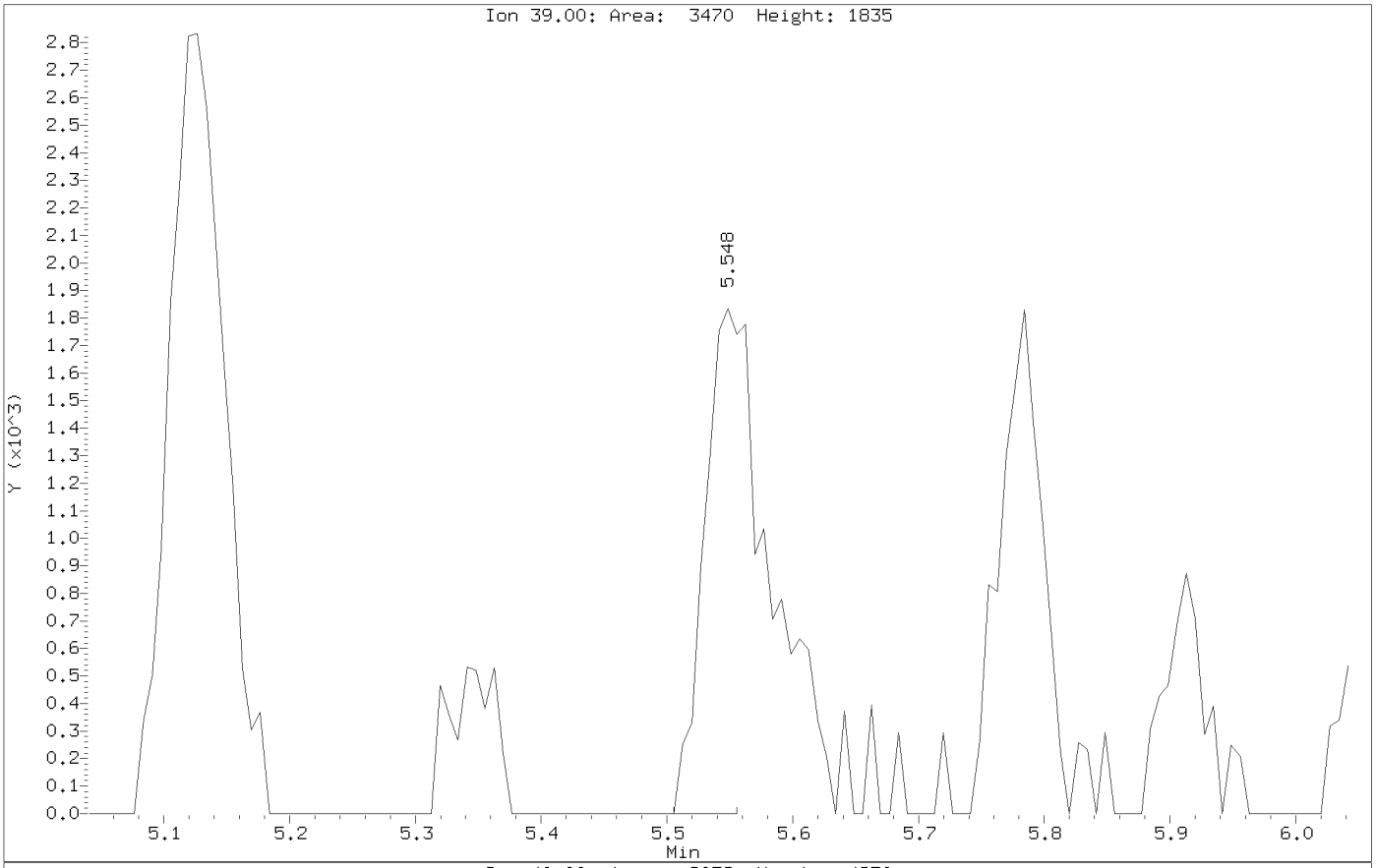
Instrument: gcms-c.i
Operator: REC
Column diameter: 0.18

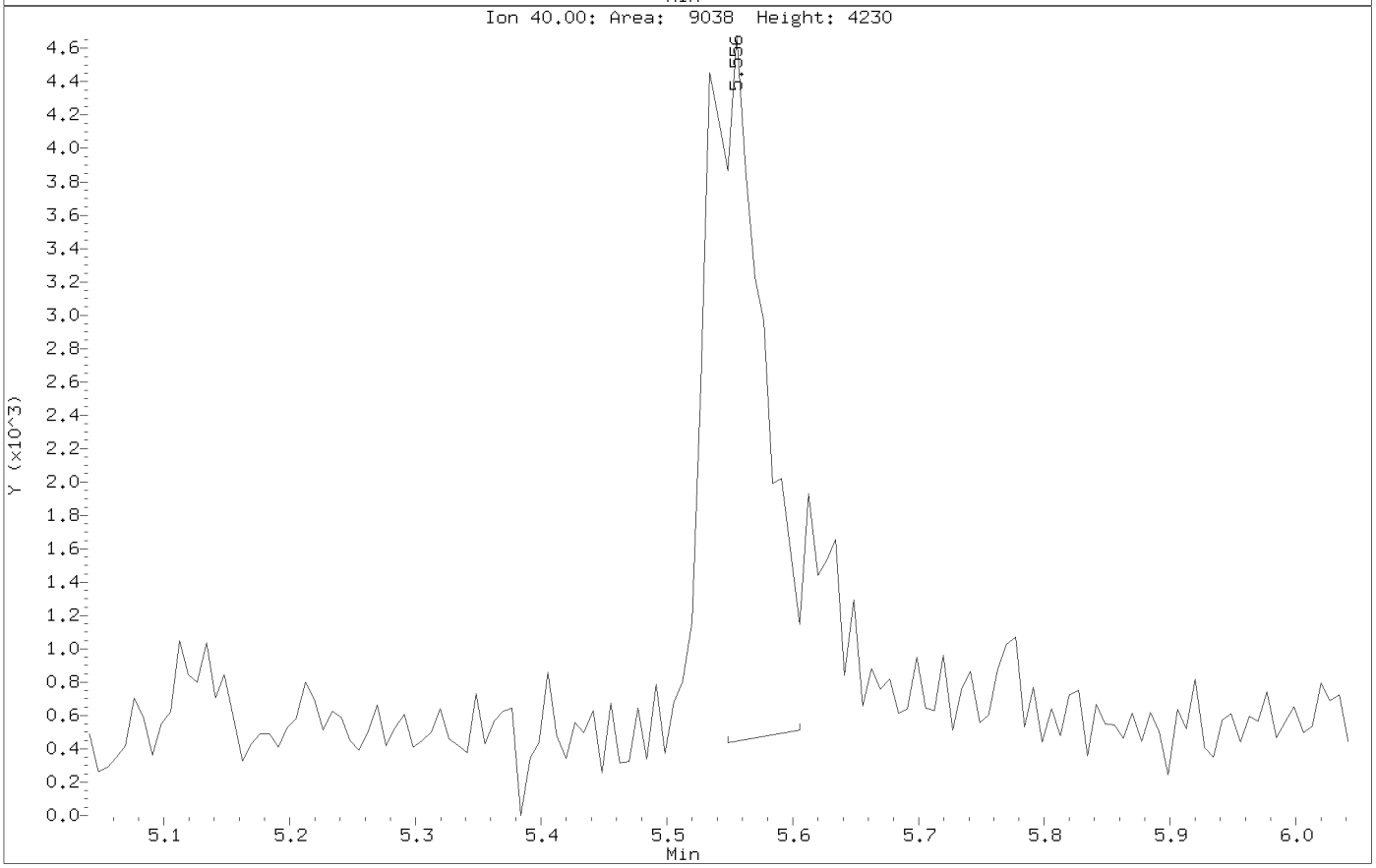


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1959.D
Injection Date: 28-MAR-2015 12:25
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8

BEFORE MANUAL INTEGRATION

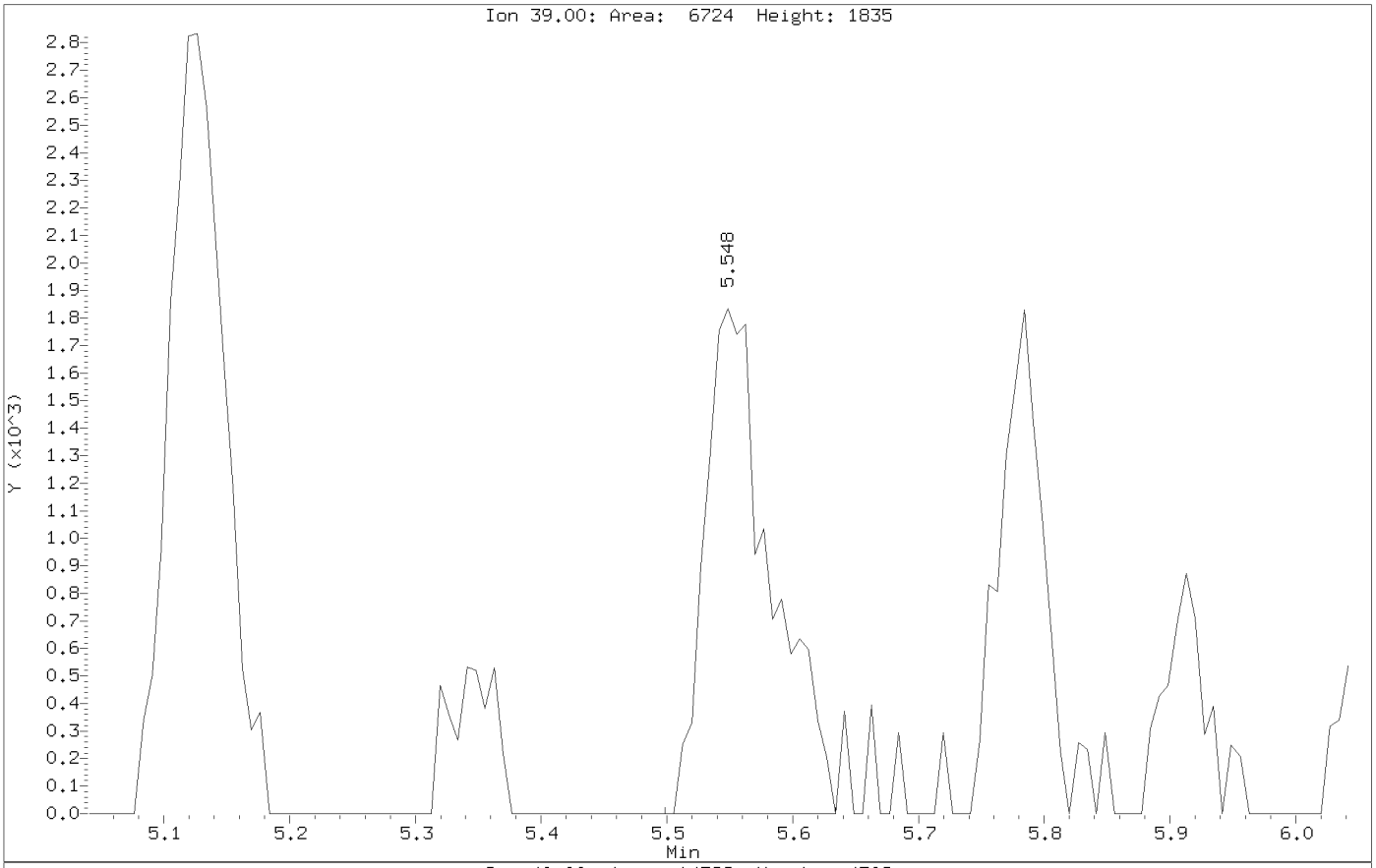


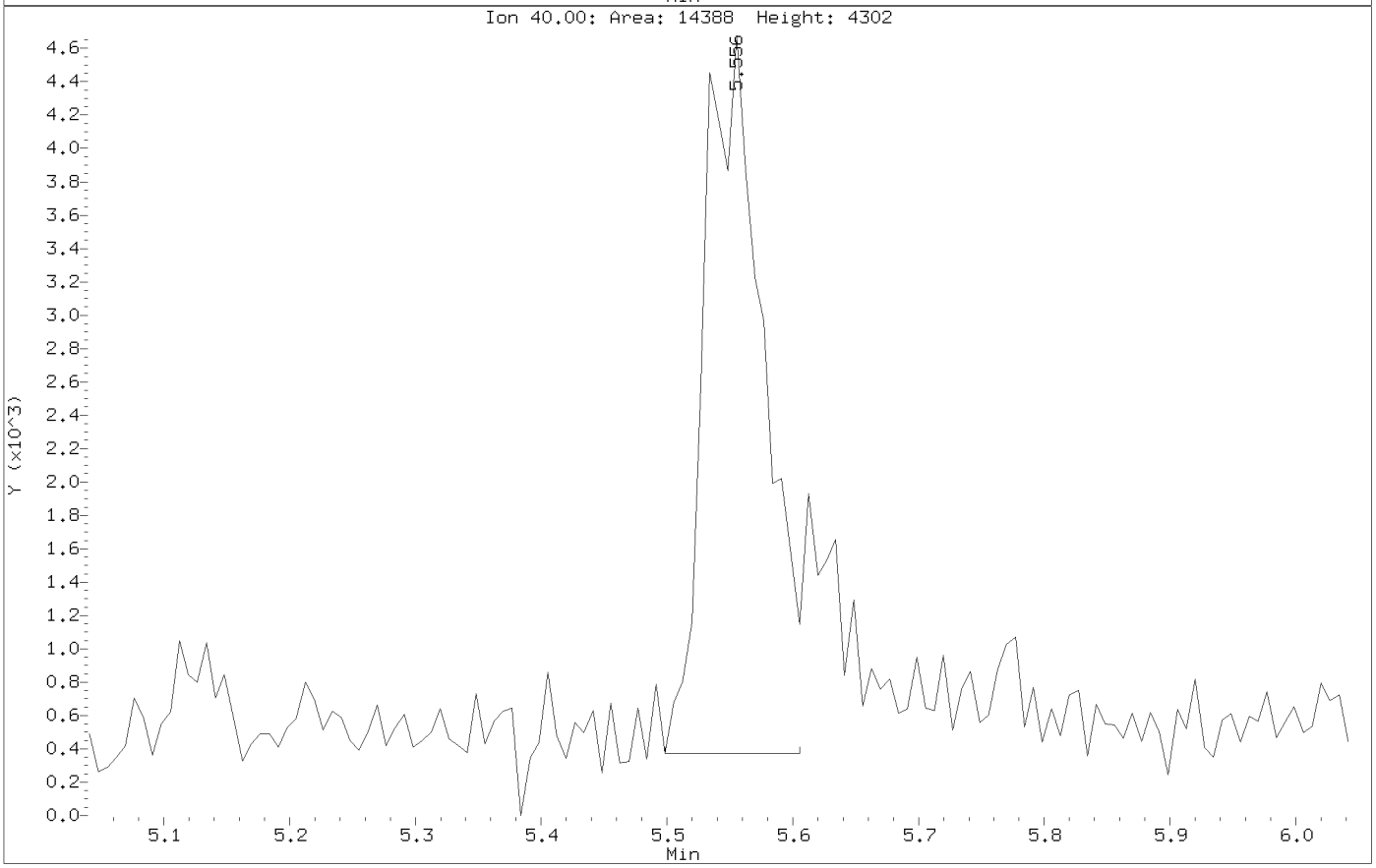


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1959.D
Injection Date: 28-MAR-2015 12:25
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8

AFTER MANUAL INTEGRATION

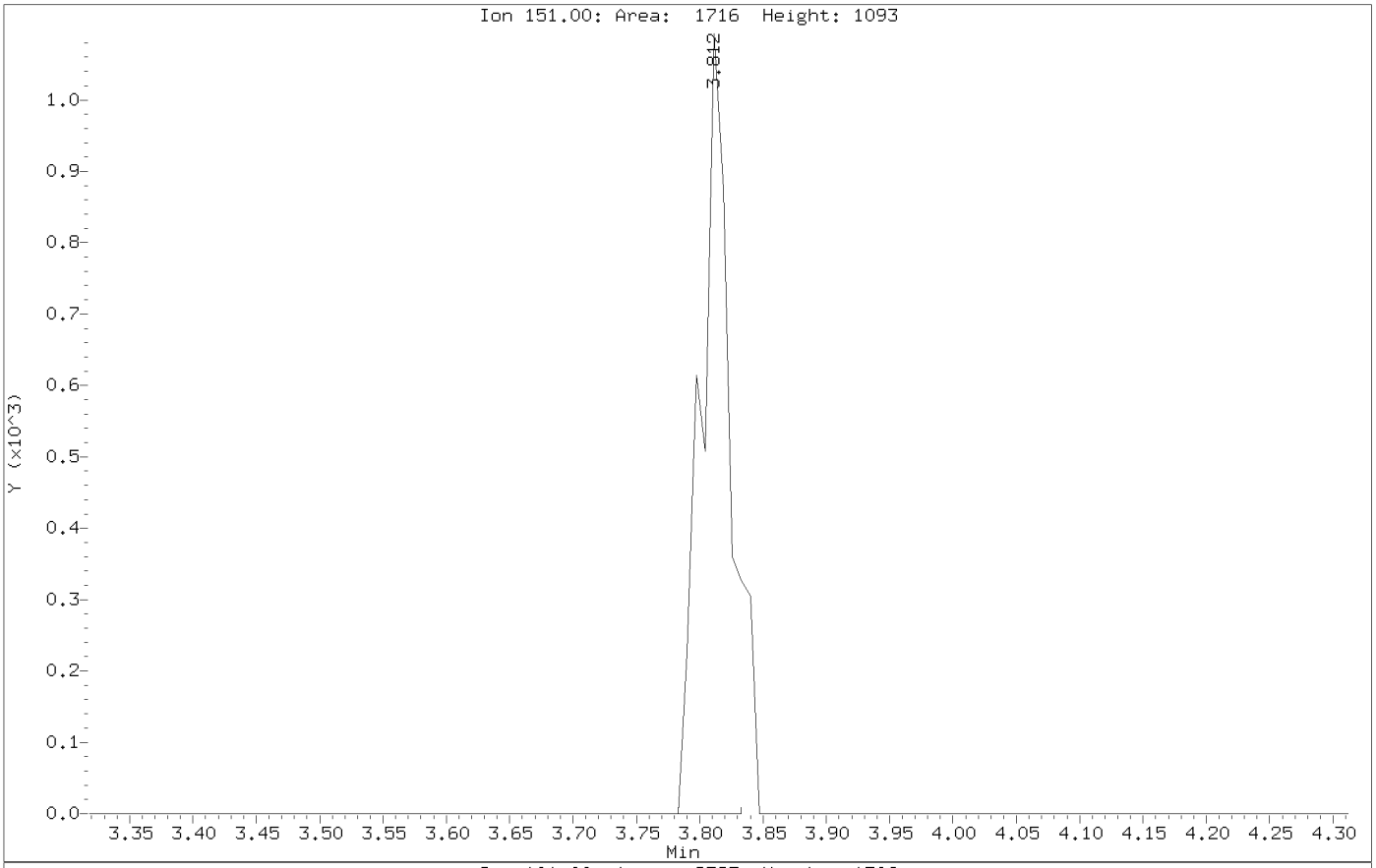


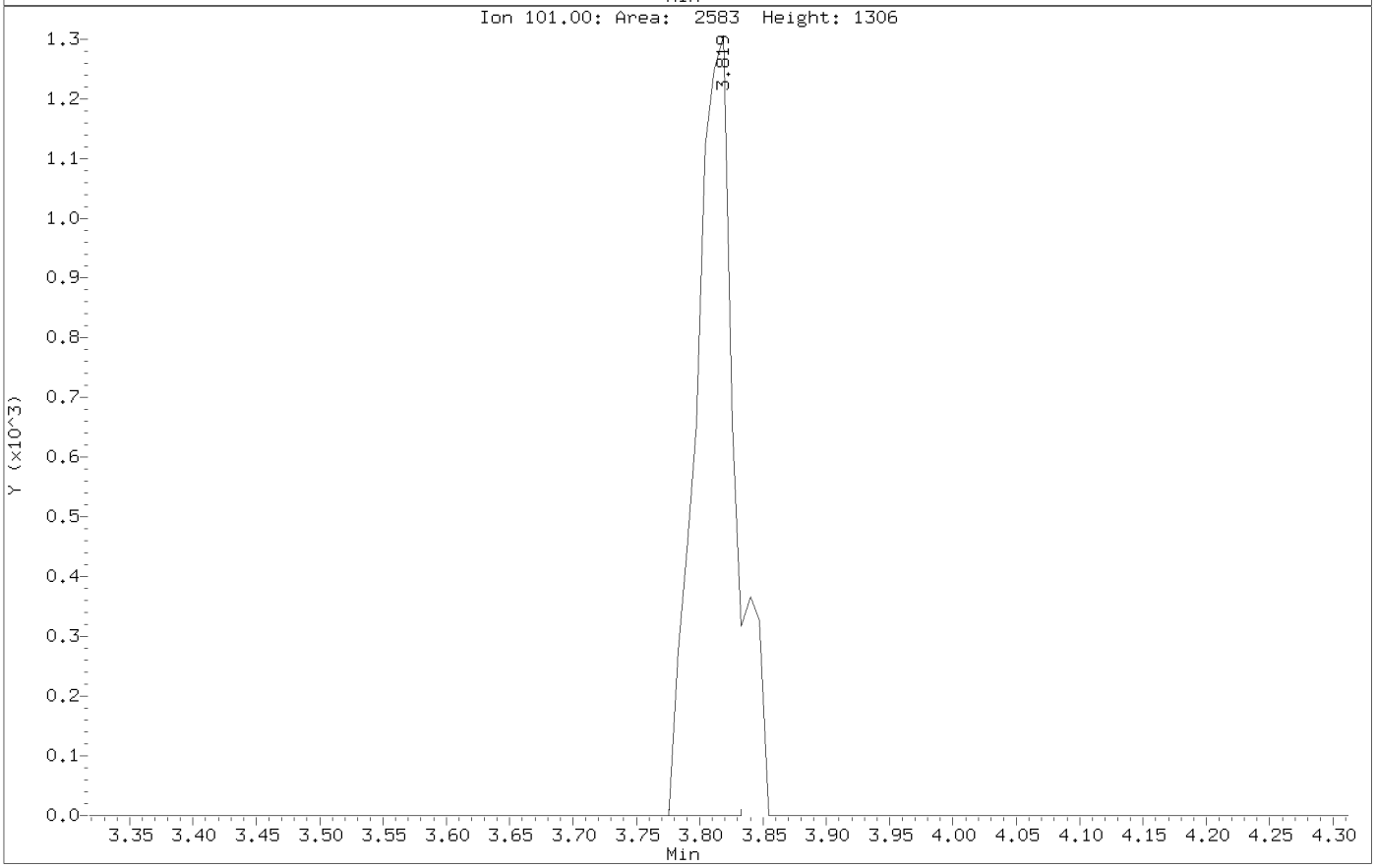


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Freon-113
CAS Number: 76-13-1

BEFORE MANUAL INTEGRATION

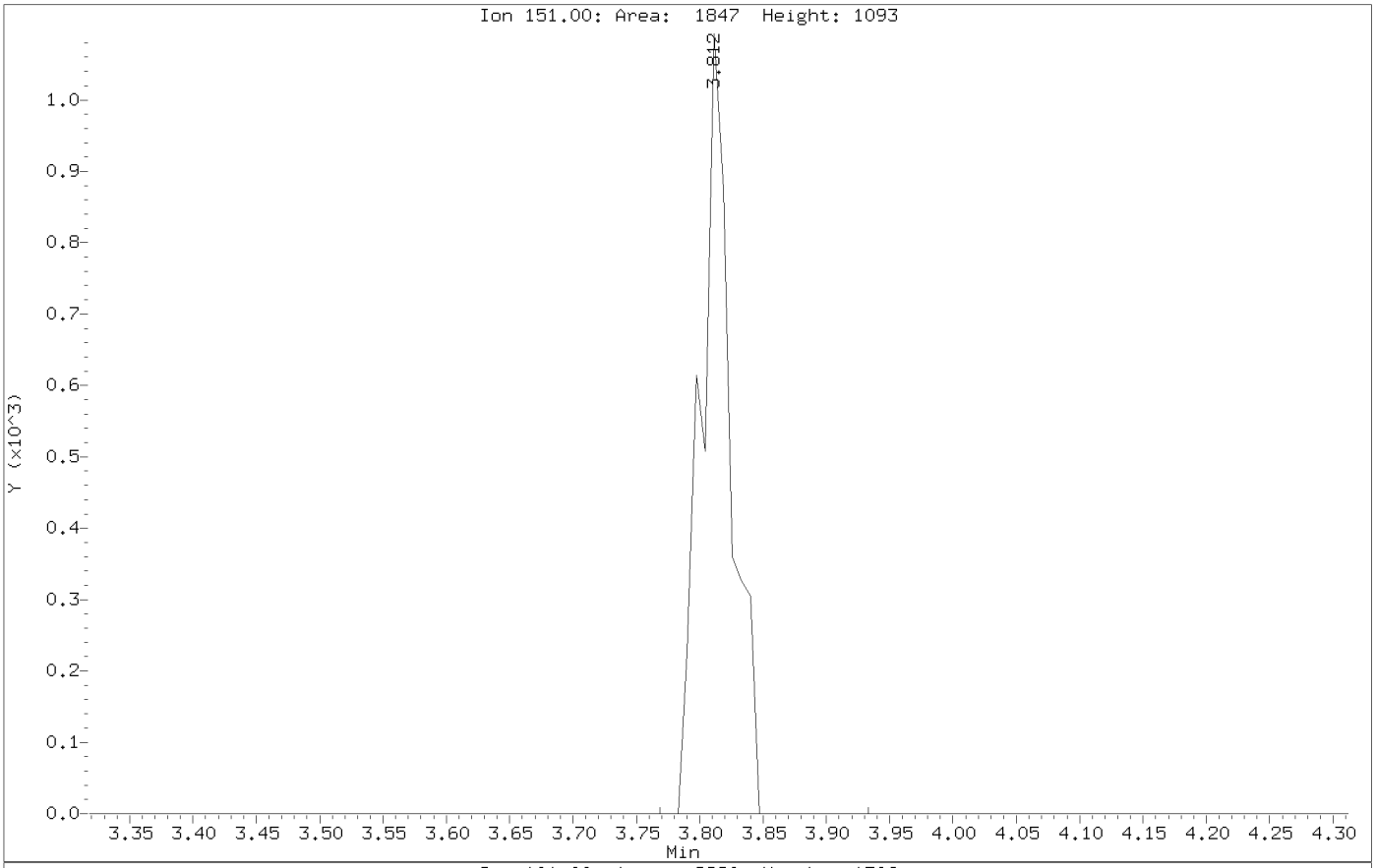


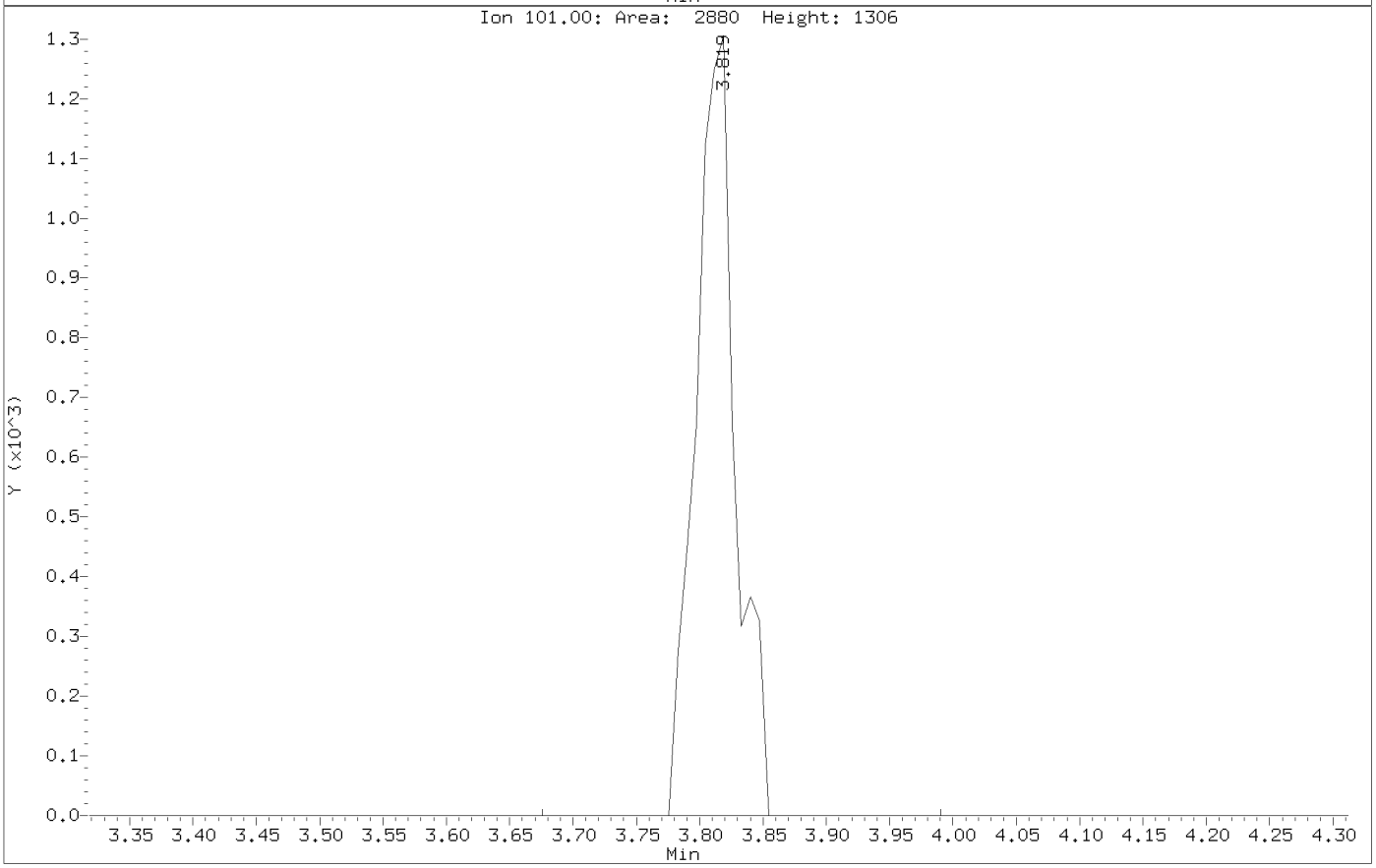


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Freon-113
CAS Number: 76-13-1

AFTER MANUAL INTEGRATION

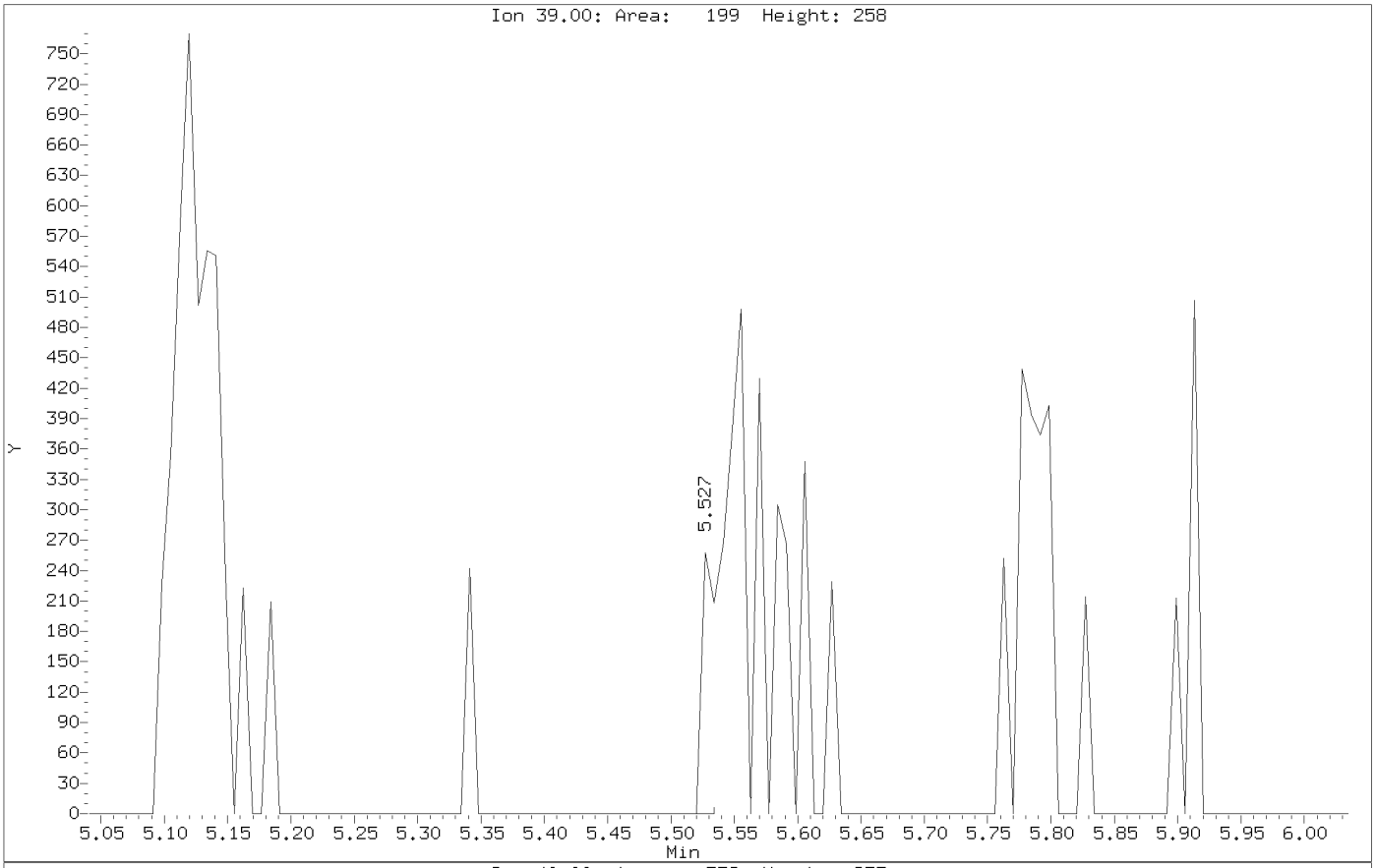


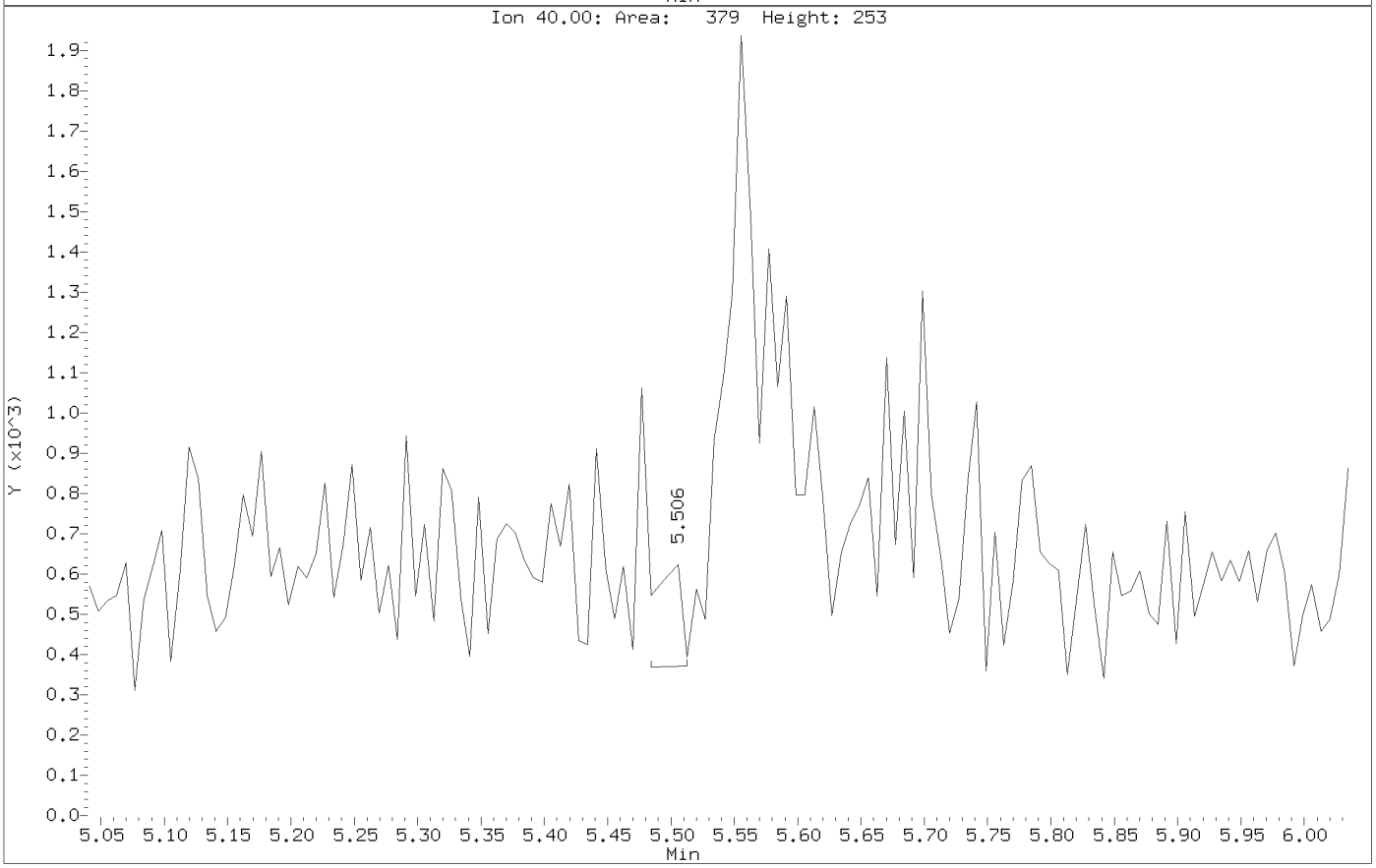


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8

BEFORE MANUAL INTEGRATION

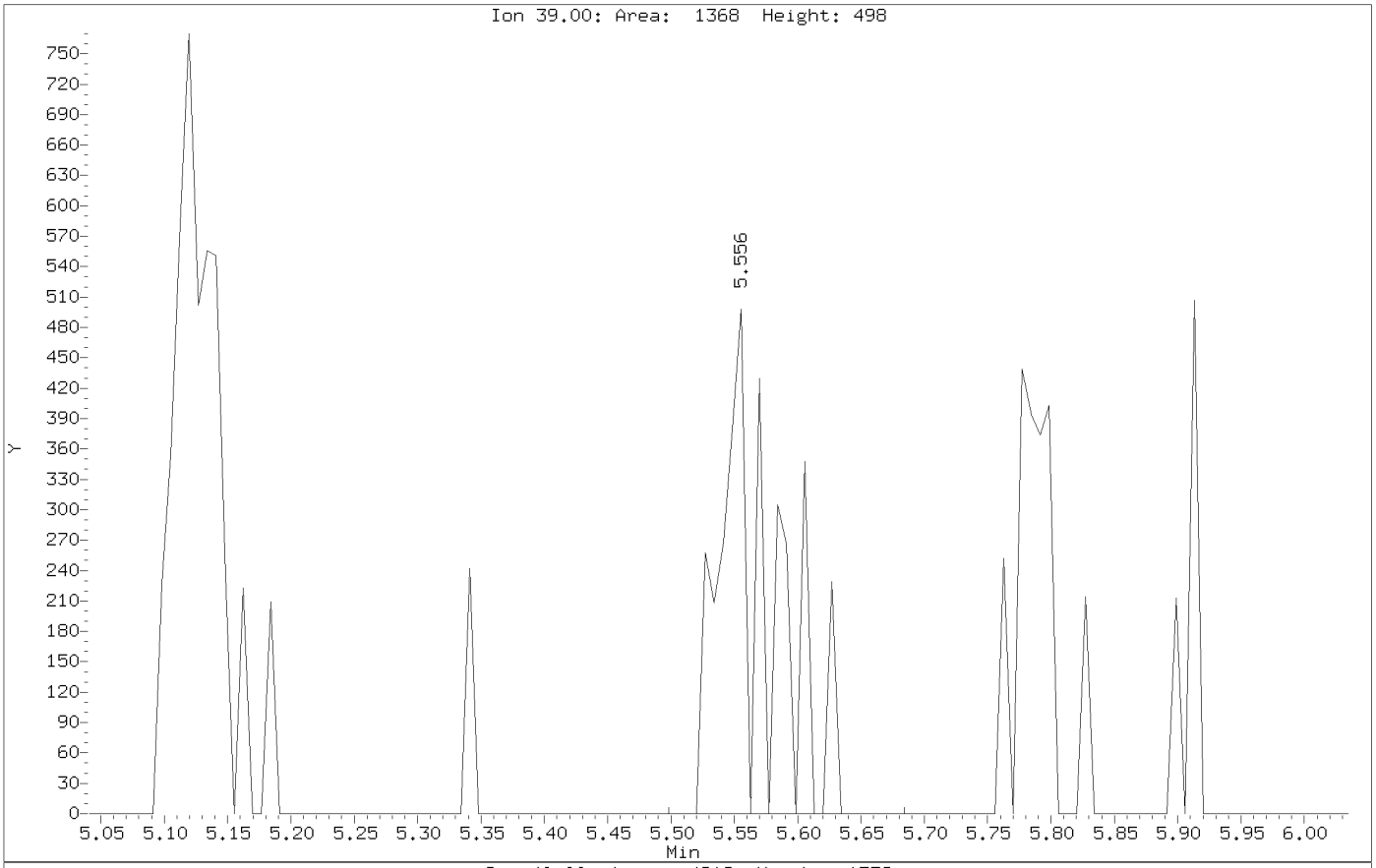


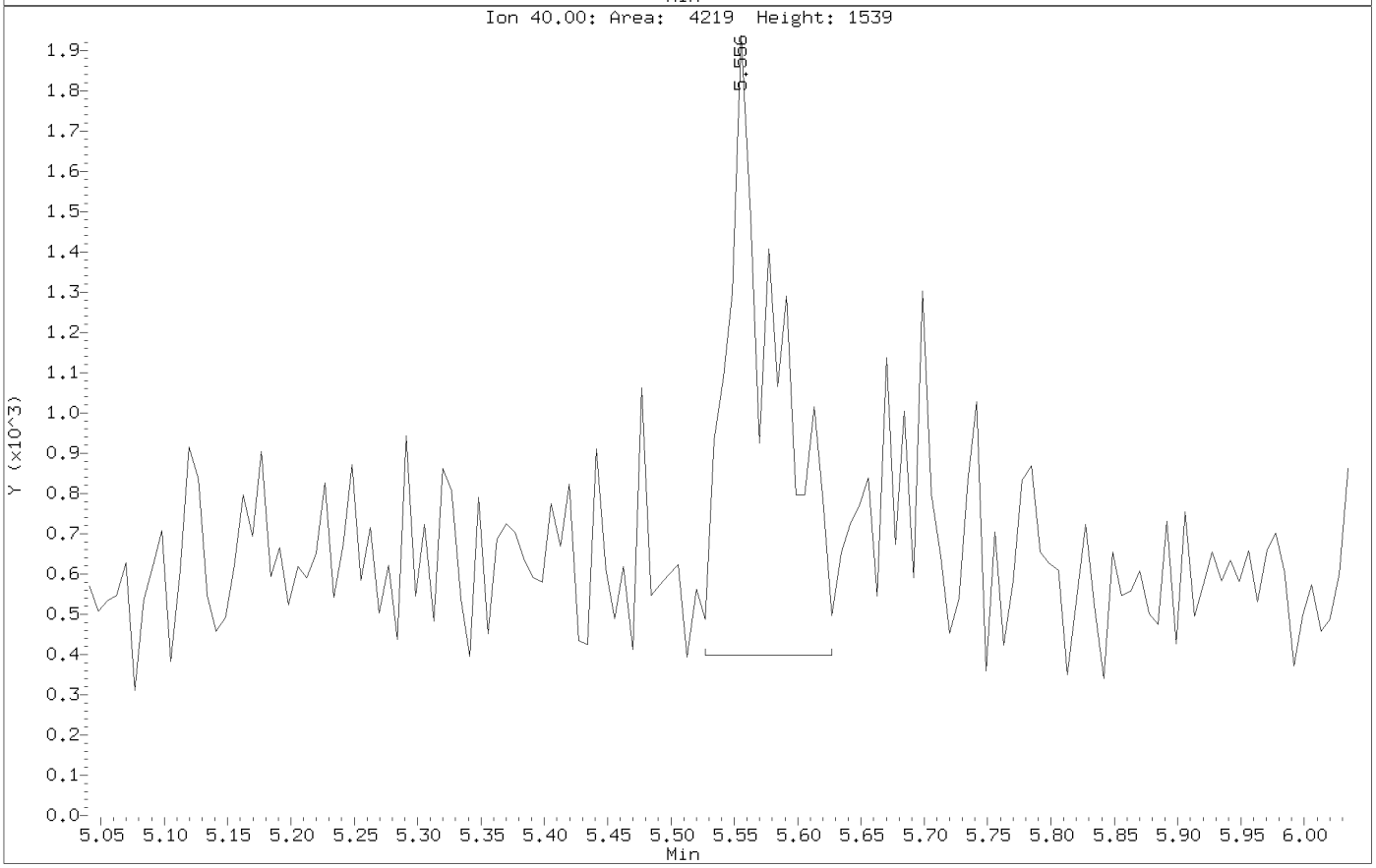


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8

AFTER MANUAL INTEGRATION

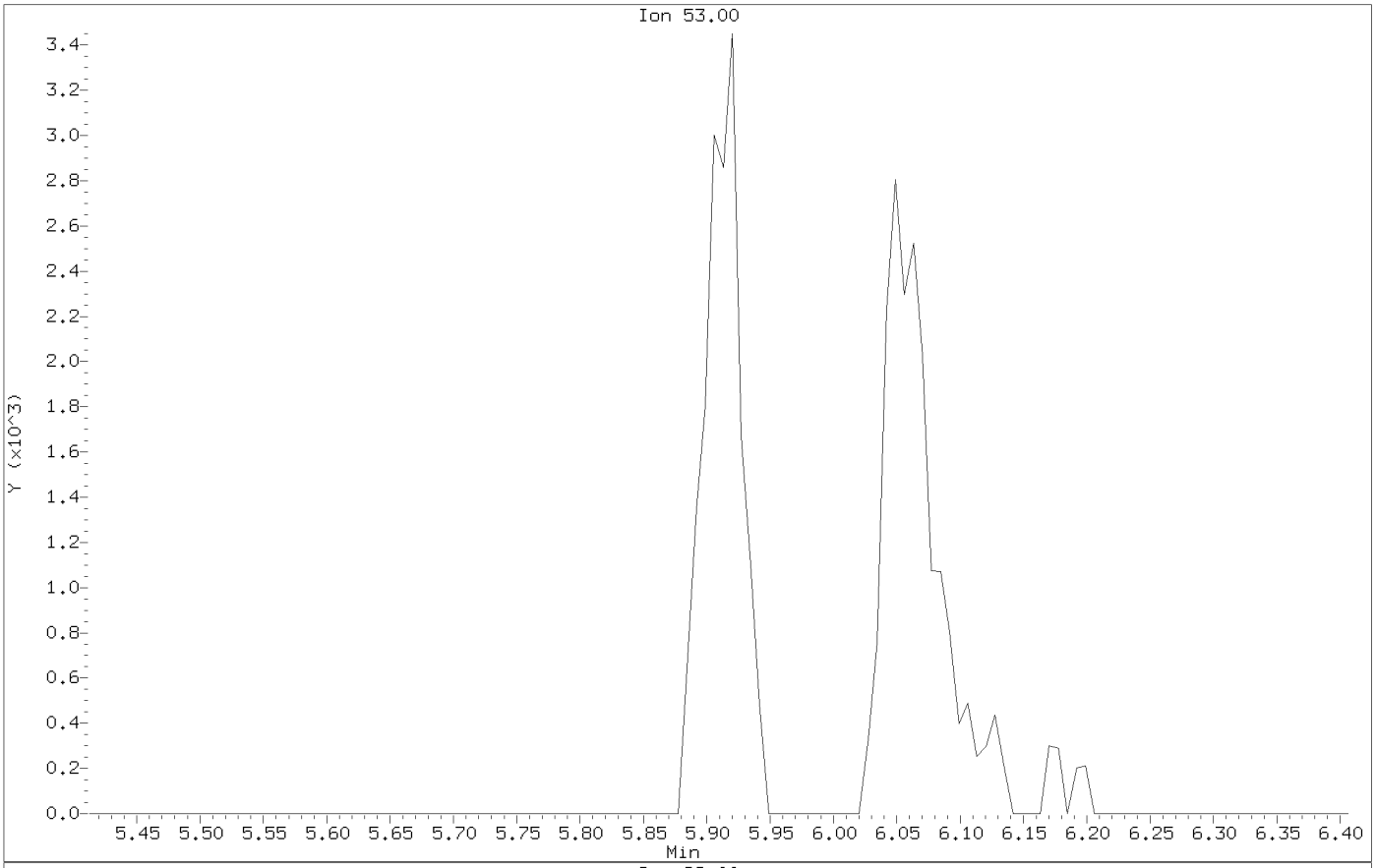


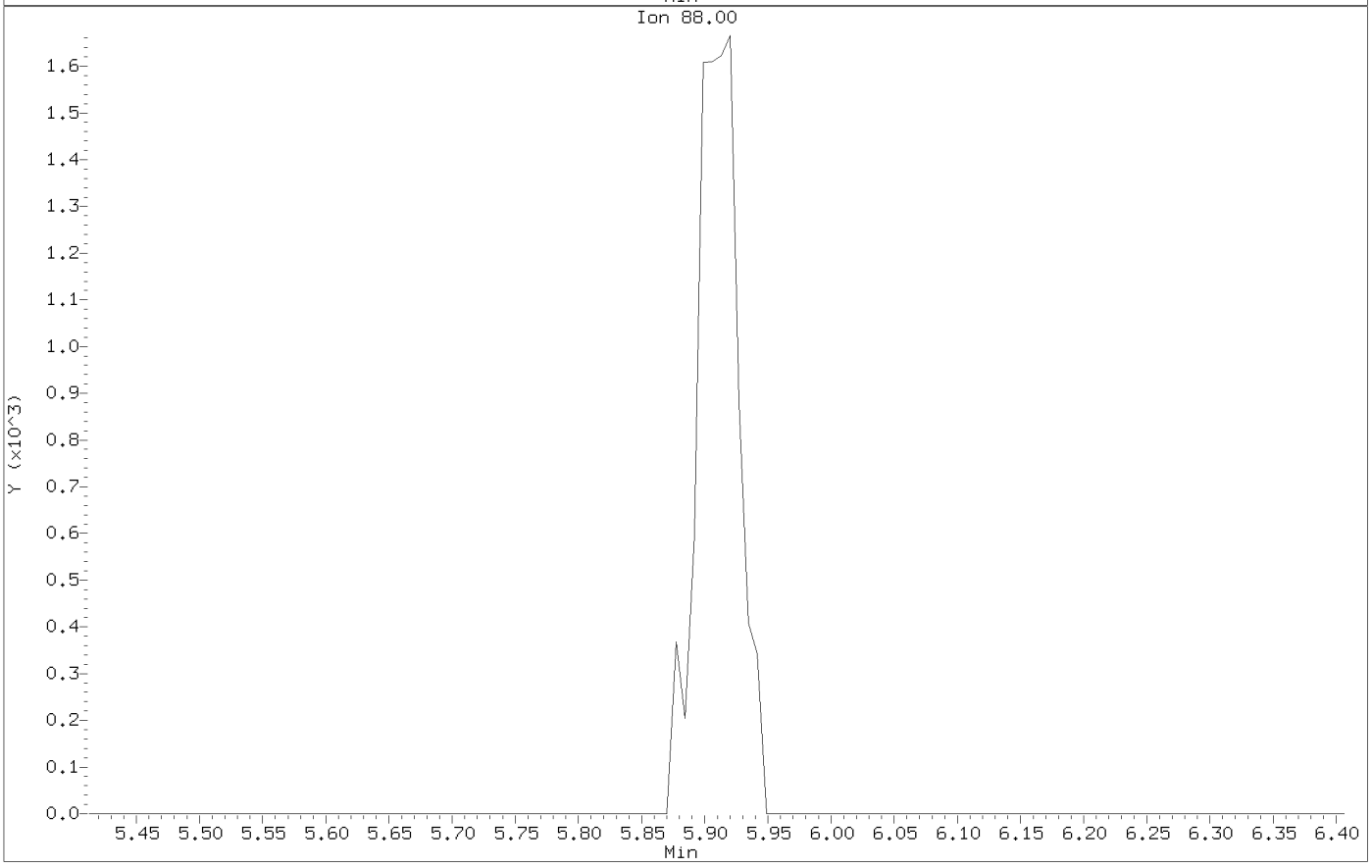


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Chloroprene
CAS Number: 126-99-8

BEFORE MANUAL INTEGRATION

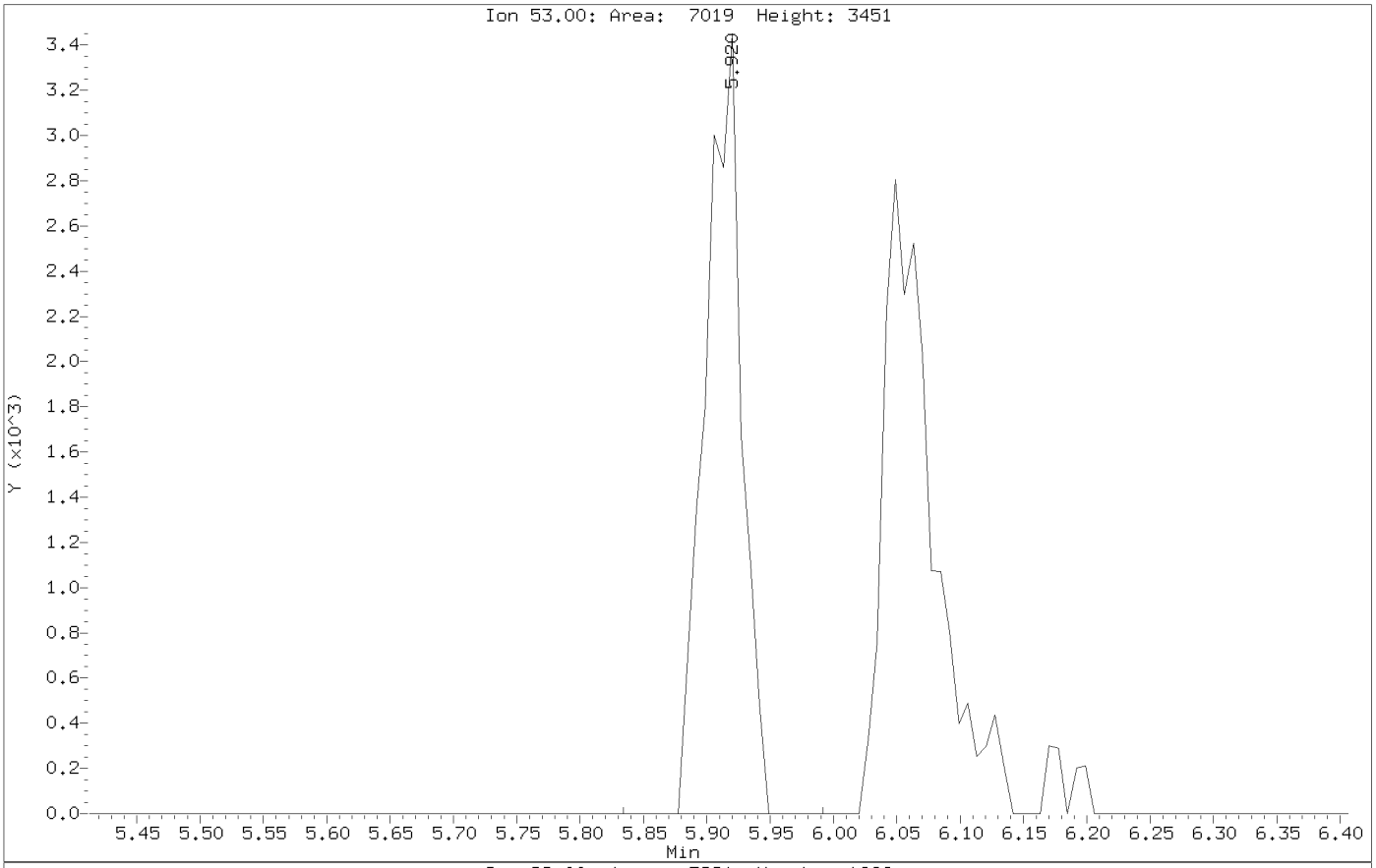


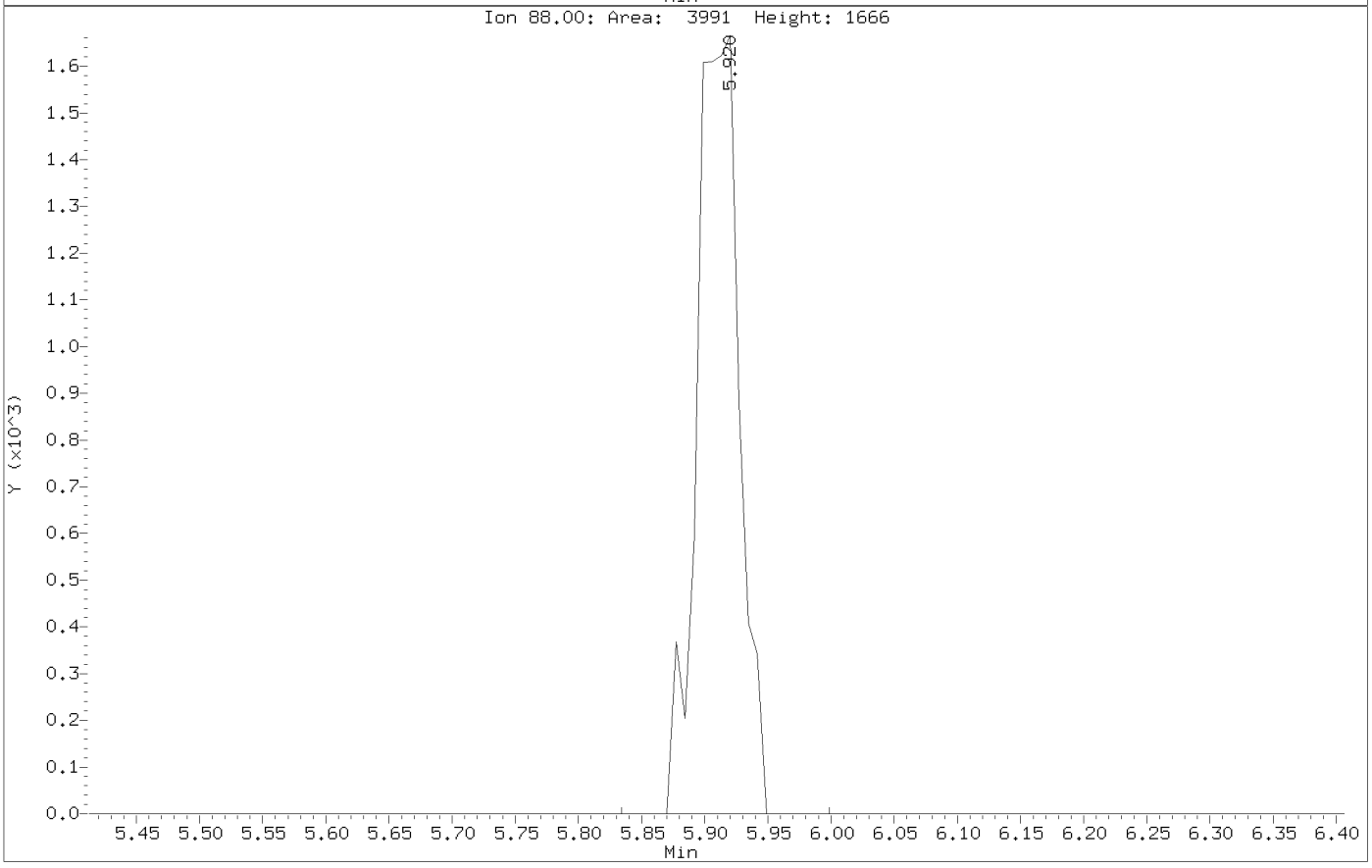


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Chloroprene
CAS Number: 126-99-8

AFTER MANUAL INTEGRATION

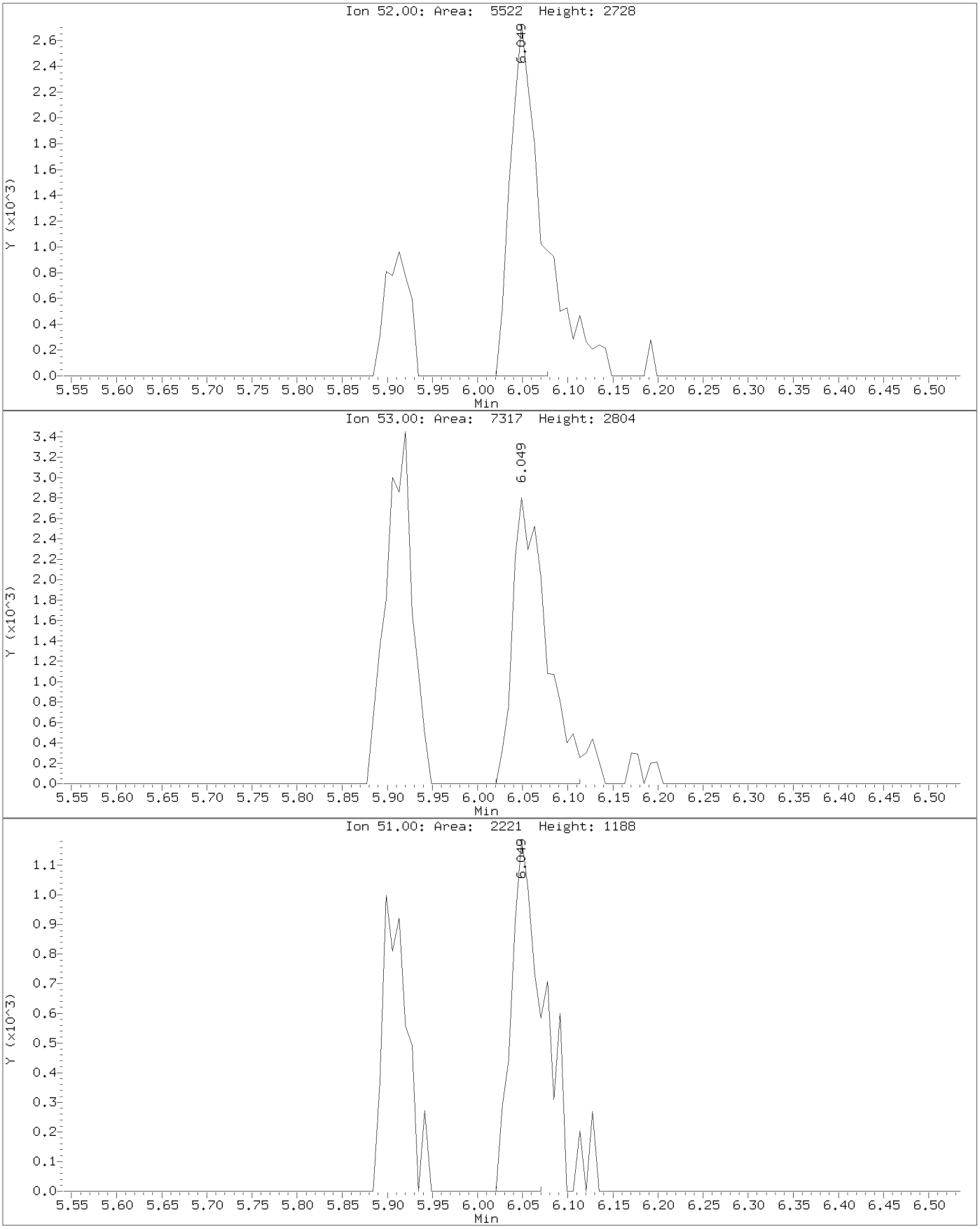




Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Acrylonitrile
CAS Number: 107-13-1

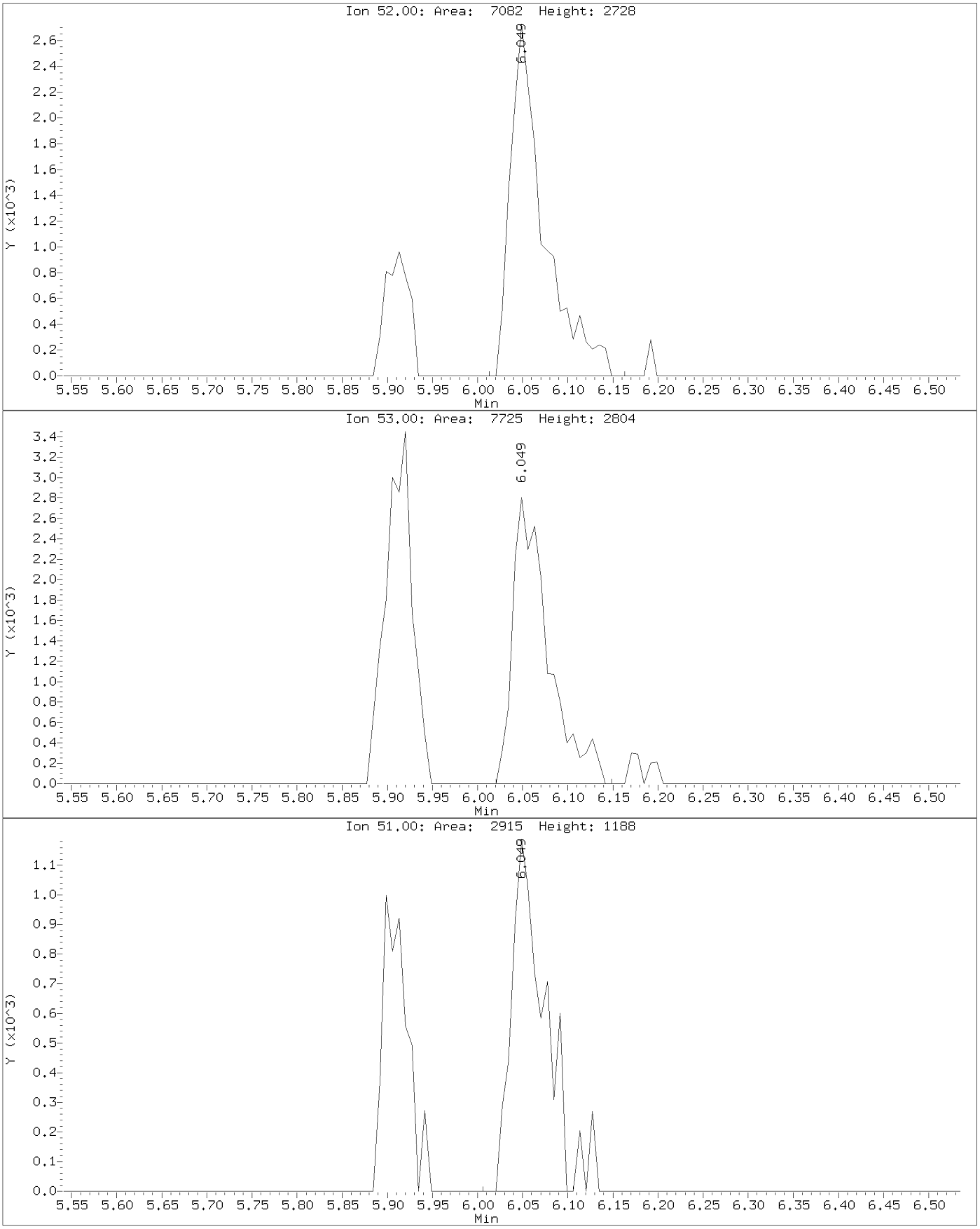
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Acrylonitrile
CAS Number: 107-13-1

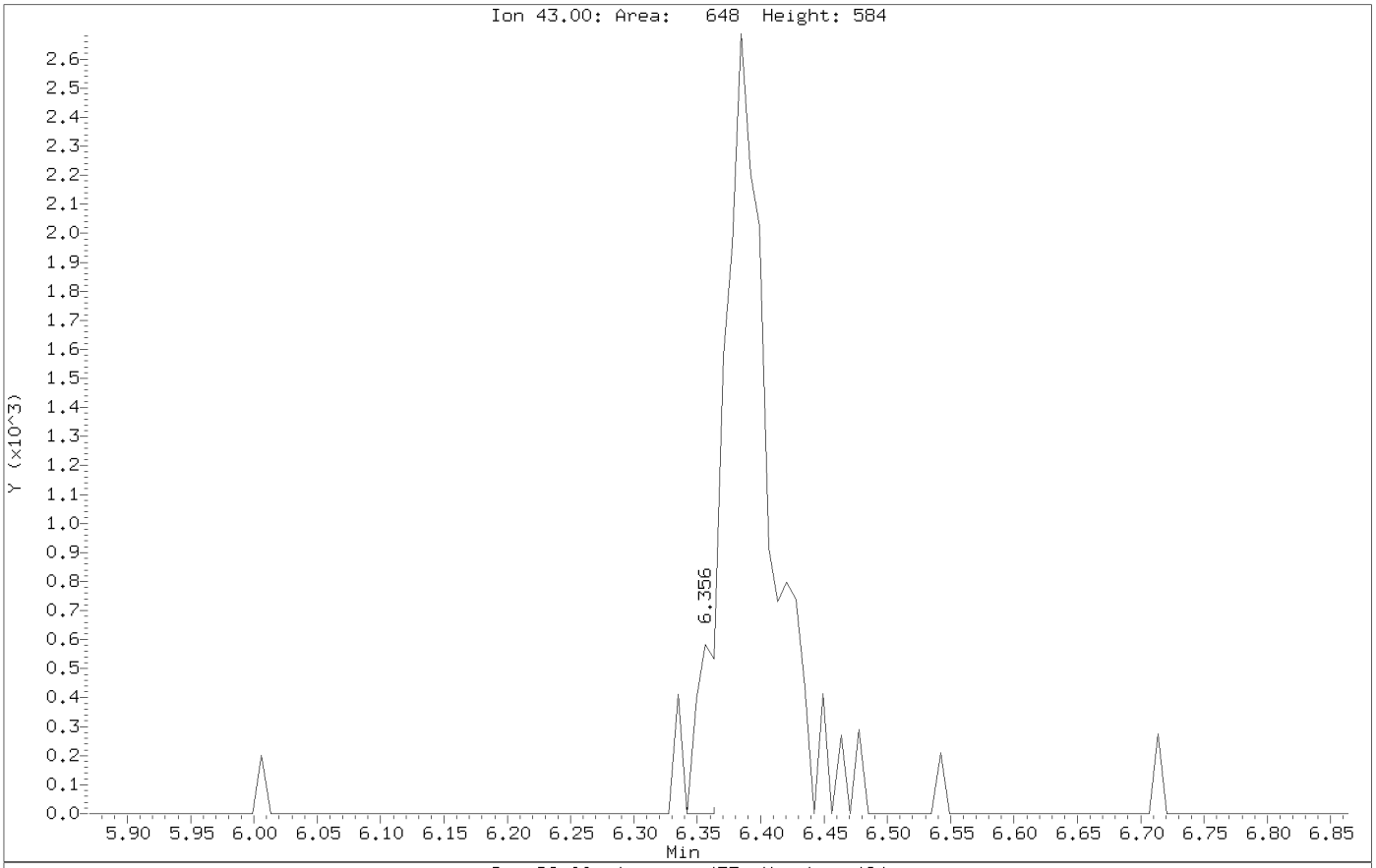
AFTER MANUAL INTEGRATION

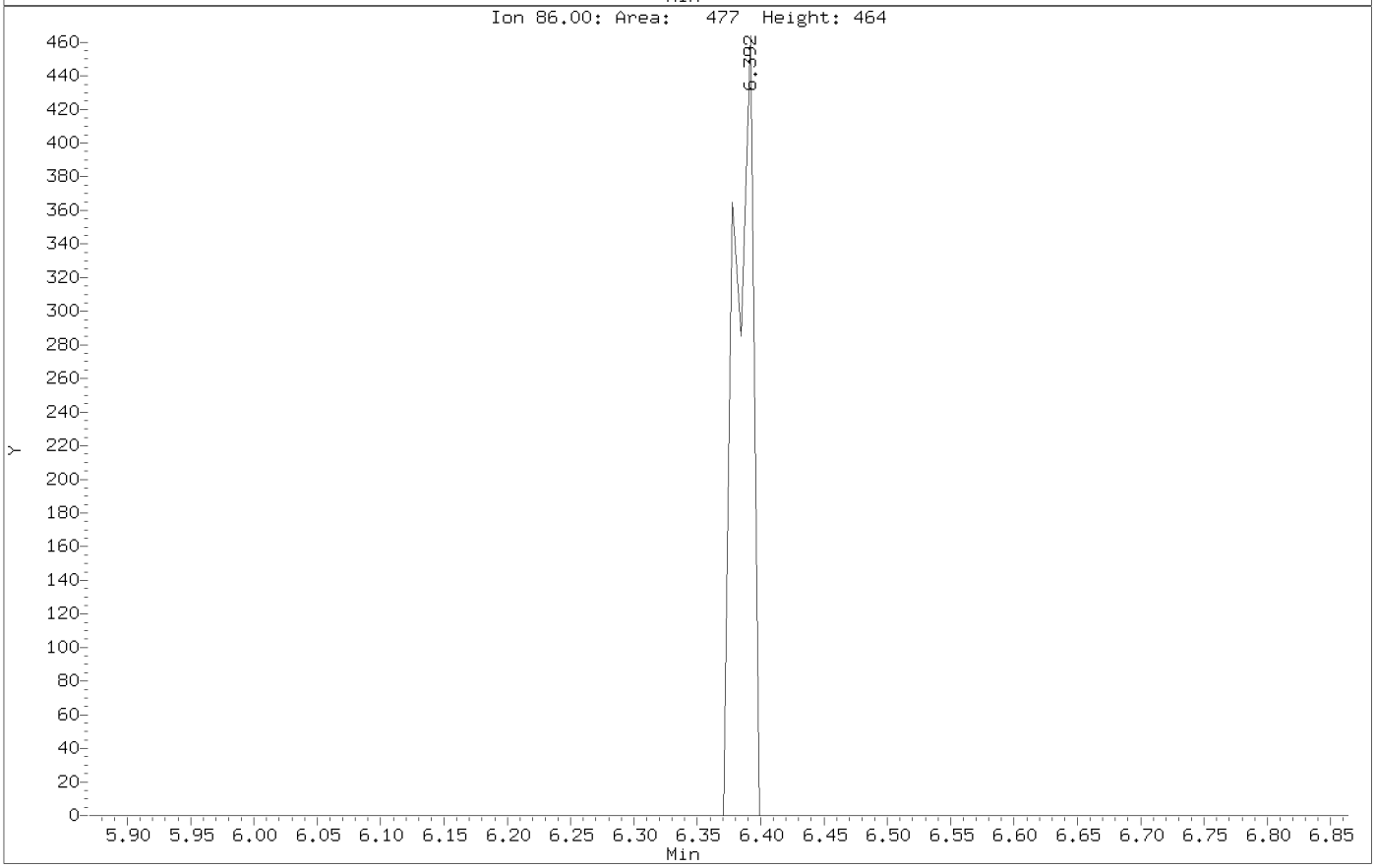


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Vinyl Acetate
CAS Number: 108-05-4

BEFORE MANUAL INTEGRATION

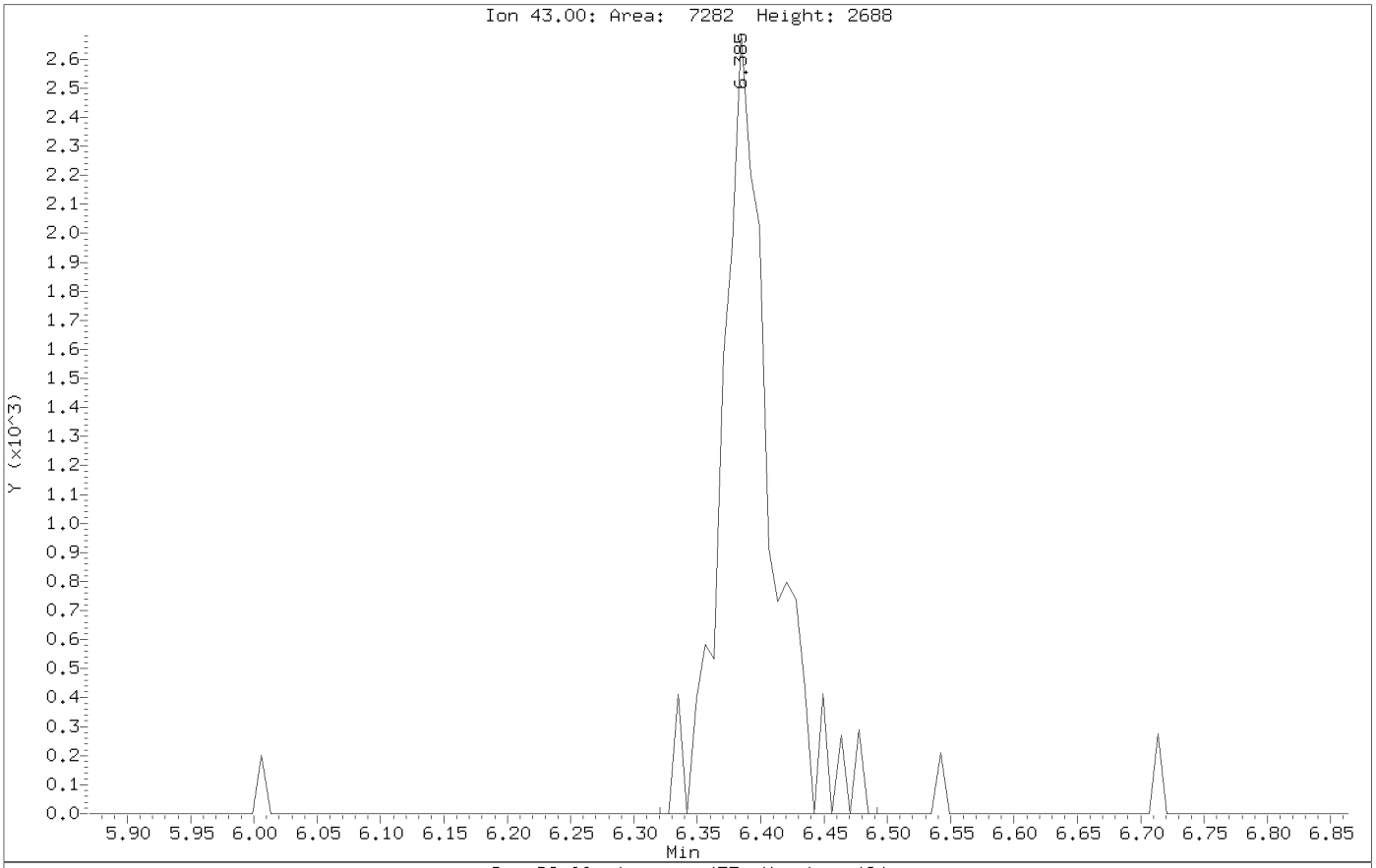


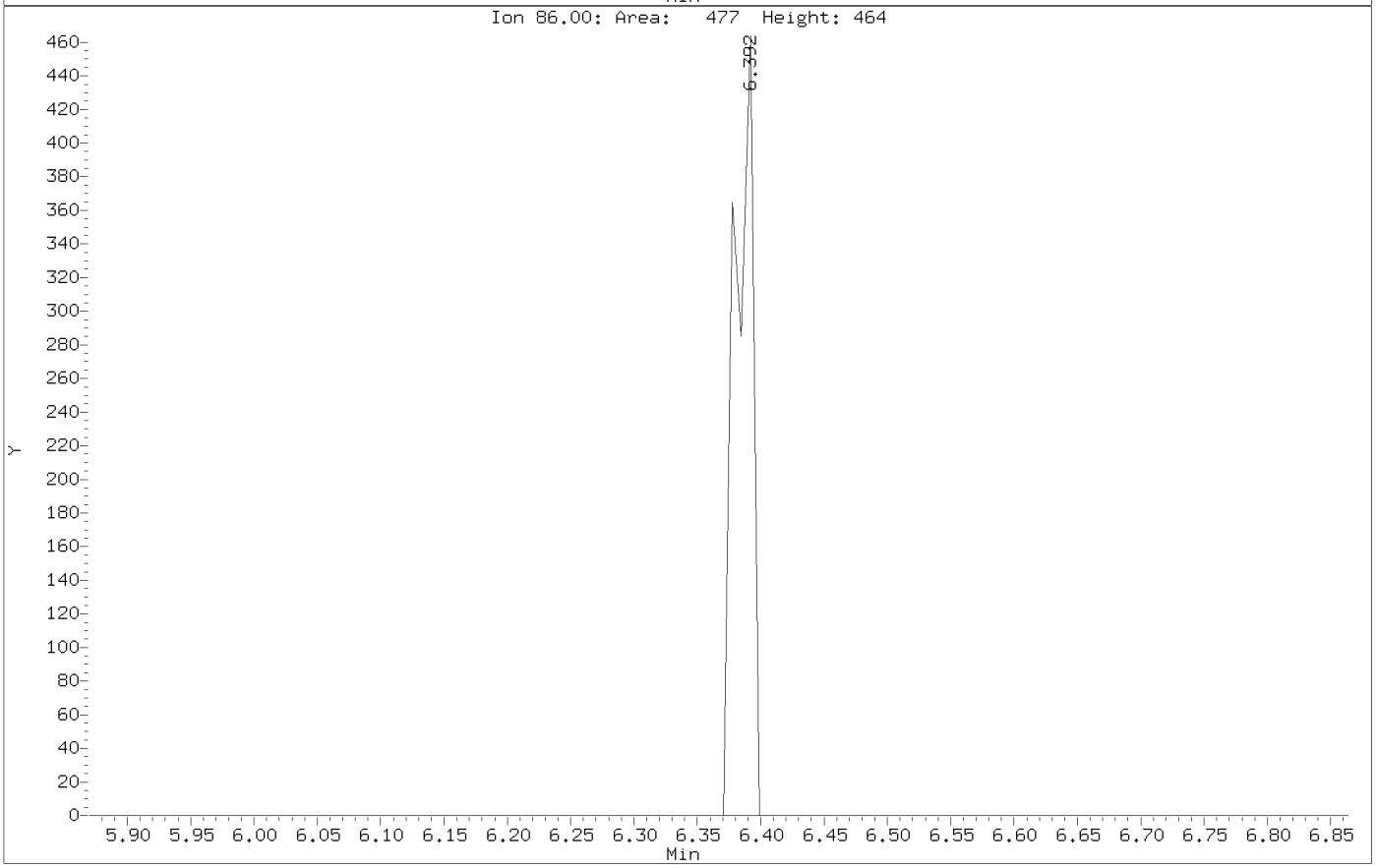


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Vinyl Acetate
CAS Number: 108-05-4

AFTER MANUAL INTEGRATION

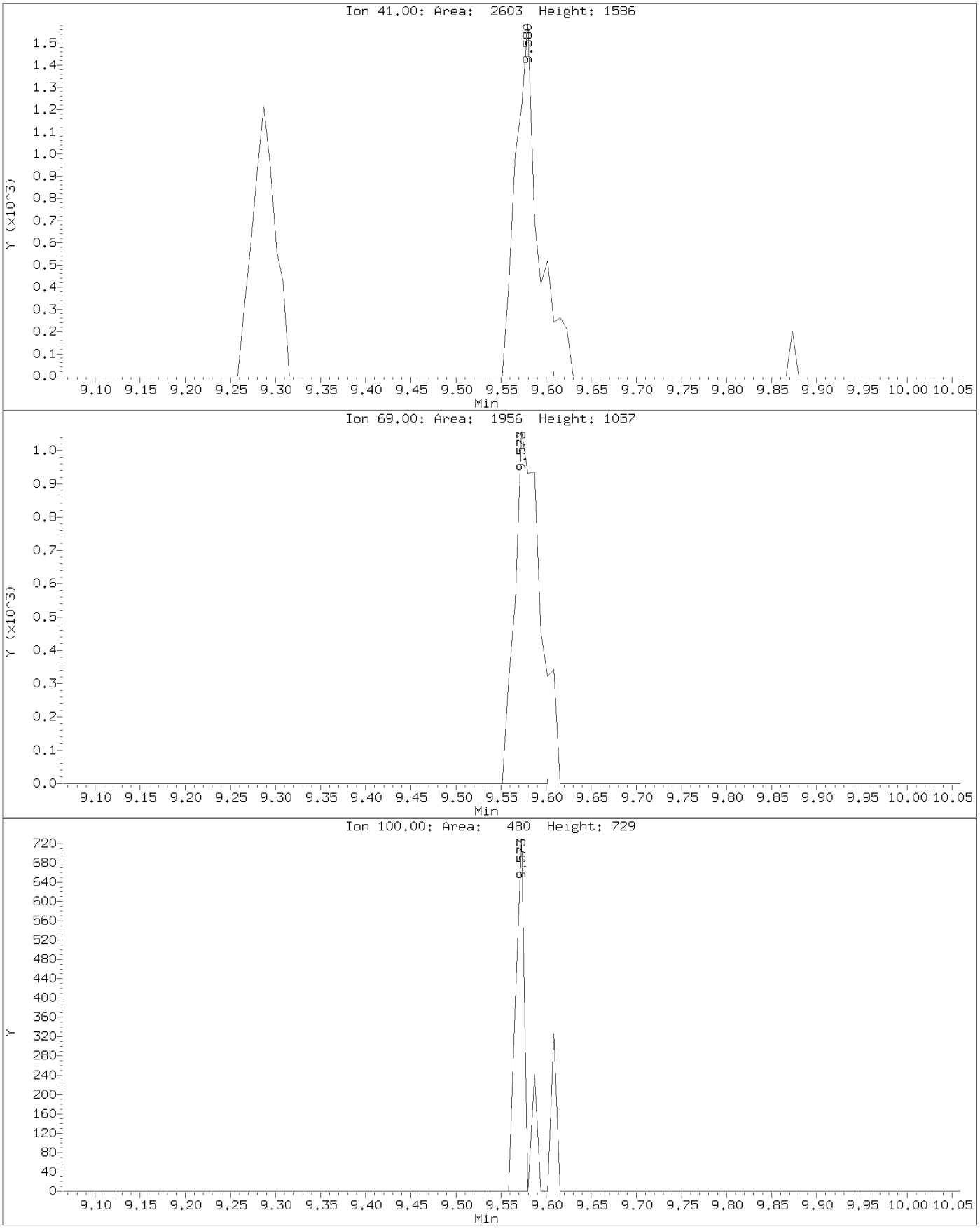




Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Methyl Methacrylate
CAS Number: 80-62-6

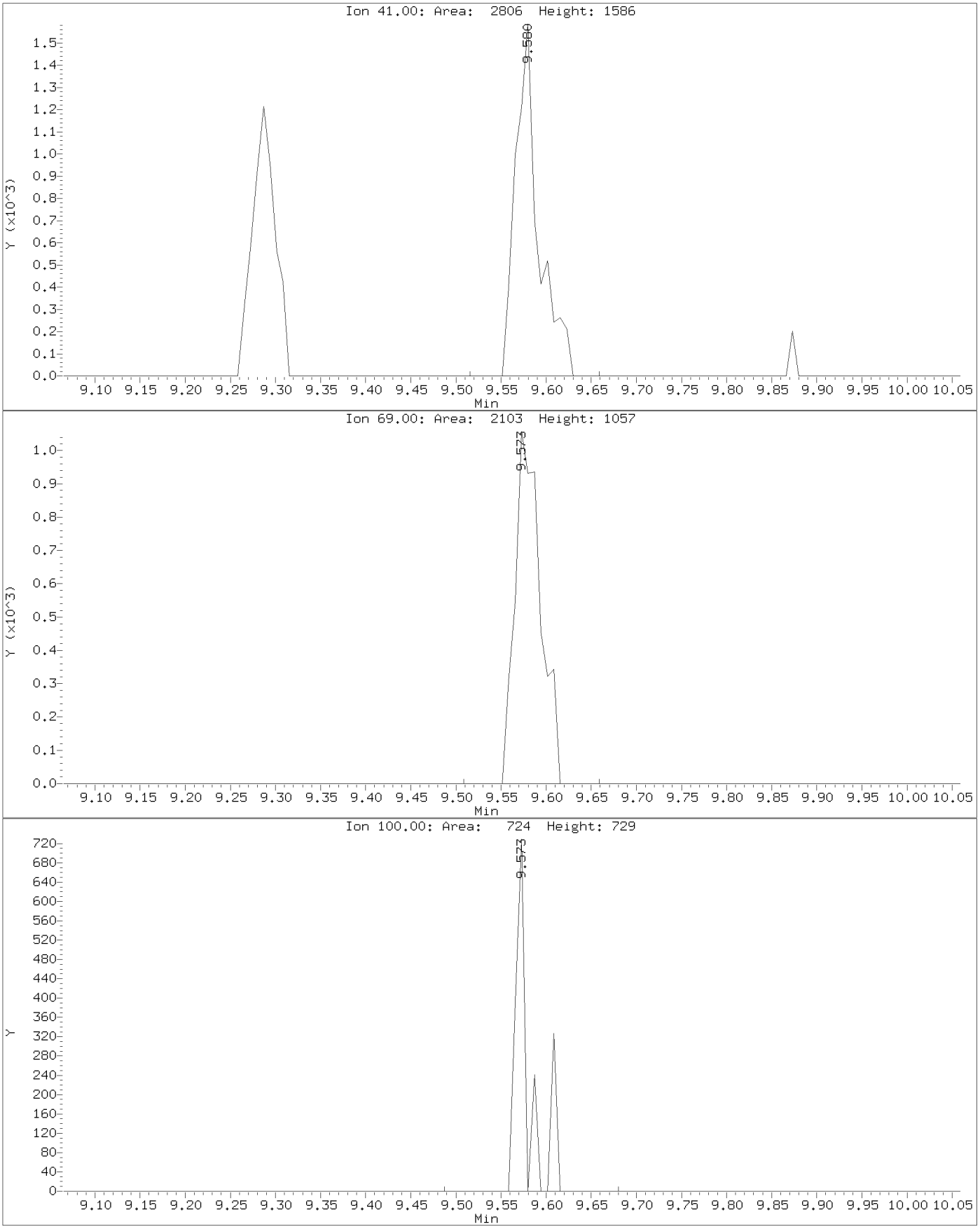
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Methyl Methacrylate
CAS Number: 80-62-6

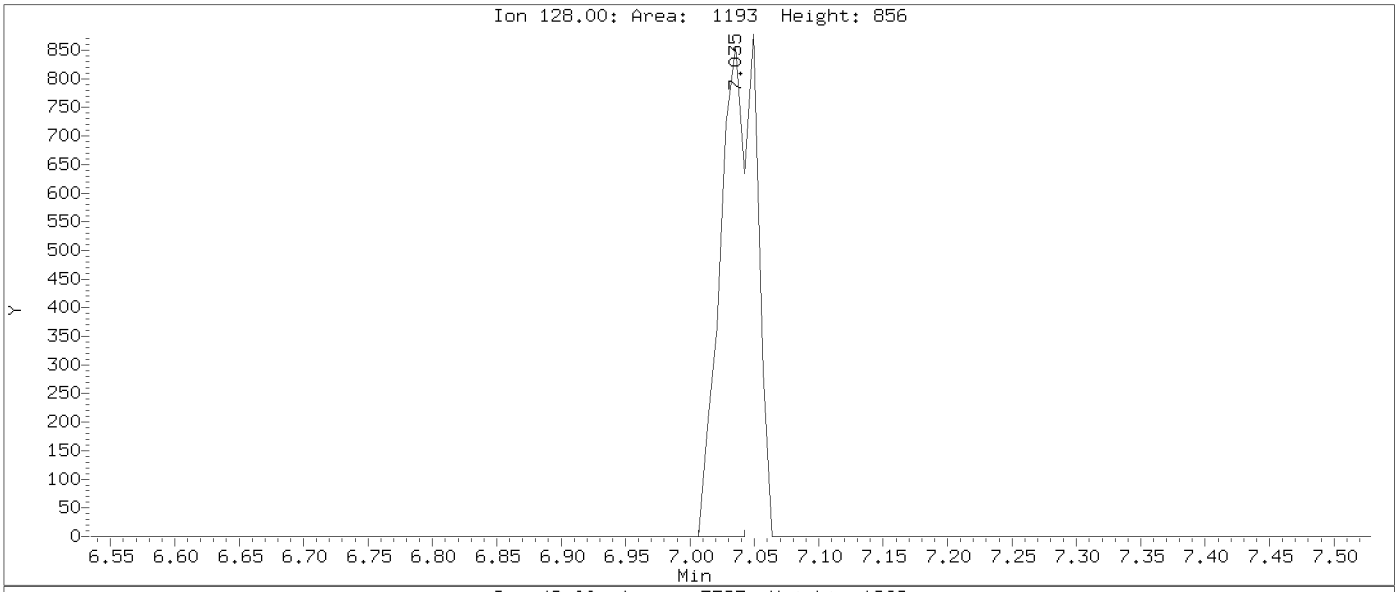
AFTER MANUAL INTEGRATION

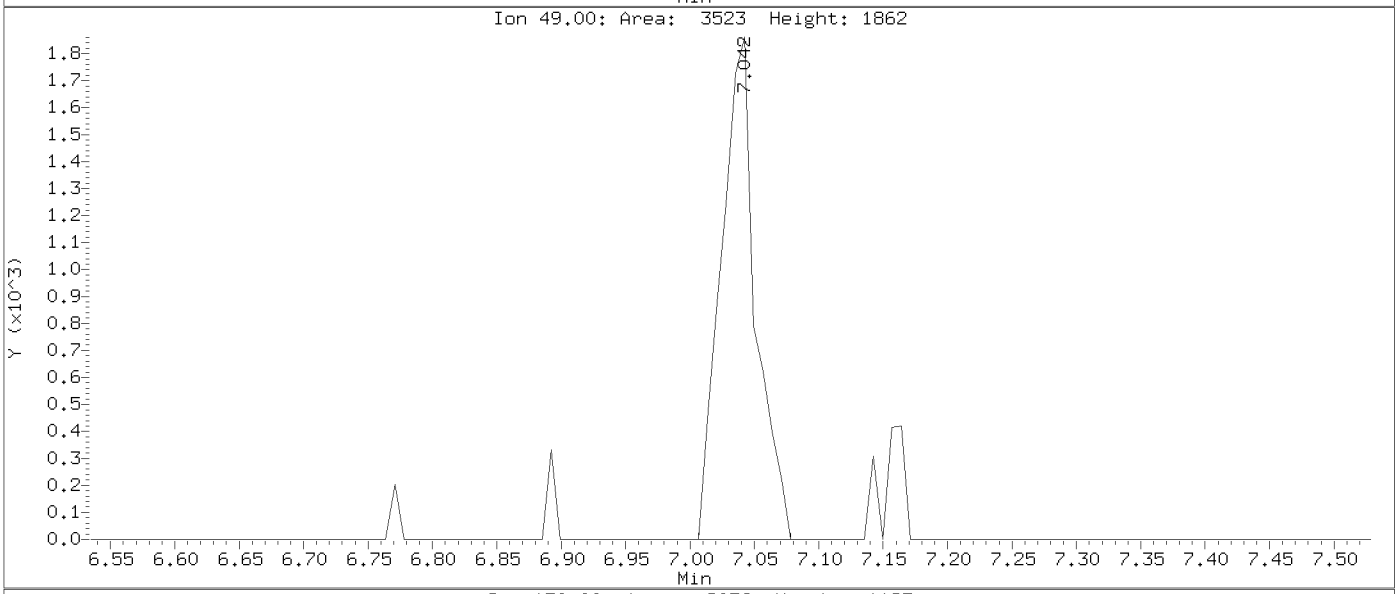


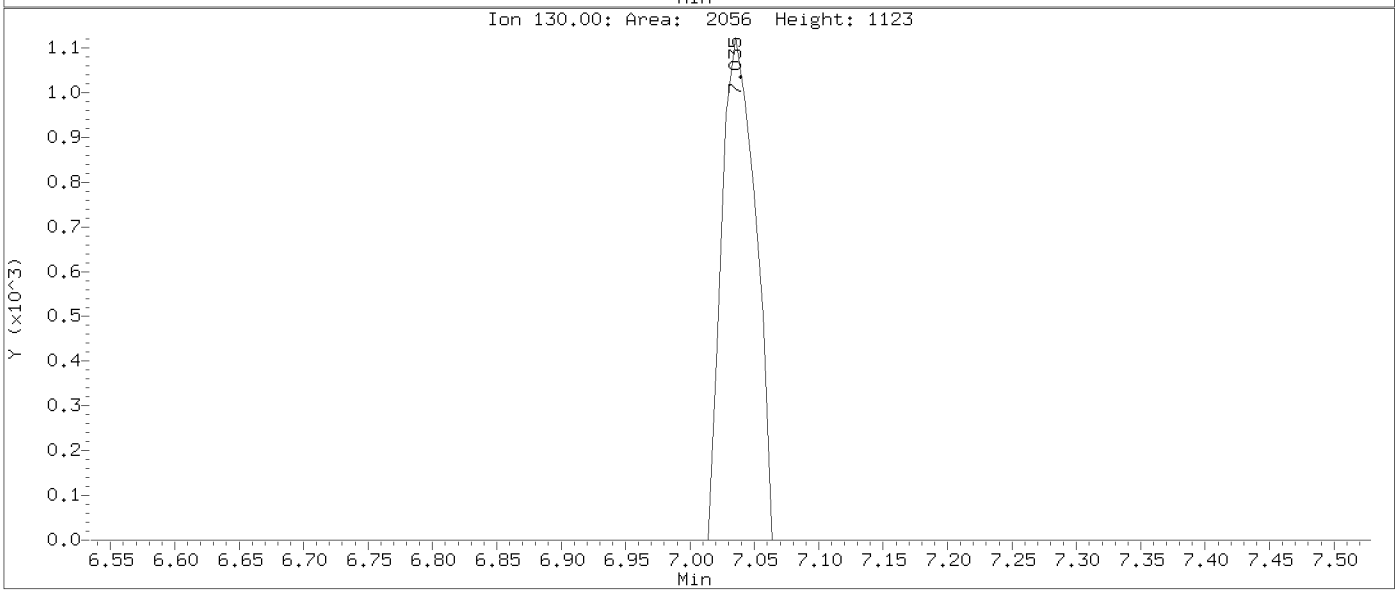
Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromochloromethane
CAS Number: 74-97-5

BEFORE MANUAL INTEGRATION



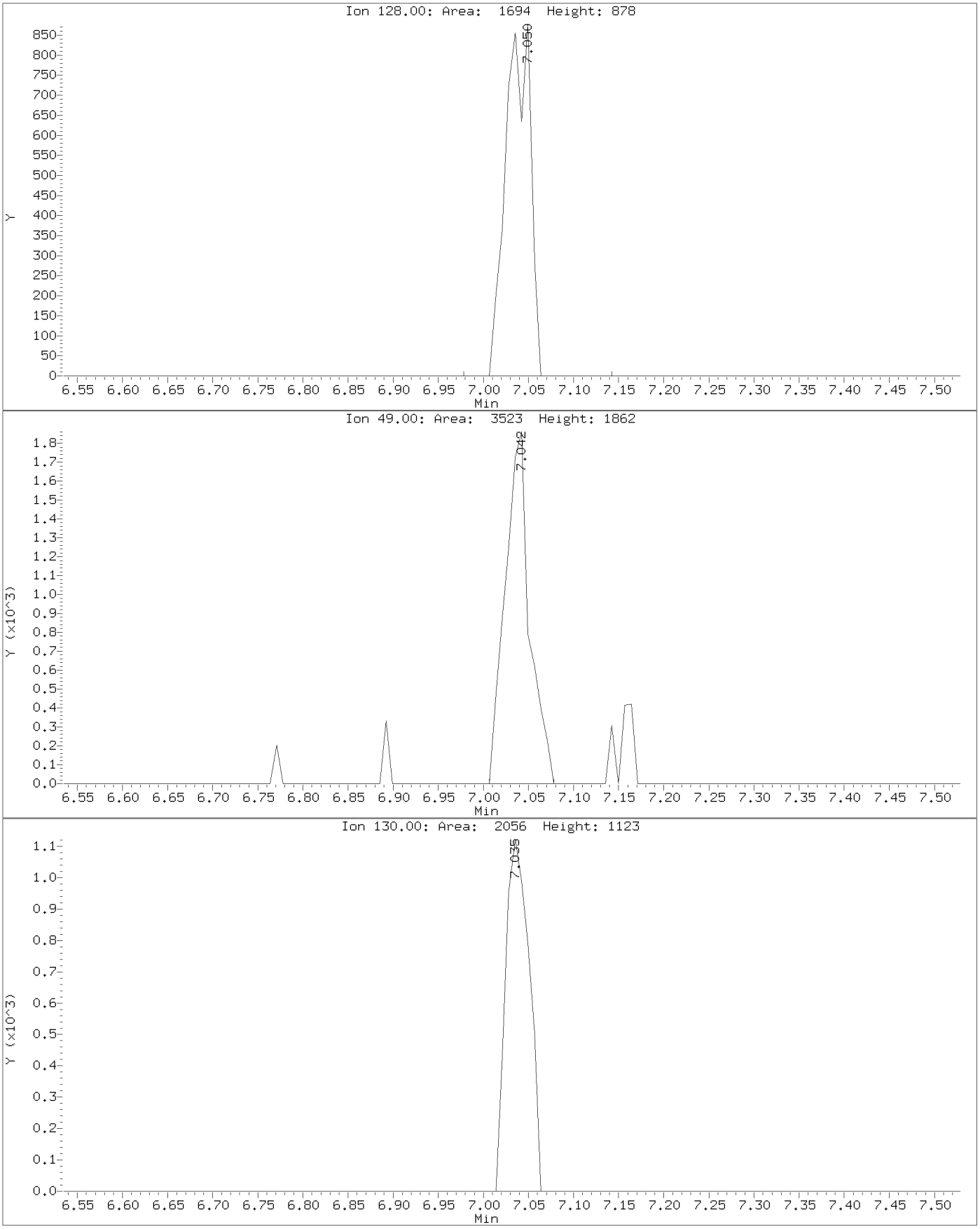




Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromochloromethane
CAS Number: 74-97-5

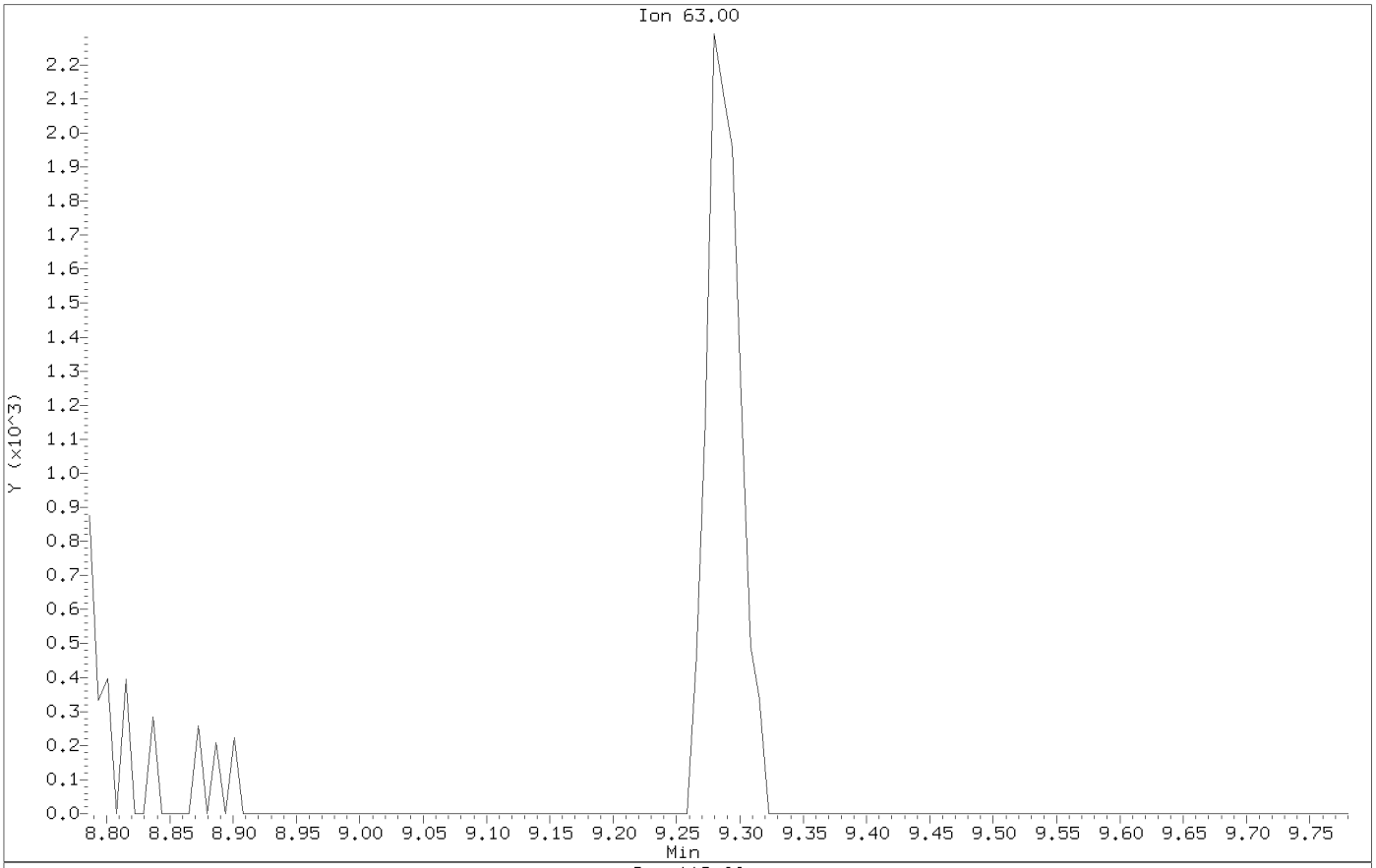
AFTER MANUAL INTEGRATION

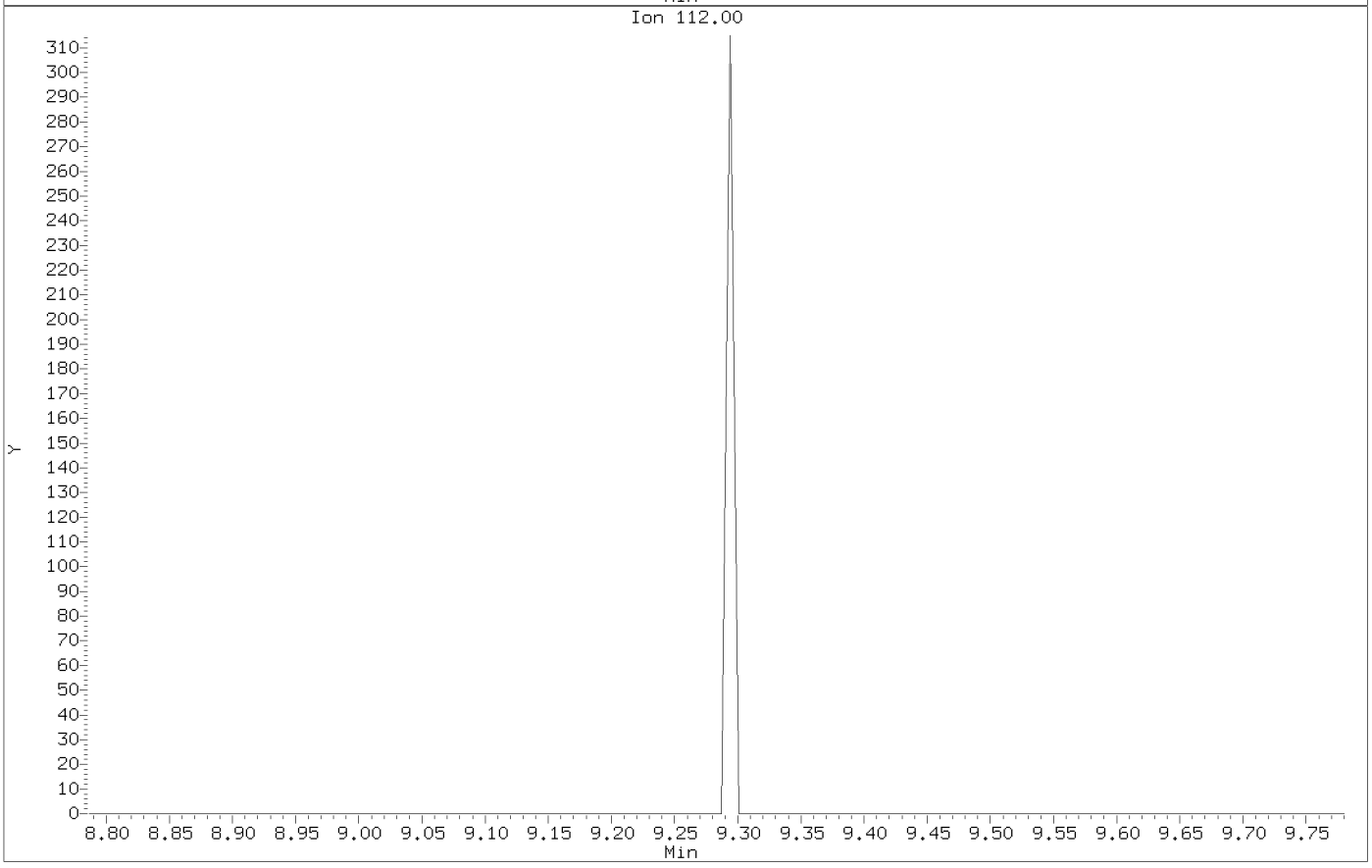


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dichloropropane
CAS Number: 78-87-5

BEFORE MANUAL INTEGRATION

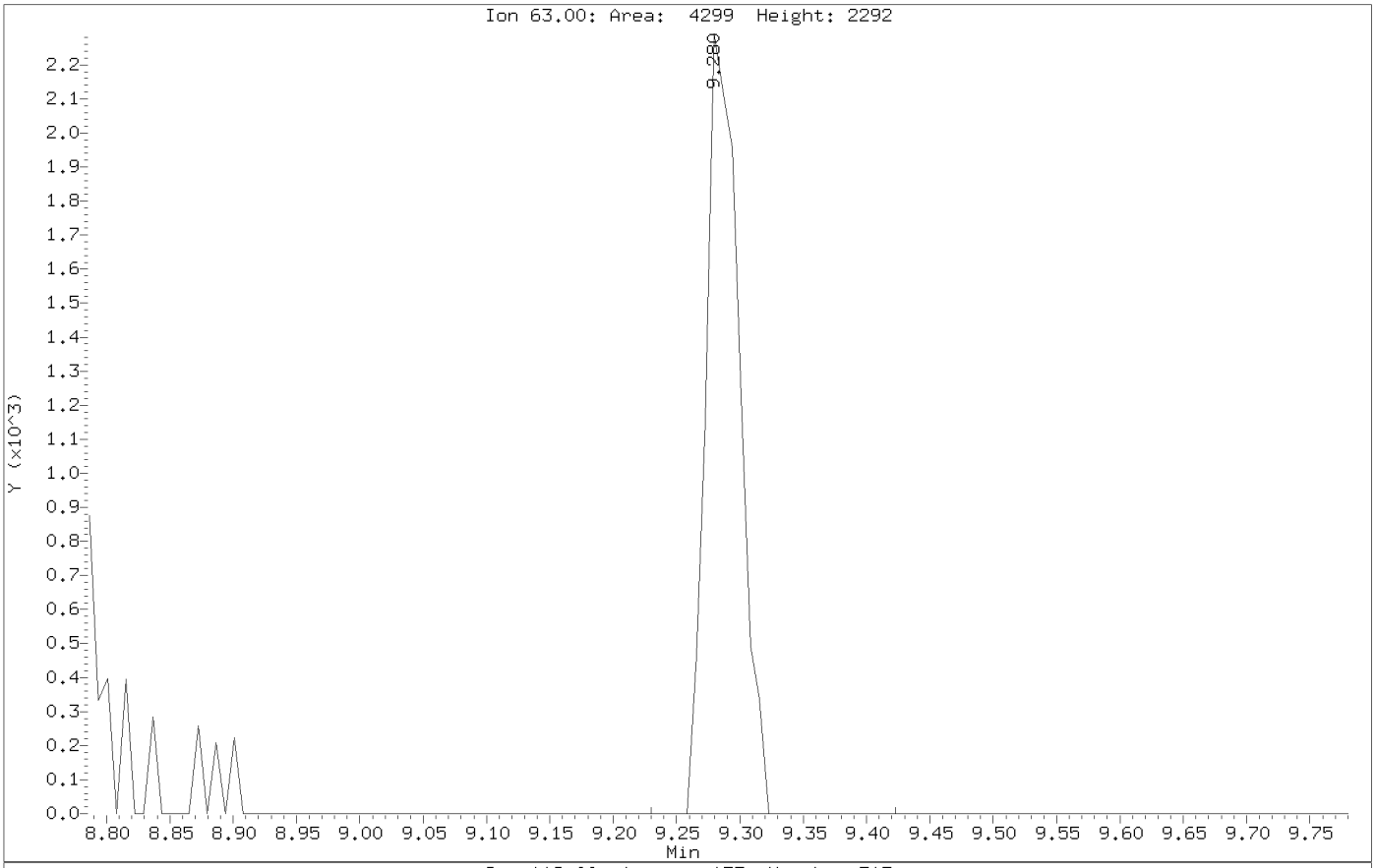


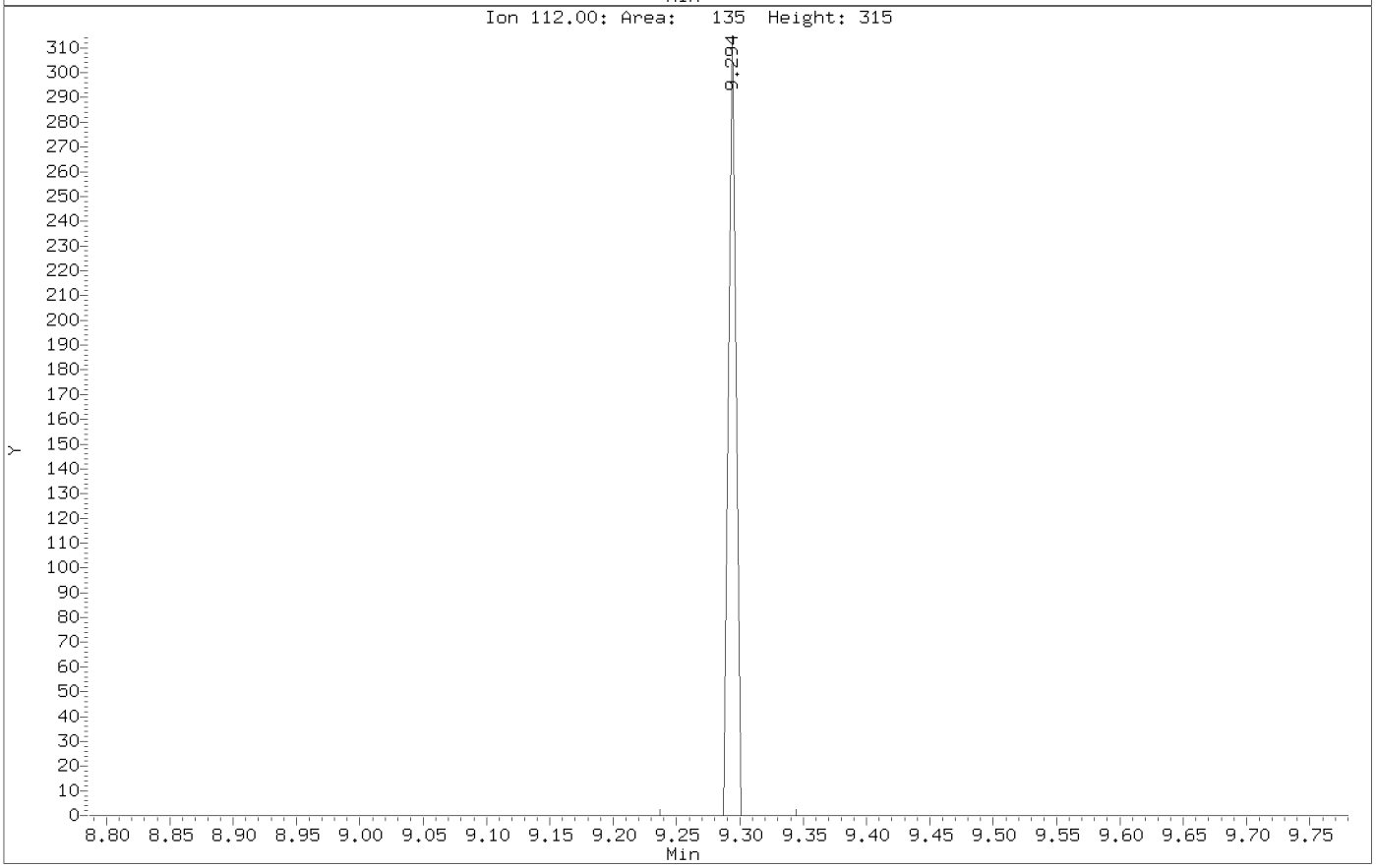


Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dichloropropane
CAS Number: 78-87-5

AFTER MANUAL INTEGRATION

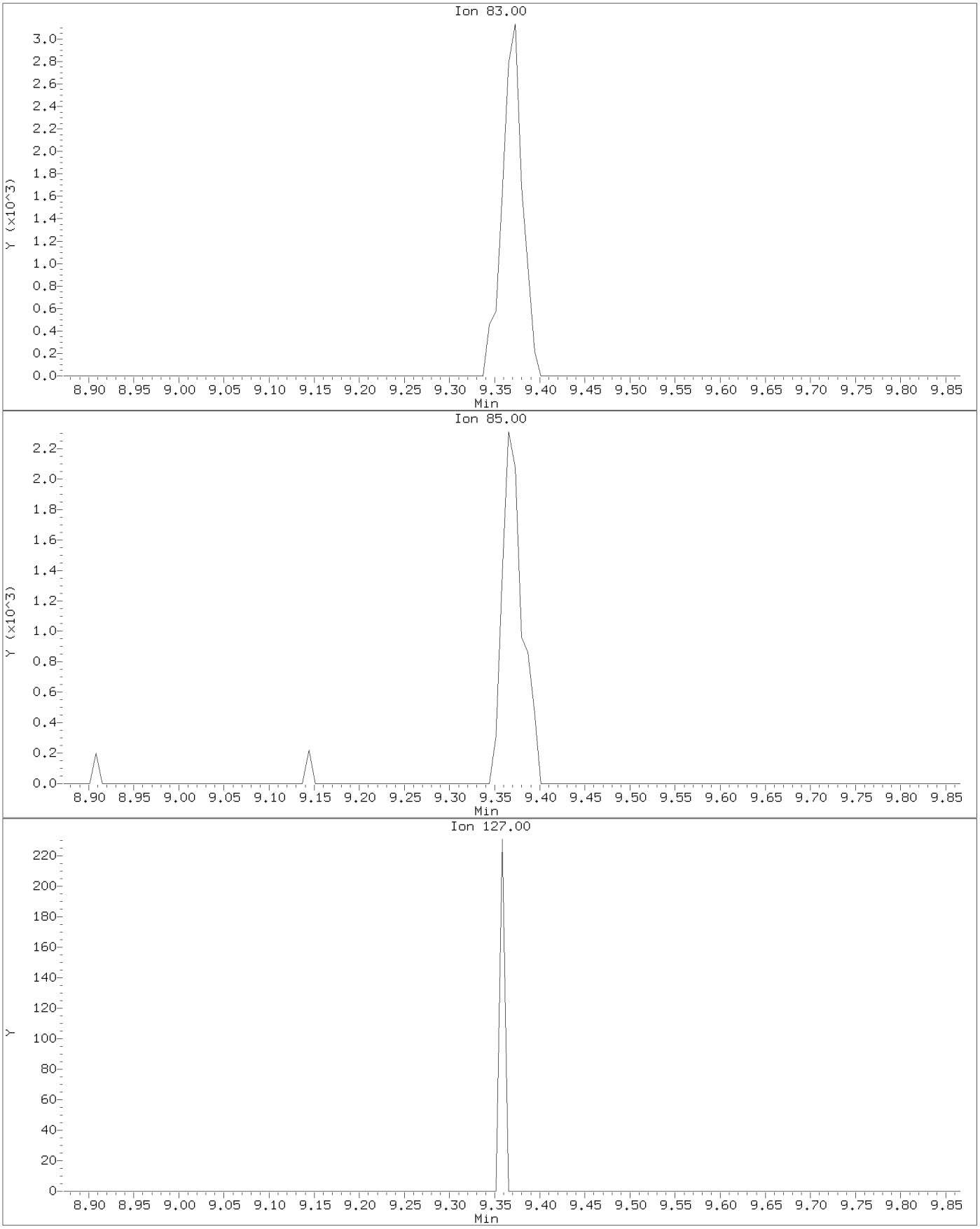




Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromodichloromethane
CAS Number: 75-27-4

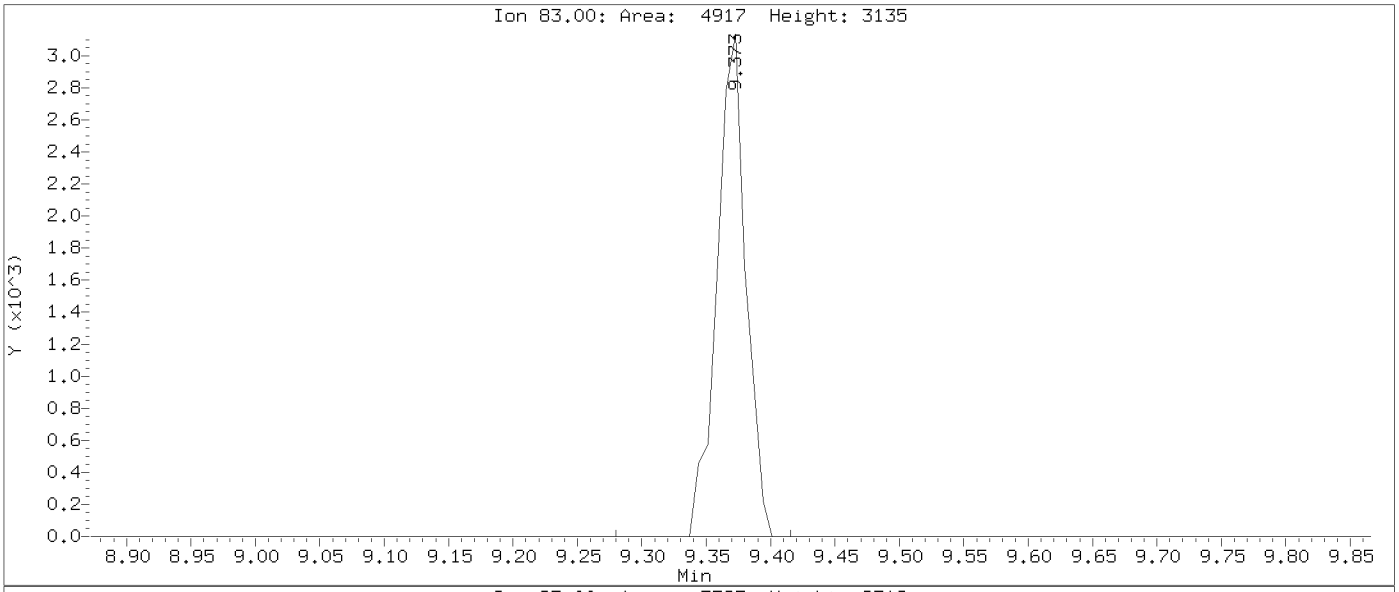
BEFORE MANUAL INTEGRATION

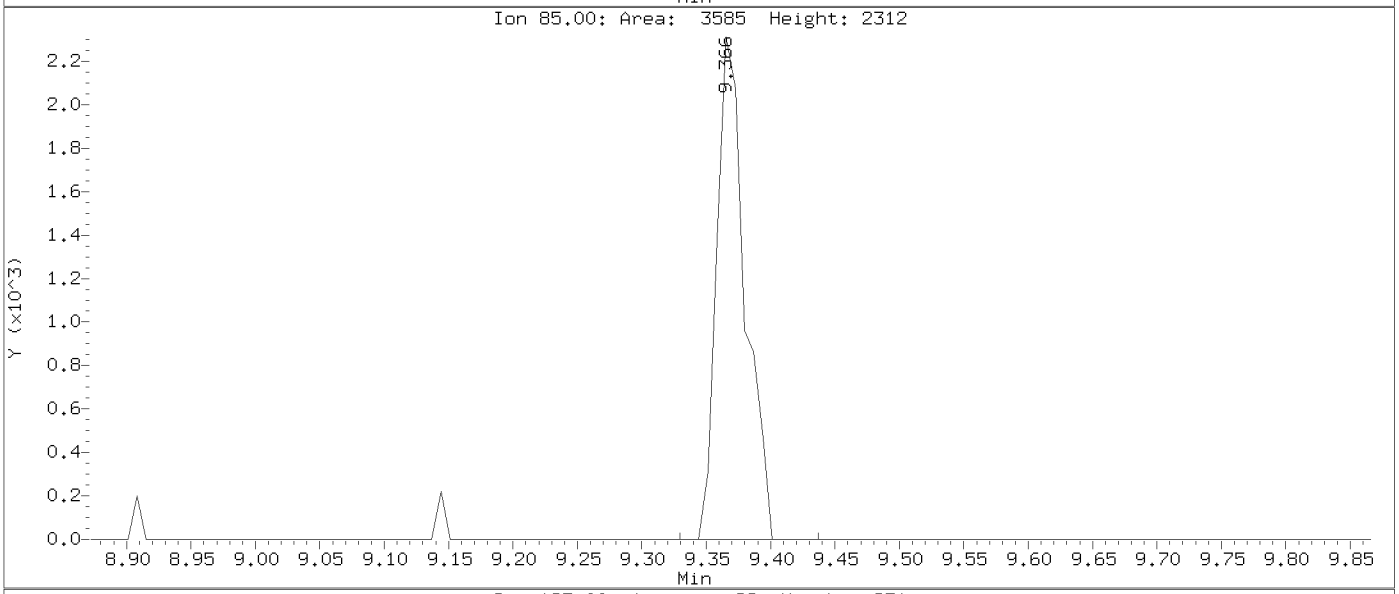


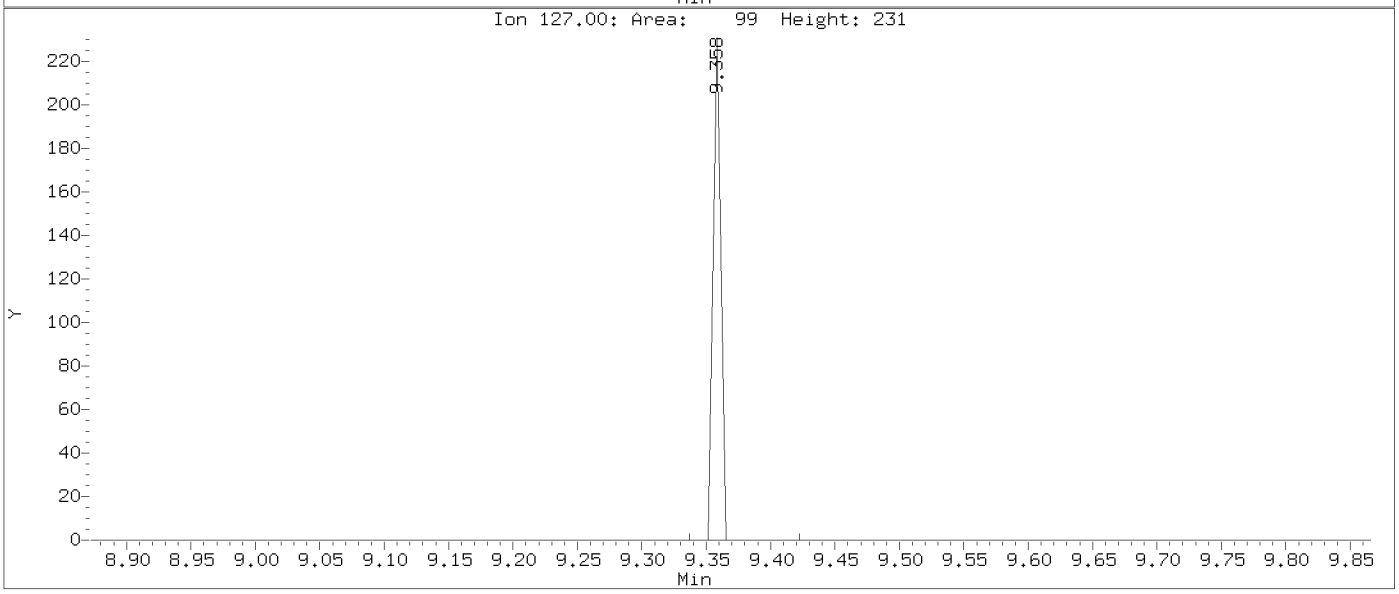
Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromodichloromethane
CAS Number: 75-27-4

AFTER MANUAL INTEGRATION



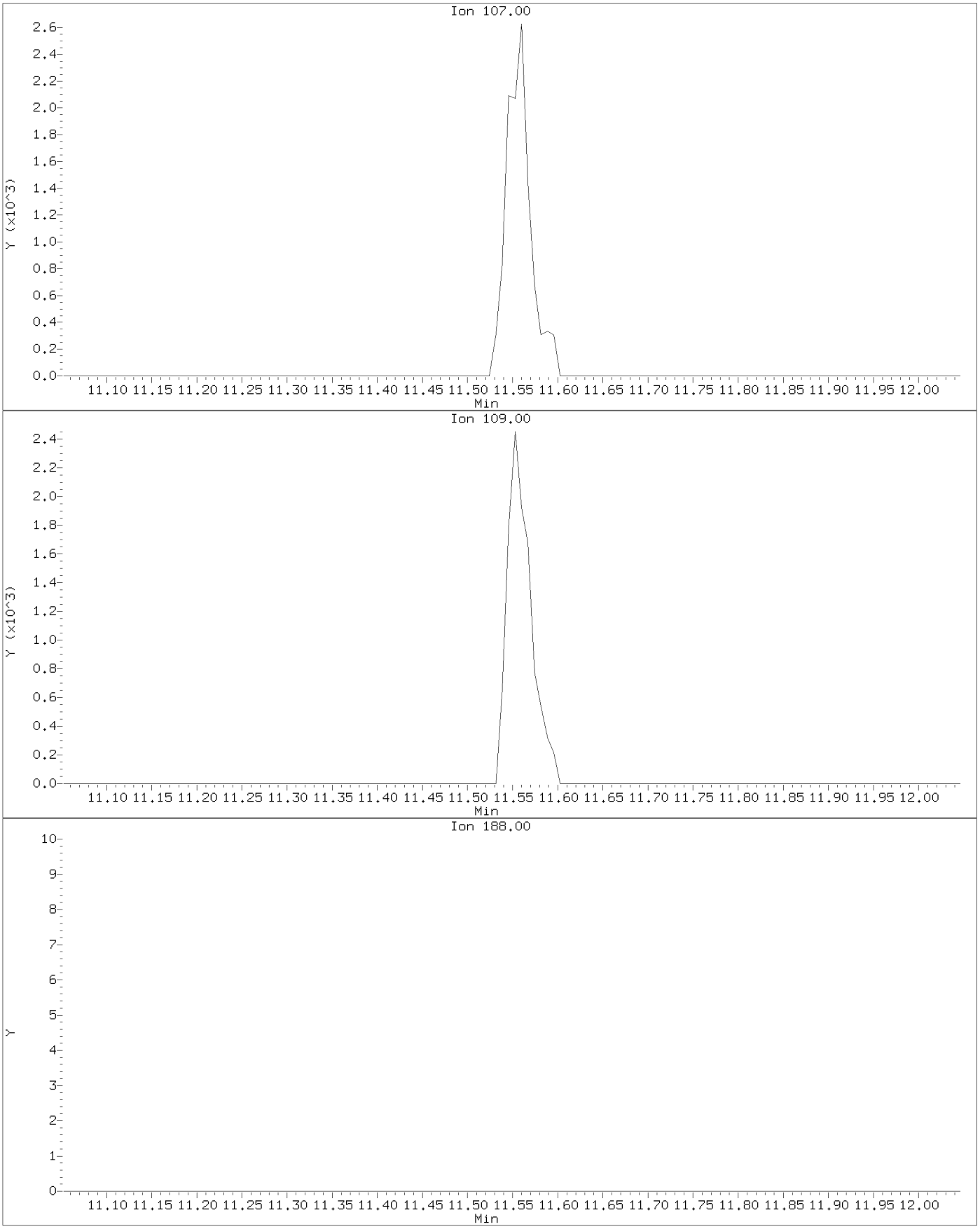




Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromoethane
CAS Number: 106-93-4

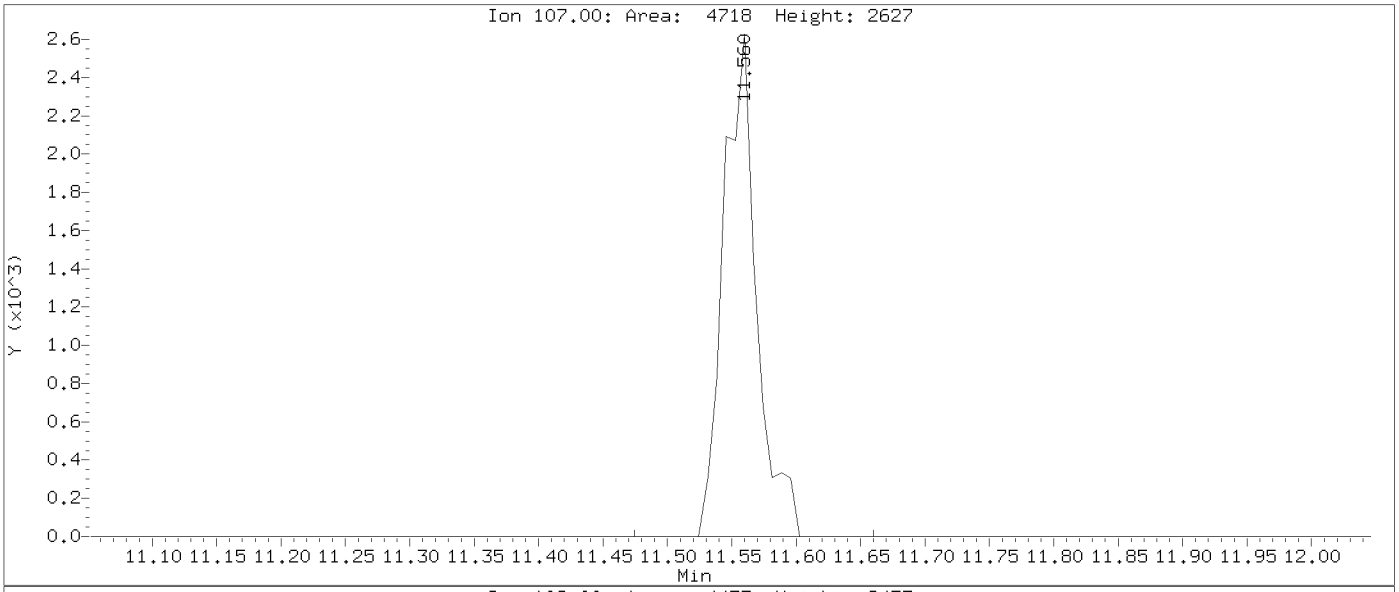
BEFORE MANUAL INTEGRATION

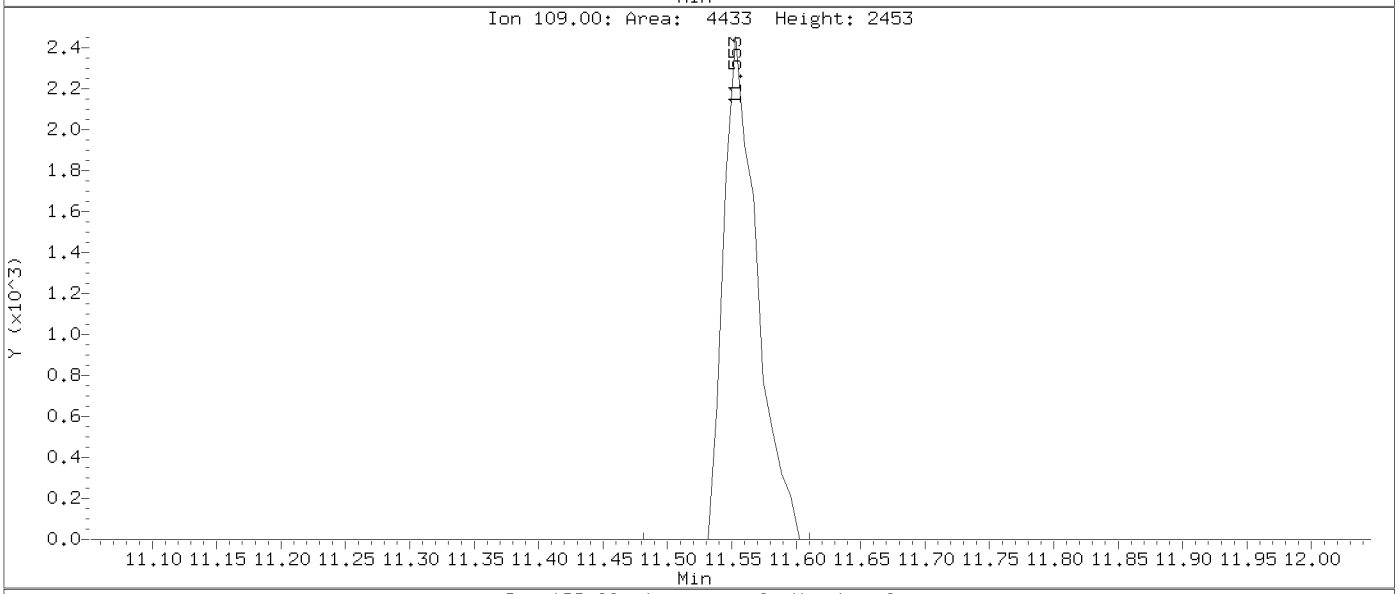


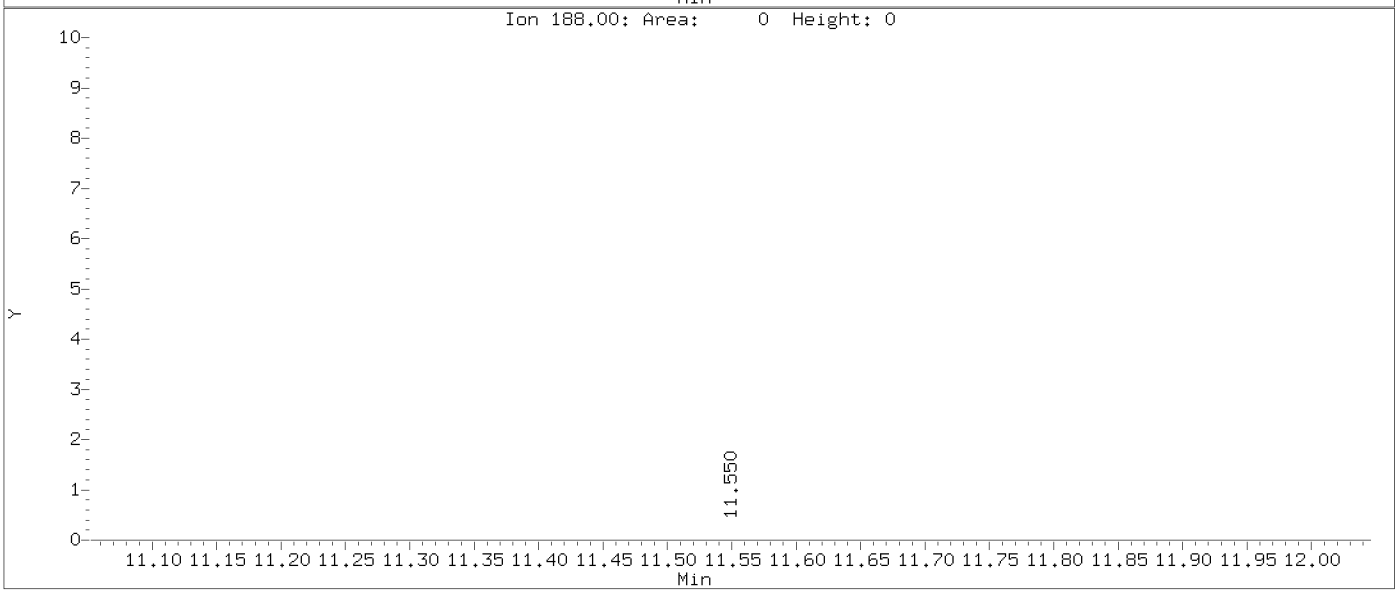
Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromoethane
CAS Number: 106-93-4

AFTER MANUAL INTEGRATION



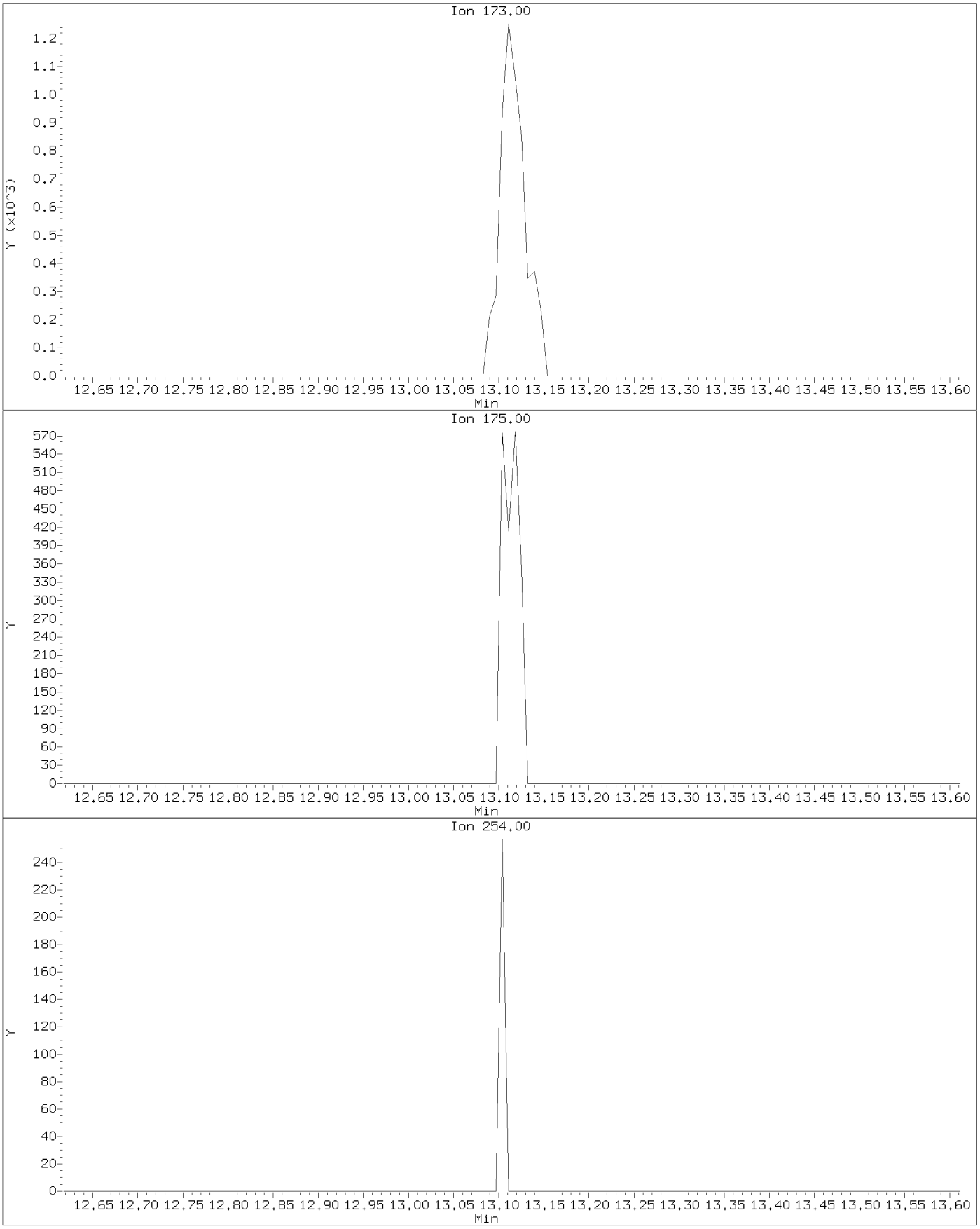




Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromoform
CAS Number: 75-25-2

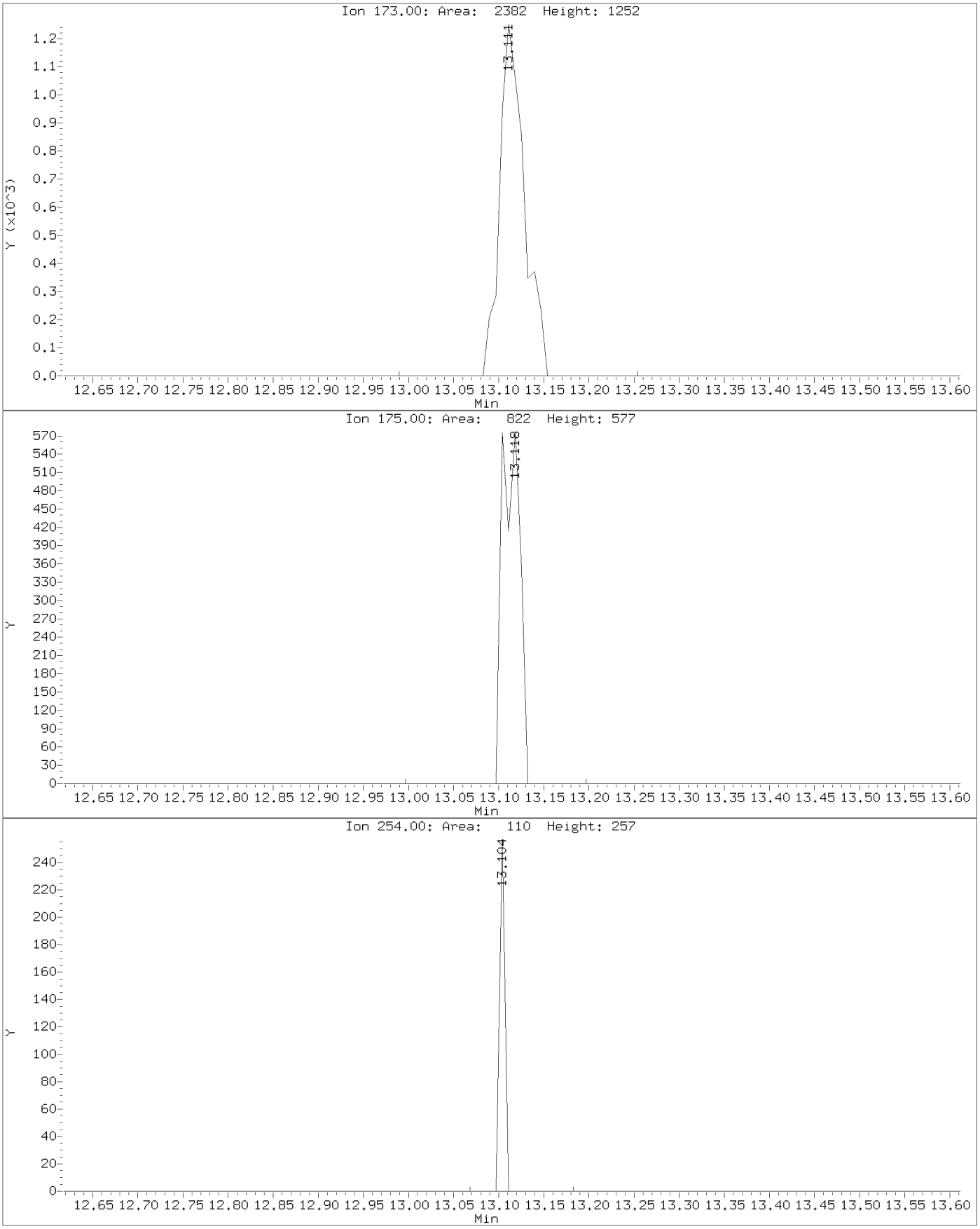
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromoform
CAS Number: 75-25-2

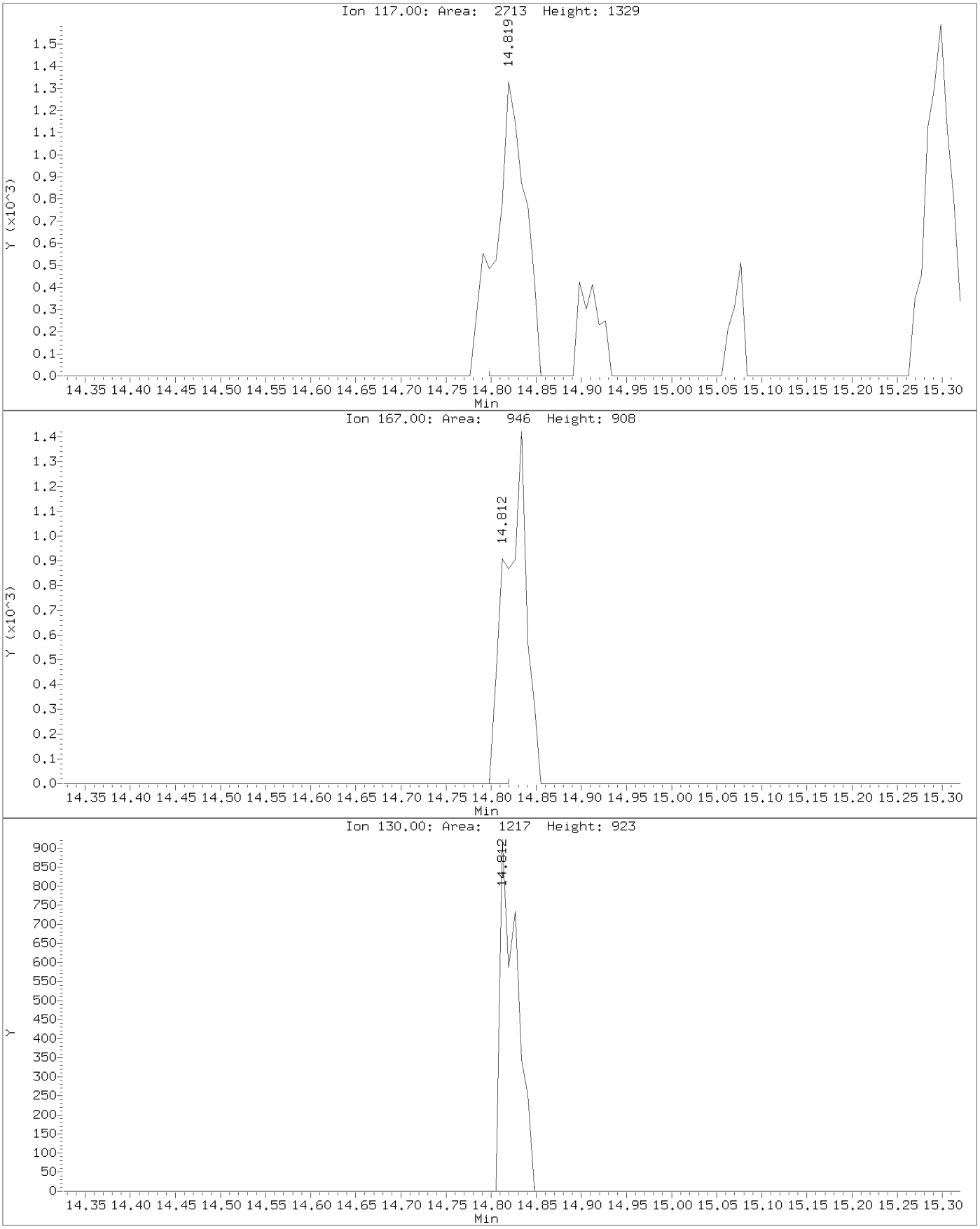
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Pentachloroethane
CAS Number: 76-01-1

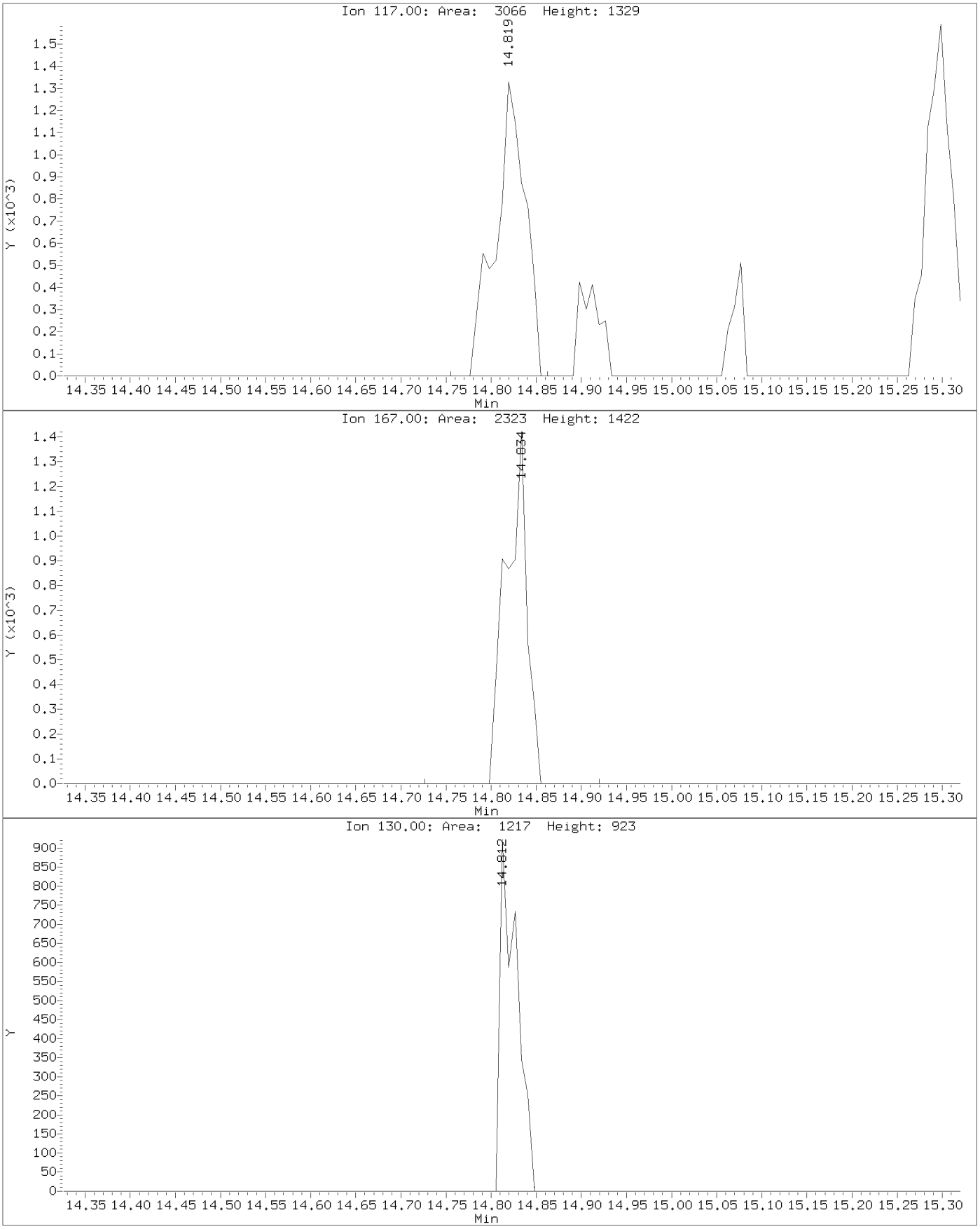
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: Pentachloroethane
CAS Number: 76-01-1

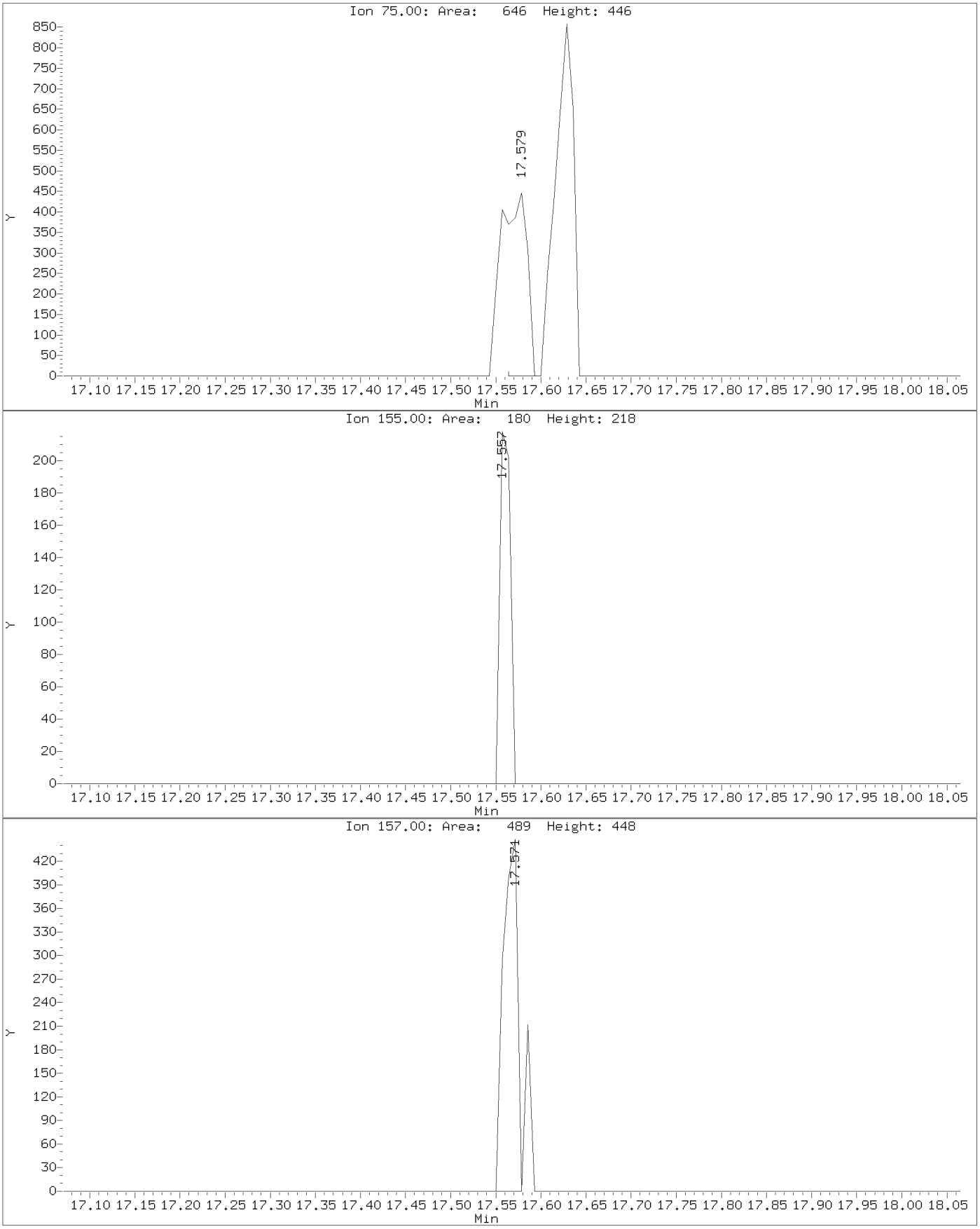
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8

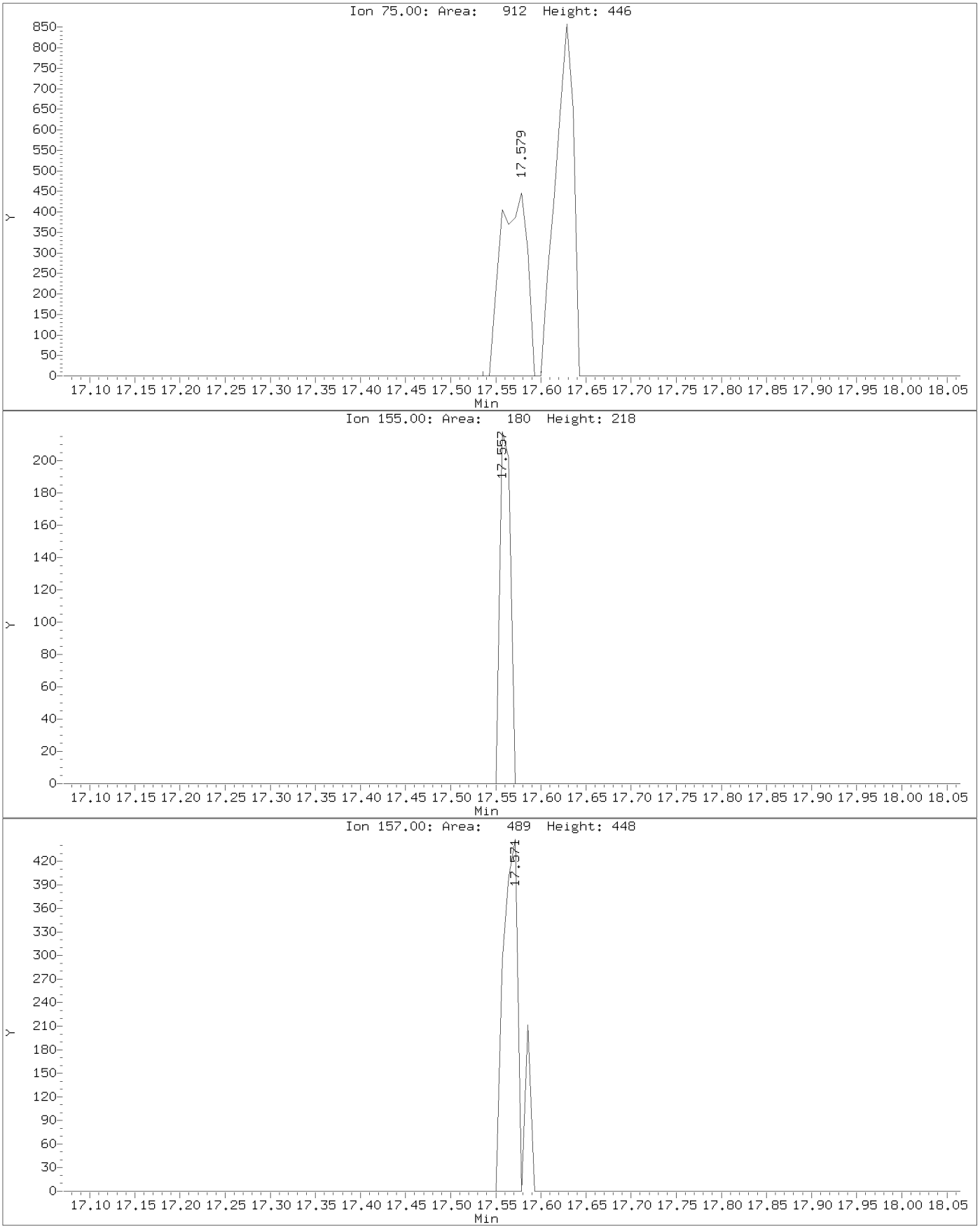
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8

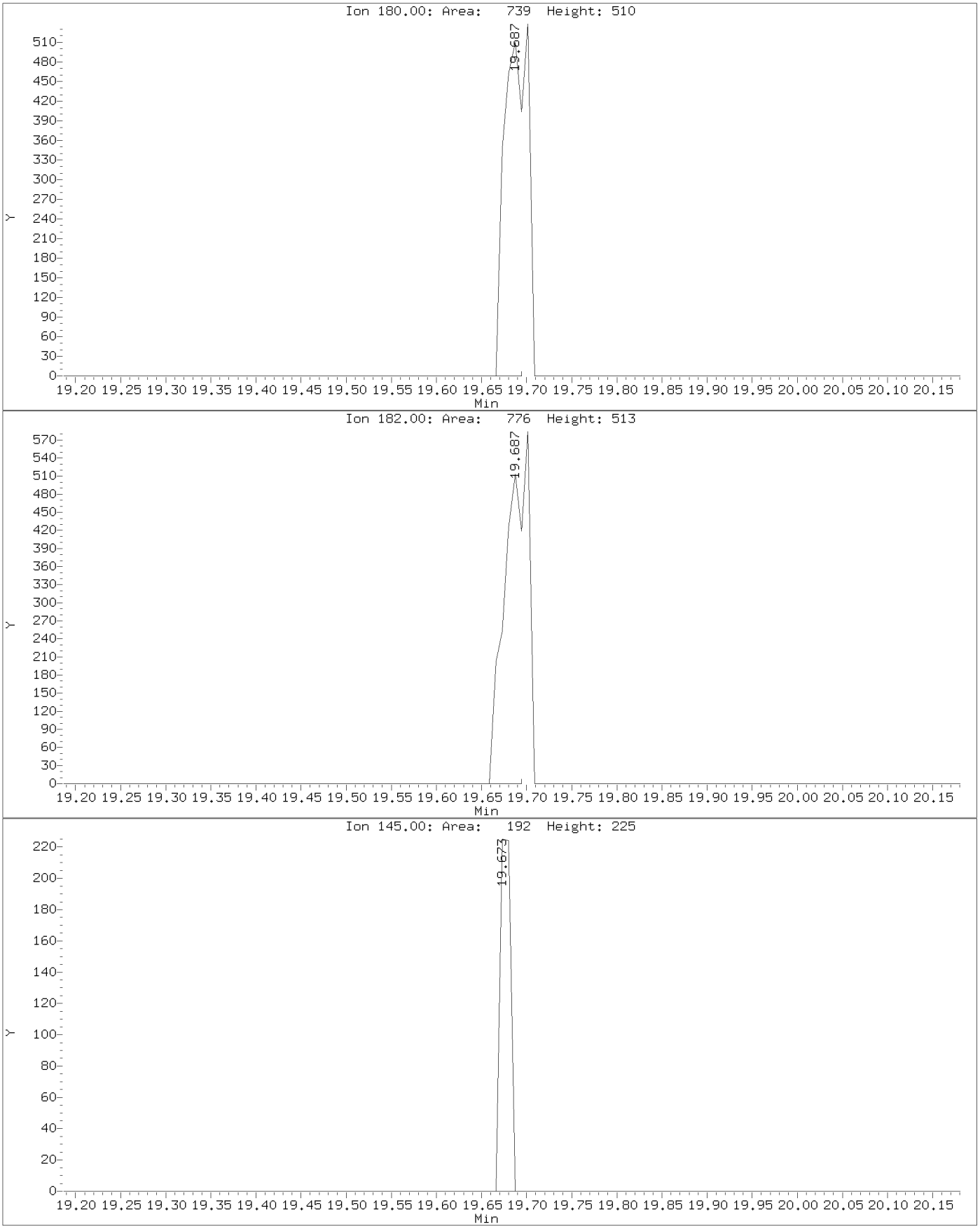
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2,3-Trichlorobenzene
CAS Number: 87-61-6

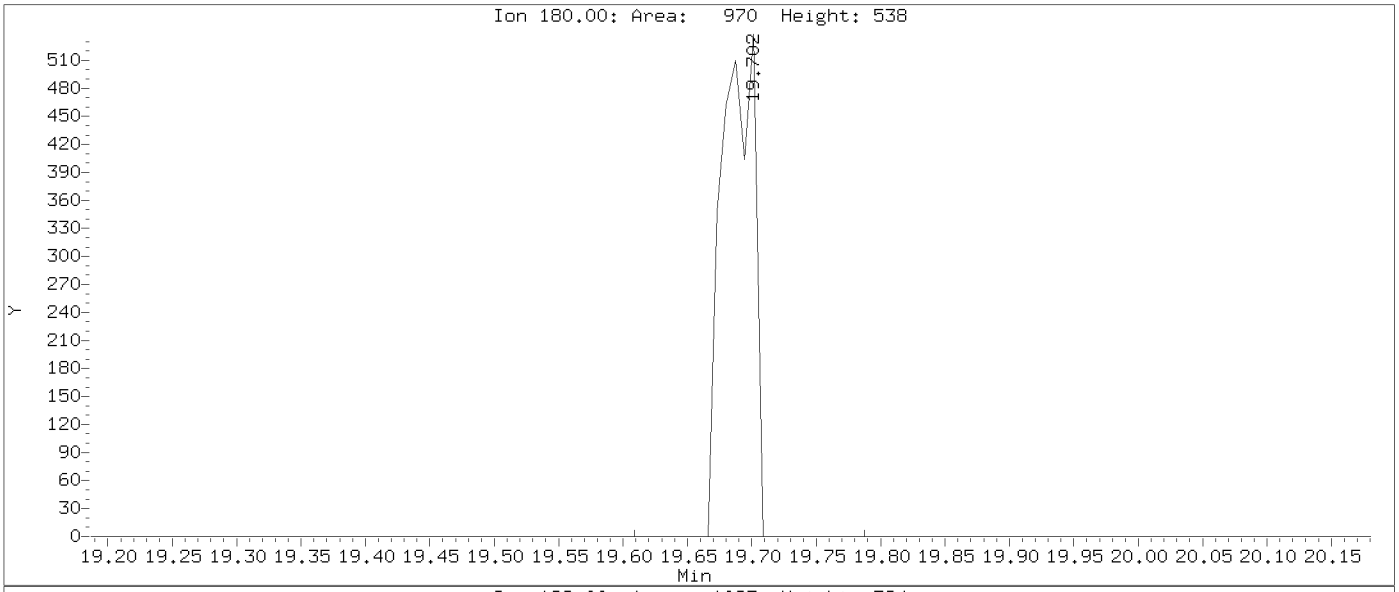
BEFORE MANUAL INTEGRATION

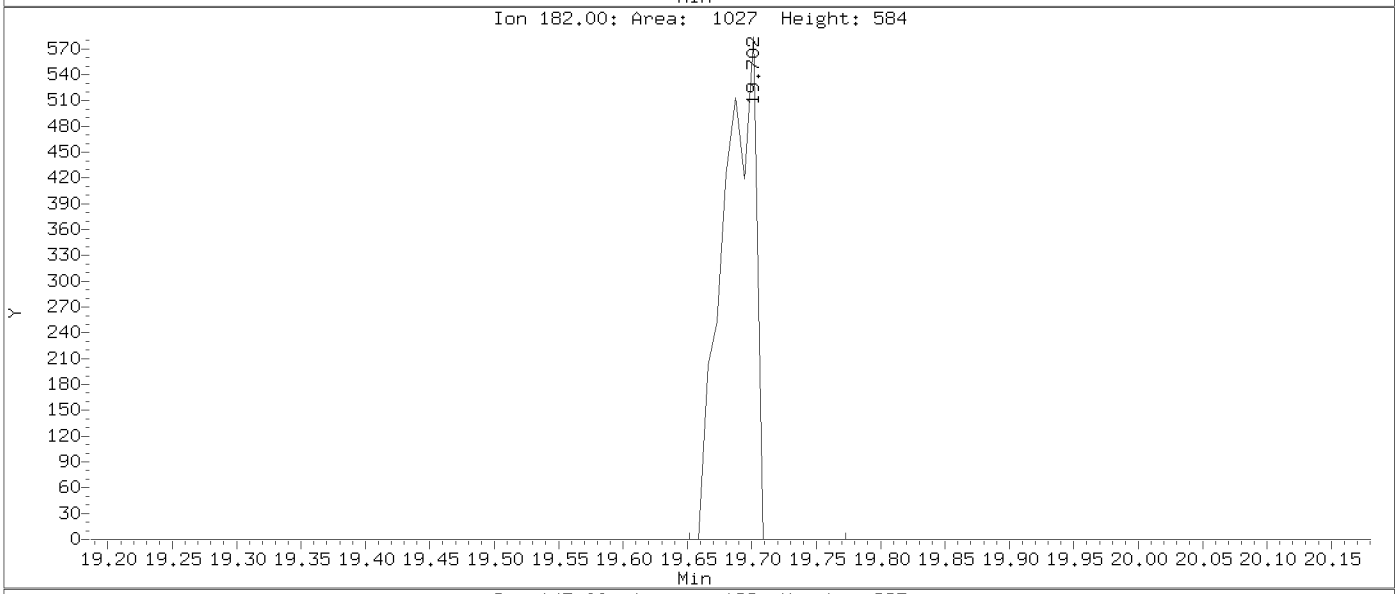


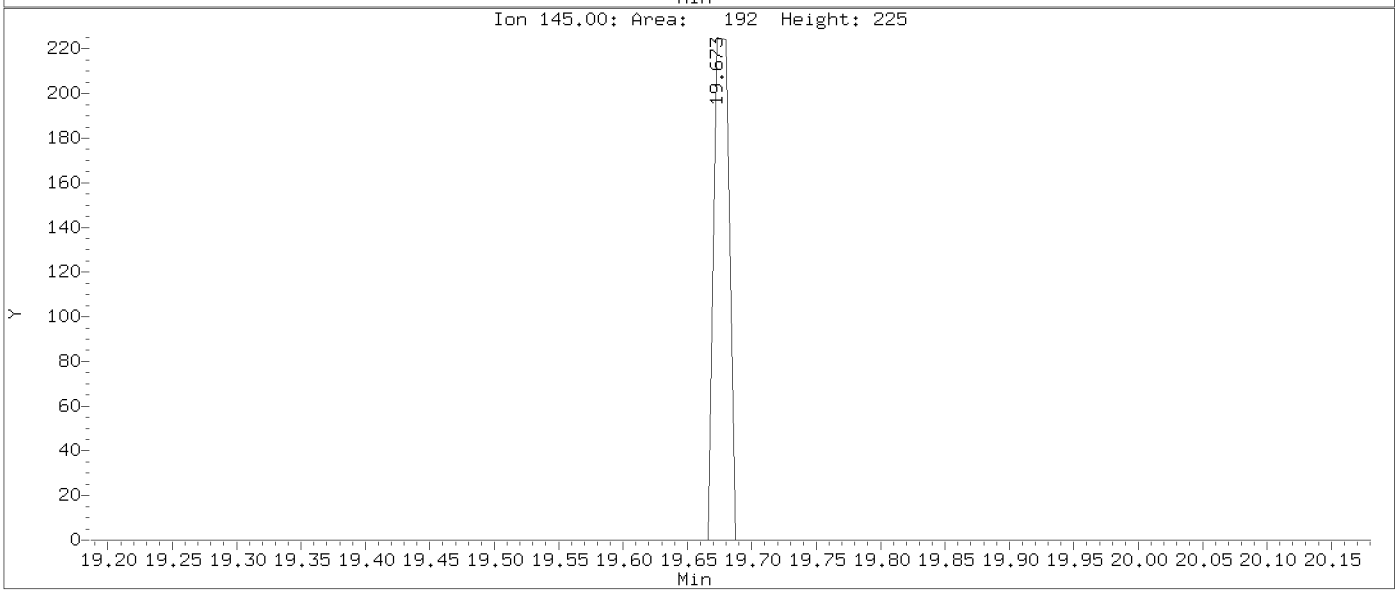
Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\C1960.D
Injection Date: 28-MAR-2015 13:00
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2,3-Trichlorobenzene
CAS Number: 87-61-6

AFTER MANUAL INTEGRATION







Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-C
Lab File IDs : C2120.D C2115.D C2114.D C2113.D C2118.D C2117.D **Column ID:**
Calibration Date(s): 06-APR-15 11:46 06-APR-15 15:49

	Level 1 1.0000	Level 2 5.0000	Level 3 20.0000	Level 4 50.0000	Level 5 100.0000	Level 6 200.0000	Crv New	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.64434	0.78891	0.76668	0.77530	0.72640	0.73349	AVG		0.73919		7.08785	15.00000	O
Chloromethane	1.42652	1.22933	1.11694	1.04008	1.03384	0.96459	AVG		1.13522		14.8707(	15.00000	O
Vinyl chloride	1.04811	0.92804	0.88575	0.85077	0.87253	0.85131	AVG		0.90608		8.29600	15.00000	O
Bromomethane	0.64450	0.53383	0.52195	0.51537	0.47681	0.49849	AVG		0.53183		11.03034	15.00000	O
Chloroethane	0.60923	0.52819	0.49885	0.49344	0.45191	0.49527	AVG		0.51281		10.36264	15.00000	O
Trichlorofluoromethane	1.16433	1.31280	1.20815	1.13143	1.05712	1.11037	AVG		1.16403		7.63119	15.00000	O
1,1-Dichloroethene	0.70172	0.59137	0.62806	0.61542	0.63586	0.62464	AVG		0.63285		5.85575	15.00000	O
Carbon Disulfide	17179	51845	226602	574429	1137636	2099185	LNR	-0.01837	1.75443		0.99967	0.99000	O
Freon-113	0.49008	0.40126	0.45169	0.44068	0.45864	0.46439	AVG		0.45112		6.53531	15.00000	O
Methylene Chloride	7810	27610	96559	229344	462995	877250	LNR	-0.01660	0.72844		0.99989	0.99000	O
Acetone	0.18040	0.12867	0.12852	0.10624	0.11087	0.08519	AVG		0.12331		26.18615	15.00000	W(
trans-1,2-Dichloroethene	0.81957	0.66557	0.72773	0.71325	0.74378	0.72209	AVG		0.73200		6.88163	15.00000	O
Methyl tert-butyl ether	1.01064	0.99416	1.18875	1.37867	1.24205	1.21929	AVG		1.17226		12.52566	15.00000	O
1,1-Dichloroethane	1.54810	1.40242	1.48161	1.43445	1.47475	1.44544	AVG		1.46446		3.41528	15.00000	O
cis-1,2-Dichloroethene	0.91466	0.64078	0.75584	0.73699	0.77726	0.76889	AVG		0.76574		11.51265	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
Chloroform	1.50227	1.45616	1.52424	1.45922	1.49502	1.47094	AVG		1.48464		1.81533	15.00000	O
Carbon Tetrachloride	0.49917	0.51445	0.60711	0.59792	0.61086	0.62421	AVG		0.57562		9.41265	15.00000	O
1,1,1-Trichloroethane	1.23260	1.25869	1.46314	1.39934	1.39940	1.40820	AVG		1.36023		6.78230	15.00000	O
2-Butanone	0.13355	0.12810	0.13869	0.14427	0.13884	0.11224	AVG		0.13261		8.58521	15.00000	O
Benzene	1.70982	1.52068	1.64379	1.53601	1.56014	1.47193	AVG		1.57373		5.55519	15.00000	O
Cyclohexane	1.10110	1.14687	1.24057	1.21630	1.29684	1.30556	AVG		1.21787		6.68274	15.00000	O
1,2-Dichloroethane	0.71410	0.57889	0.62672	0.63829	0.58023	0.58404	AVG		0.62038		8.46797	15.00000	O
Trichloroethene	0.47282	0.43470	0.48432	0.45733	0.45516	0.46105	AVG		0.46090		3.66017	15.00000	O
1,2-Dichloropropane	0.37083	0.35135	0.40018	0.39233	0.41433	0.40877	AVG		0.38963		6.19577	15.00000	O
Bromodichloromethane	0.65205	0.52579	0.65457	0.65090	0.63993	0.64167	AVG		0.62748		7.99483	15.00000	O
cis-1,3-dichloropropene	0.65024	0.60358	0.67469	0.69267	0.70038	0.68663	AVG		0.66803		5.40353	15.00000	O
Toluene	1.07618	1.03888	1.09724	1.00148	1.03657	0.98367	AVG		1.03900		4.13952	15.00000	O
4-methyl-2-pentanone	0.15960	0.13531	0.16393	0.19293	0.15274	0.14187	AVG		0.15773		12.86821	15.00000	O
Tetrachloroethene	0.34567	0.31641	0.35100	0.32574	0.33637	0.33775	AVG		0.33549		3.79182	15.00000	O
trans-1,3-Dichloropropene	0.55730	0.46917	0.55368	0.59340	0.56448	0.57067	AVG		0.55145		7.73986	15.00000	O
1,1,2-Trichloroethane	0.25768	0.20397	0.23911	0.24216	0.23245	0.22934	AVG		0.23412		7.59063	15.00000	O
Dibromochloromethane	0.34646	0.30440	0.36317	0.39639	0.38691	0.40576	AVG		0.36718		10.27556	15.00000	O
1,2-Dibromoethane	0.33985	0.25936	0.27874	0.29924	0.28192	0.27914	AVG		0.28971		9.53950	15.00000	O
2-Hexanone	0.09283	0.08850	0.11243	0.13427	0.11489	0.11128	AVG		0.10903		15.1940(	15.00000	W(
Chlorobenzene	1.22355	1.07620	1.16081	1.07438	1.09376	1.08040	AVG		1.11818		5.45791	15.00000	O
Ethylbenzene	0.73074	0.59913	0.64855	0.62061	0.65354	0.66101	AVG		0.65226		6.88233	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-C
Lab File IDs : C2120.D C2115.D C2114.D C2113.D C2118.D C2117.D **Column ID:**
Calibration Date(s): 06-APR-15 11:46 06-APR-15 15:49

Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.79677	0.75847	0.81403	0.73974	0.76214	0.74422	AVG		0.76923		3.86836	15.00000	O
o-Xylene	0.78934	0.64310	0.74066	0.72061	0.74916	0.74448	AVG		0.73122		6.65547	15.00000	O
Styrene	1.15461	1.11912	1.29184	1.26361	1.28825	1.25082	AVG		1.22804		5.95444	15.00000	O
Bromoform	0.16171	0.13429	0.17886	0.20591	0.18479	0.19951	AVG		0.17751		14.82581	15.00000	O
Isopropylbenzene	3.85100	3.75034	4.00418	3.45006	3.50513	3.16092	AVG		3.62027		8.47574	15.00000	O
1,1,2,2-Tetrachloroethane	0.63983	0.52799	0.53863	0.56998	0.53037	0.49775	AVG		0.55076		8.96653	15.00000	O
1,3-Dichlorobenzene	1.81198	1.51607	1.56363	1.39795	1.45422	1.36594	AVG		1.51830		10.62471	15.00000	O
1,4-Dichlorobenzene	2.07388	1.58241	1.60131	1.48012	1.53313	1.43534	AVG		1.61770		14.3368(	15.00000	O
1,2-Dichlorobenzene	1.67619	1.22002	1.24910	1.21868	1.21348	1.15023	AVG		1.28795		14.98185	15.00000	O
1,2-Dibromo-3-Chloropropane	318	1186	6059	23004	40858	78152	LNR	-0.00312	0.06655		0.99807	0.99000	O
1,2,4-Trichlorobenzene	3172	4770	40094	160418	311141	582793	LNR	0.01785	0.49985		0.99816	0.99000	O
Methyl Acetate	0.27243	0.22075	0.22953	0.26425	0.24004	0.24364	AVG		0.24511		8.11216	15.00000	O
Methylcyclohexane	1.26852	1.09914	1.20002	1.17601	1.28062	1.27959	AVG		1.21732		5.97798	15.00000	O
Dibromofluoromethane	0.50942	0.54042	0.54096	0.61159	0.58515	0.57701	AVG		0.56076		6.61680	15.00000	
1,2-Dichloroethane-D4	0.64401	0.60017	0.58953	0.72194	0.62272	0.62012	AVG		0.63308		7.49938	15.00000	
Toluene-D8	1.01906	1.04951	1.07698	1.10356	1.09591	1.01030	AVG		1.05922		3.71159	15.00000	
P-Bromofluorobenzene	0.59170	0.55530	0.55989	0.59377	0.58554	0.56079	AVG		0.57450		3.07399	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122A.D
Report Date: 07-Apr-2015 12:28

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG160815-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Misc Info: WG160815,WG160815-4,SI1843-1

Client SDG: WG160815
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	42.3	84.68	80-120
	2 Chloromethane	50.0	41.2	82.37	80-120
	3 Vinyl chloride	50.0	42.3	84.57	80-120
	4 Bromomethane	50.0	43.4	86.85	80-120
	5 Chloroethane	50.0	45.4	90.91	80-120
	6 Trichlorofluoromet	50.0	45.7	91.36	80-120
	7 Diethyl Ether	50.0	50.2	100.31	80-120
	8 Tertiary-butyl alc	250	133	53.37*	80-120
	9 1,1-Dichloroethene	50.0	50.5	100.95	80-120
	10 Carbon Disulfide	50.0	53.4	106.76	80-120
	11 Freon-113	50.0	50.1	100.15	80-120
	12 Iodomethane	50.0	54.4	108.92	80-120
	13 Acrolein	250	246	98.36	80-120
	14 Methylene Chloride	50.0	47.7	95.44	80-120
	15 Acetone	50.0	65.1	130.29*	80-120
	16 Isobutyl Alcohol	1000	575	57.51*	80-120
	17 trans-1,2-Dichloro	50.0	47.4	94.72	80-120
	18 Allyl Chloride	50.0	48.8	97.53	80-120
	19 Methyl tert-butyl	100	105	104.70	80-120
	20 Acetonitrile	500	343	68.58*	80-120
	21 Di-isopropyl ether	50.0	52.8	105.60	80-120
	22 Chloroprene	50.0	50.3	100.62	80-120
	23 Propionitrile	500	421	84.23	80-120
	24 Methacrylonitrile	500	496	99.23	80-120
	25 1,1-Dichloroethane	50.0	50.4	100.83	80-120
	26 Acrylonitrile	250	239	95.72	80-120
	27 Ethyl tertiary-but	50.0	50.0	99.94	80-120
	28 Vinyl Acetate	50.0	50.9	101.80	80-120
	29 cis-1,2-Dichloroet	50.0	50.5	100.95	80-120
M	30 1,2-Dichloroethyle	100	97.8	97.84	80-120
	31 Methyl Methacrylat	50.0	47.4	94.80	80-120
	32 2,2-Dichloropropan	50.0	51.9	103.87	80-120
	33 Bromochloromethane	50.0	52.0	104.04	80-120
	34 Chloroform	50.0	51.0	102.10	80-120
	35 Carbon Tetrachlori	50.0	51.4	102.80	80-120
	36 Tetrahydrofuran	50.0	48.3	96.65	80-120
	38 1,1,1-Trichloroeth	50.0	51.2	102.36	80-120
	39 1,1-Dichloropropen	50.0	54.6	109.13	80-120
	40 2-Butanone	50.0	57.4	114.91	80-120
	41 Benzene	50.0	50.5	101.08	80-120

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122A.D
Report Date: 07-Apr-2015 12:28

	SPIKE	COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	43	Cyclohexane	50.0	51.4	102.76	80-120
	44	Ethyl Methacrylate	50.0	47.1	94.17	80-120
	46	Tertiary-amyl meth	50.0	47.6	95.11	80-120
	47	1,2-Dichloroethane	50.0	49.6	99.29	80-120
	48	Trichloroethene	50.0	52.3	104.67	80-120
	50	Dibromomethane	50.0	49.9	99.74	80-120
	51	1,2-Dichloropropan	50.0	55.2	110.34	80-120
	52	Bromodichlorometha	50.0	54.0	107.96	80-120
	53	cis-1,3-dichloropr	50.0	51.2	102.40	80-120
	54	1,4-Dioxane	1000	386	38.61*	80-120
	56	2-Chloroethylvinyl	50.0	34.1	68.18*	80-120
	57	Toluene	50.0	50.4	100.76	80-120
	58	4-methyl-2-pentano	50.0	54.2	108.43	80-120
	59	Tetrachloroethene	50.0	53.5	107.02	80-120
	60	trans-1,3-Dichloro	50.0	53.3	106.58	80-120
	61	1,1,2-Trichloroeth	50.0	50.2	100.49	80-120
	62	Dibromochlorometha	50.0	53.0	106.02	80-120
	63	1,3-Dichloropropan	50.0	51.0	102.10	80-120
	64	1,2-Dibromoethane	50.0	49.7	99.41	80-120
	65	2-Hexanone	50.0	58.3	116.67	80-120
	67	Chlorobenzene	50.0	54.6	109.27	80-120
	152	1-Chlorohexane	50.0	54.0	107.91	80-120
	68	Ethylbenzene	50.0	50.7	101.37	80-120
	69	1,1,1,2-Tetrachlor	50.0	52.0	103.94	80-120
M	70	Xylenes (total)	150	163	108.87	80-120
	71	m+p-Xylenes	100	107	107.44	80-120
	72	o-Xylene	50.0	55.9	111.73	80-120
	73	Styrene	50.0	53.8	107.58	80-120
	74	Bromoform	50.0	53.4	106.78	80-120
	75	Isopropylbenzene	50.0	54.6	109.22	80-120
	77	cis-1,4-Dichloro-2	50.0	45.0	90.03	80-120
	78	trans-1,4-Dichloro	50.0	45.4	90.88	80-120
	79	Bromobenzene	50.0	50.0	99.97	80-120
	80	N-Propylbenzene	50.0	54.7	109.32	80-120
	81	1,1,2,2-Tetrachlor	50.0	47.9	95.83	80-120
	82	1,3,5-Trimethylben	50.0	48.8	97.67	80-120
	83	2-Chlorotoluene	50.0	52.9	105.74	80-120
	84	1,2,3-Trichloropro	50.0	48.8	97.72	80-120
	85	4-Chlorotoluene	50.0	53.9	107.78	80-120
	86	tert-Butylbenzene	50.0	51.8	103.67	80-120
	87	Pentachloroethane	50.0	49.1	98.30	80-120
	88	1,2,4-Trimethylben	50.0	51.5	103.08	80-120
	89	P-Isopropyltoluene	50.0	55.5	110.95	80-120
	90	1,3-Dichlorobenzen	50.0	52.1	104.29	80-120
	92	1,4-Dichlorobenzen	50.0	47.0	93.95	80-120
	93	N-Butylbenzene	50.0	53.1	106.19	80-120
	94	sec-Butylbenzene	50.0	54.4	108.91	80-120
	95	1,2-Dichlorobenzen	50.0	51.4	102.88	80-120
	96	1,2-Dibromo-3-Chlo	50.0	46.0	91.90	80-120
	97	1,3,5-Trichloroben	50.0	50.0	99.94	80-120
	98	Hexachlorobutadien	50.0	52.7	105.50	80-120
	99	1,2,4-Trichloroben	50.0	48.4	96.71	80-120
	100	1,2,3-Trimethylben	50.0	47.2	94.36	80-120
	101	Naphthalene	50.0	42.8	85.62	80-120

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122A.D
Report Date: 07-Apr-2015 12:28

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	41.0	81.91	80-120
103 Methyl Acetate	50.0	47.2	94.48	80-120
104 Methylcyclohexane	50.0	50.6	101.28	80-120
M 153 Total Alkylbenzene	350	370	105.69	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	53.2	106.33	68-128
$ 45 1,2-Dichloroethane	50.0	56.7	113.33	67-135
$ 55 Toluene-D8	50.0	61.1	122.26	65-128
$ 76 P-Bromofluorobenze	50.0	51.4	102.83	56-133

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2113.D
Report Date: 07-Apr-2015 07:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2113.D
Lab Smp Id: WG160815-4 Client Smp ID: Initial Calibration
Inj Date : 06-APR-2015 11:46
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-4
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 11:46 Cal File: C2113.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.989	1.990	(0.248)	245432	50.0000	50.0	
2 Chloromethane	50	2.218	2.219	(0.276)	329252	50.0000	50.0	
3 Vinyl chloride	62	2.325	2.326	(0.289)	269324	50.0000	50.0	
4 Bromomethane	94	2.726	2.726	(0.339)	163149	50.0000	50.0	
5 Chloroethane	64	2.890	2.891	(0.360)	156206	50.0000	50.0	
6 Trichlorofluoromethane	101	3.062	3.062	(0.381)	358169	50.0000	50.0	
7 Diethyl Ether	59	3.483	3.484	(0.433)	164518	50.0000	50.0	
8 Tertiary-butyl alcohol	59	5.335	5.335	(0.664)	41035	250.000	250	
9 1,1-Dichloroethene	96	3.755	3.755	(0.467)	194820	50.0000	50.0	
10 Carbon Disulfide	76	3.784	3.784	(0.471)	574429	50.0000	50.0	
11 Freon-113	151	3.812	3.813	(0.474)	139504	50.0000	50.0	
12 Iodomethane	142	3.955	3.956	(0.492)	181035	50.0000	50.0	
13 Acrolein	56	4.262	4.263	(0.530)	82516	250.000	250	
14 Methylene Chloride	84	4.648	4.649	(0.578)	229344	50.0000	50.0	
15 Acetone	43	4.741	4.742	(0.590)	168158	250.000	250	
16 Isobutyl Alcohol	43	8.251	8.252	(1.027)	53951	1000.00	1000	
17 trans-1,2-Dichloroethene	96	4.913	4.913	(0.611)	225788	50.0000	50.0	
18 Allyl Chloride	41	4.477	4.477	(0.557)	232686	50.0000	50.0	
19 Methyl tert-butyl ether	73	5.120	5.121	(0.637)	872873	100.000	100	
20 Acetonitrile	39	5.542	5.542	(0.690)	16826	500.000	500	
21 Di-isopropyl ether	45	5.778	5.778	(0.719)	654628	50.0000	50.0	
22 Chloroprene	53	5.906	5.907	(0.735)	364306	50.0000	50.0	
23 Propionitrile	54	7.958	7.958	(0.990)	154099	500.000	500	
24 Methacrylonitrile	41	7.987	7.987	(0.994)	732165	500.000	500	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2113.D
Report Date: 07-Apr-2015 07:35

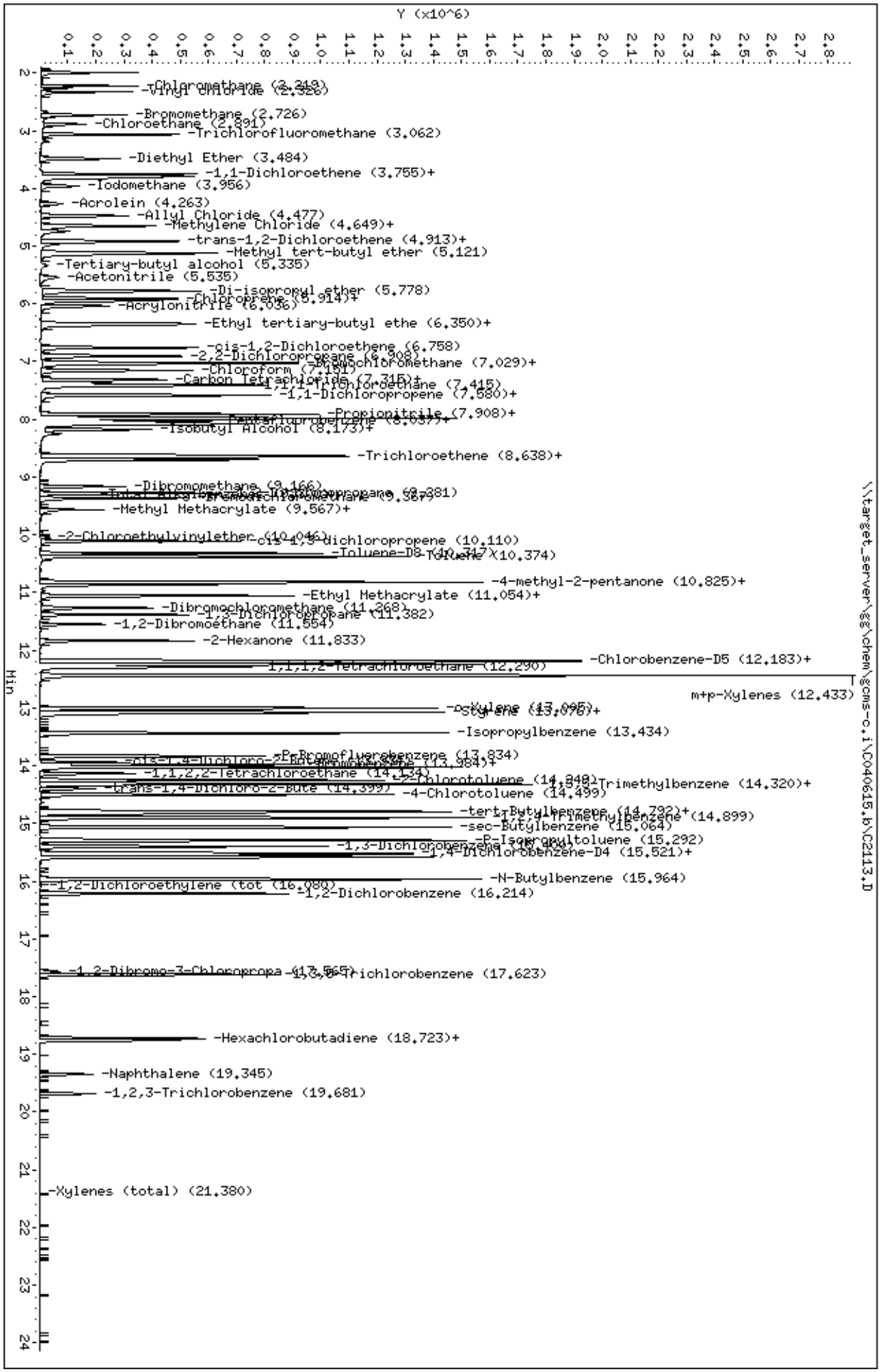
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.949	5.950	(0.740)	454094	50.0000	50.0	
	26 Acrylonitrile	52	6.035	6.036	(0.751)	184434	250.000	250	
	27 Ethyl tertiary-butyl ether	59	6.343	6.343	(0.789)	599359	50.0000	50.0	
	28 Vinyl Acetate	43	6.371	6.372	(0.732)	366040	50.0000	50.0	
	29 cis-1,2-Dichloroethene	96	6.757	6.758	(0.841)	233303	50.0000	50.0	
	31 Methyl Methacrylate	41	9.566	9.567	(1.099)	103268	50.0000	50.0	
	32 2,2-Dichloropropane	77	6.907	6.908	(0.859)	409296	50.0000	50.0	
	33 Bromochloromethane	128	7.036	7.036	(0.875)	90791	50.0000	50.0	
	34 Chloroform	83	7.150	7.151	(0.890)	461936	50.0000	50.0	
	35 Carbon Tetrachloride	117	7.315	7.315	(0.841)	315951	50.0000	50.0	
	36 Tetrahydrofuran	42	7.358	7.358	(0.916)	147052	250.000	250	
$	37 Dibromofluoromethane	113	7.400	7.401	(0.921)	193607	50.0000	50.0	
	38 1,1,1-Trichloroethane	97	7.415	7.415	(0.923)	442981	50.0000	50.0	
	39 1,1-Dichloropropene	75	7.579	7.580	(0.871)	330716	50.0000	50.0	
	40 2-Butanone	43	7.579	7.580	(0.943)	228346	250.000	250	
	41 Benzene	78	7.908	7.908	(0.909)	811659	50.0000	50.0	
*	42 Pentafluorobenzene	168	8.037	8.037	(1.000)	316564	50.0000		
	43 Cyclohexane	56	7.022	7.022	(0.874)	385038	50.0000	50.0	
	44 Ethyl Methacrylate	69	11.053	11.054	(1.270)	169386	50.0000	50.0	
$	45 1,2-Dichloroethane-D4	65	8.087	8.087	(1.006)	228541	50.0000	50.0	
	46 Tertiary-amyl methyl ether	73	8.072	8.073	(1.004)	405921	50.0000	50.0	
	47 1,2-Dichloroethane	62	8.172	8.173	(0.939)	337285	50.0000	50.0	
	48 Trichloroethene	95	8.651	8.651	(0.994)	241663	50.0000	50.0	
*	49 1,4-Difluorobenzene	114	8.701	8.702	(1.000)	528421	50.0000		
	50 Dibromomethane	93	9.166	9.166	(1.053)	111818	50.0000	50.0	
	51 1,2-Dichloropropane	63	9.280	9.281	(1.067)	207316	50.0000	50.0	
	52 Bromodichloromethane	83	9.366	9.367	(1.076)	343947	50.0000	50.0	
	53 cis-1,3-dichloropropene	75	10.110	10.110	(1.162)	366022	50.0000	50.0	
	54 1,4-Dioxane	88	9.609	9.610	(1.104)	11830	1000.00	1000	
$	55 Toluene-D8	98	10.317	10.317	(1.186)	583143	50.0000	50.0	
	56 2-Chloroethylvinylether	63	10.045	10.046	(1.154)	11459	50.0000	50.0	
	57 Toluene	92	10.374	10.374	(1.192)	529204	50.0000	50.0	
	58 4-methyl-2-pentanone	43	10.824	10.825	(1.244)	509746	250.000	250	
	59 Tetrachloroethene	164	10.817	10.818	(0.887)	170143	50.0000	50.0	
	60 trans-1,3-Dichloropropene	75	10.867	10.868	(1.249)	313566	50.0000	50.0	
	61 1,1,2-Trichloroethane	83	11.053	11.054	(1.270)	127963	50.0000	50.0	
	62 Dibromochloromethane	129	11.267	11.268	(0.924)	207047	50.0000	50.0	
	63 1,3-Dichloropropane	76	11.382	11.382	(0.934)	294870	50.0000	50.0	
	64 1,2-Dibromoethane	107	11.553	11.554	(1.328)	158124	50.0000	50.0	
	65 2-Hexanone	43	11.832	11.833	(0.971)	350676	250.000	250	
*	66 Chlorobenzene-D5	117	12.190	12.190	(1.000)	522326	50.0000		
	67 Chlorobenzene	112	12.211	12.212	(1.002)	561178	50.0000	50.0	
	152 1-Chlorohexane	91	12.182	12.183	(0.999)	328042	50.0000	50.0	
	68 Ethylbenzene	106	12.247	12.247	(1.005)	324160	50.0000	50.0	
	69 1,1,1,2-Tetrachloroethane	131	12.290	12.290	(1.008)	227018	50.0000	50.0	
	71 m+p-Xylenes	106	12.433	12.433	(1.020)	772766	100.000	100	
	72 o-Xylene	106	13.004	13.005	(1.067)	376393	50.0000	50.0	
	73 Styrene	104	13.076	13.076	(1.073)	660016	50.0000	50.0	
	74 Bromoform	173	13.112	13.112	(1.076)	107554	50.0000	50.0	
	75 Isopropylbenzene	105	13.433	13.434	(0.866)	1054217	50.0000	50.0	
$	76 P-Bromofluorobenzene	95	13.834	13.834	(1.590)	313761	50.0000	50.0	
	77 cis-1,4-Dichloro-2-Butene	53	13.934	13.934	(0.898)	66829	50.0000	50.0	
	78 trans-1,4-Dichloro-2-Butene	53	14.398	14.399	(0.928)	50805	50.0000	50.0	
	79 Bromobenzene	156	13.984	13.984	(0.901)	241716	50.0000	50.0	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2113.D
Report Date: 07-Apr-2015 07:35

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.027	14.027	(0.904)	1281824	50.0000	50.0	
81 1,1,2,2-Tetrachloroethane	83	14.134	14.134	(0.911)	174166	50.0000	50.0	
82 1,3,5-Trimethylbenzene	105	14.320	14.320	(0.923)	985110	50.0000	50.0	
83 2-Chlorotoluene	91	14.255	14.256	(0.919)	818428	50.0000	50.0	
84 1,2,3-Trichloropropane	75	14.334	14.334	(0.924)	149272	50.0000	50.0	
85 4-Chlorotoluene	91	14.498	14.499	(0.935)	822317	50.0000	50.0	
86 tert-Butylbenzene	119	14.791	14.792	(0.953)	877450	50.0000	50.0	
87 Pentachloroethane	117	14.820	14.821	(0.955)	185858	50.0000	50.0	
88 1,2,4-Trimethylbenzene	105	14.899	14.899	(0.960)	982015	50.0000	50.0	
89 P-Isopropyltoluene	119	15.292	15.292	(0.986)	939813	50.0000	50.0	
90 1,3-Dichlorobenzene	146	15.399	15.400	(0.993)	427165	50.0000	50.0	
* 91 1,4-Dichlorobenzene-D4	152	15.513	15.514	(1.000)	305565	50.0000		
92 1,4-Dichlorobenzene	146	15.542	15.542	(1.002)	452272	50.0000	50.0	
93 N-Butylbenzene	91	15.964	15.964	(1.029)	1008195	50.0000	50.0	
94 sec-Butylbenzene	105	15.063	15.064	(0.971)	1119555	50.0000	50.0	
95 1,2-Dichlorobenzene	146	16.214	16.213	(1.045)	372386	50.0000	50.0	
96 1,2-Dibromo-3-Chloropropane	75	17.565	17.565	(1.132)	23004	50.0000	50.0	
97 1,3,5-Trichlorobenzene	180	17.622	17.623	(1.136)	281892	50.0000	50.0	
98 Hexachlorobutadiene	225	18.723	18.723	(1.207)	132189	50.0000	50.0	
99 1,2,4-Trichlorobenzene	180	18.759	18.759	(1.209)	160418	50.0000	50.0	
100 1,2,3-Trimethylbenzene	105	15.585	15.585	(1.005)	904245	50.0000	50.0	
101 Naphthalene	128	19.352	19.352	(1.247)	160702	50.0000	50.0	
102 1,2,3-Trichlorobenzene	180	19.681	19.681	(1.269)	65997	50.0000	50.0	
103 Methyl Acetate	43	4.970	4.971	(0.618)	83652	50.0000	50.0	
104 Methylcyclohexane	83	8.630	8.630	(1.074)	372281	50.0000	50.0	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2113.D
Date : 06-APR-2015 11:46
Client ID: Initial Calibration
Sample Info: WG160815-4
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2114.D
Report Date: 07-Apr-2015 07:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2114.D
Lab Smp Id: WG160815-3 Client Smp ID: Initial Calibration
Inj Date : 06-APR-2015 12:18
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-3
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 12:18 Cal File: C2114.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.992	1.990	(0.248)	92607	20.0000	19.9	
2 Chloromethane	50	2.221	2.219	(0.276)	134914	20.0000	20.7	
3 Vinyl chloride	62	2.328	2.326	(0.290)	106989	20.0000	20.4	
4 Bromomethane	94	2.728	2.726	(0.339)	63046	20.0000	20.1	
5 Chloroethane	64	2.893	2.891	(0.360)	60256	20.0000	20.1	
6 Trichlorofluoromethane	101	3.064	3.062	(0.381)	145932	20.0000	20.6	
7 Diethyl Ether	59	3.486	3.484	(0.434)	52825	20.0000	18.3	
8 Tertiary-butyl alcohol	59	5.337	5.335	(0.664)	22750	100.000	118	
9 1,1-Dichloroethene	96	3.751	3.755	(0.467)	75863	20.0000	20.2	
10 Carbon Disulfide	76	3.786	3.784	(0.471)	226602	20.0000	20.3	
11 Freon-113	151	3.815	3.813	(0.475)	54559	20.0000	20.2	
12 Iodomethane	142	3.958	3.956	(0.492)	72100	20.0000	20.4	
13 Acrolein	56	4.258	4.263	(0.530)	23435	100.000	85.3	
14 Methylene Chloride	84	4.651	4.649	(0.579)	96559	20.0000	21.0	
15 Acetone	43	4.744	4.742	(0.590)	77622	100.000	109	
16 Isobutyl Alcohol	43	8.247	8.252	(1.026)	32709	400.000	491	
17 trans-1,2-Dichloroethene	96	4.916	4.913	(0.611)	87902	20.0000	20.2	
18 Allyl Chloride	41	4.473	4.477	(0.556)	92441	20.0000	20.4	
19 Methyl tert-butyl ether	73	5.123	5.121	(0.637)	287176	40.0000	37.0	
20 Acetonitrile	39	5.545	5.542	(0.690)	12455	200.000	264	
21 Di-isopropyl ether	45	5.781	5.778	(0.719)	236843	20.0000	19.5	
22 Chloroprene	53	5.909	5.907	(0.735)	133138	20.0000	19.6	
23 Propionitrile	54	7.961	7.958	(0.990)	67741	200.000	214	
24 Methacrylonitrile	41	7.982	7.987	(0.993)	229553	200.000	180	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2114.D
Report Date: 07-Apr-2015 07:35

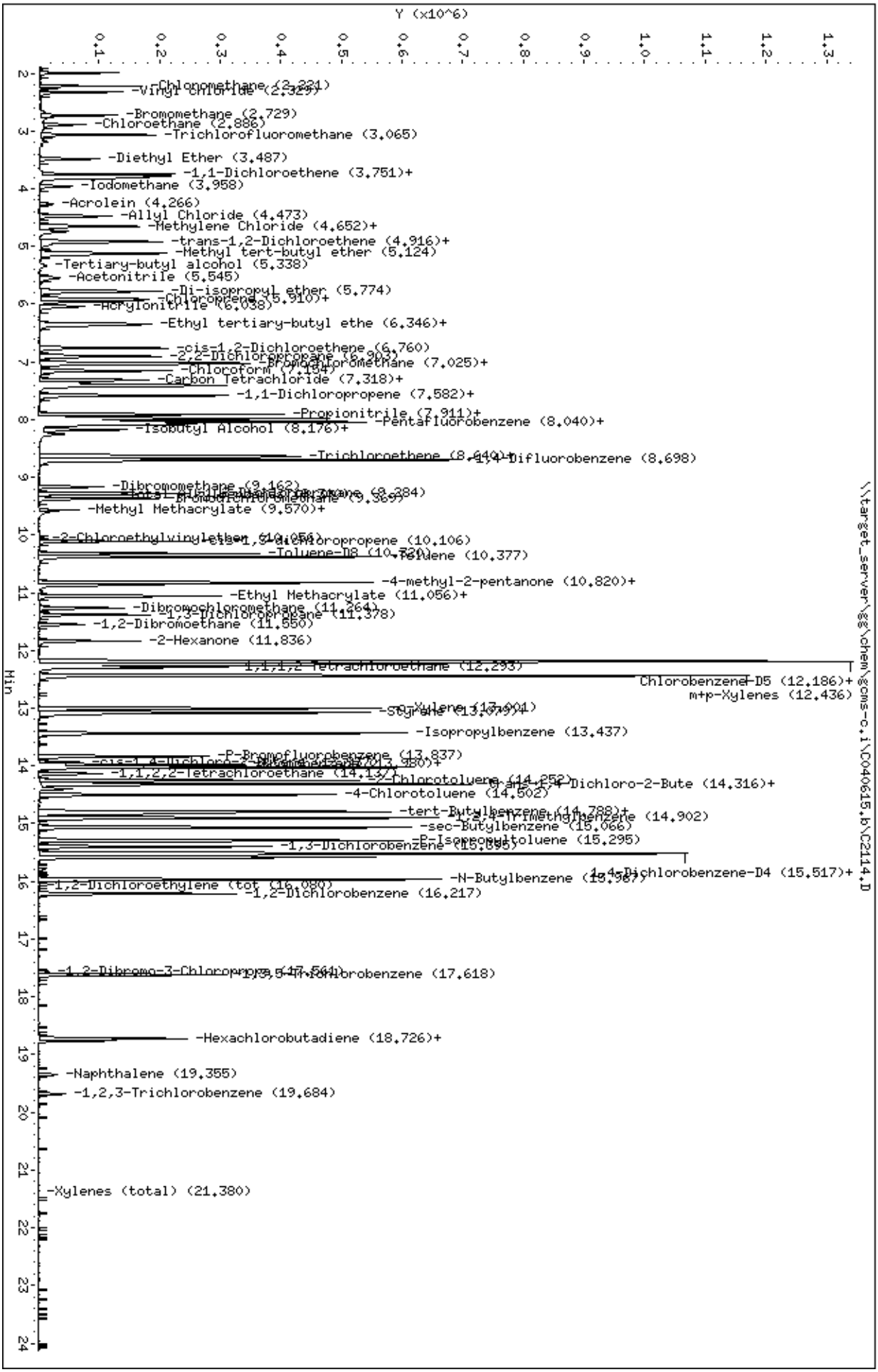
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	25	1,1-Dichloroethane	63	5.945	5.950	(0.740)	178962	20.0000	20.3	
	26	Acrylonitrile	52	6.038	6.036	(0.751)	55951	100.000	88.6	
	27	Ethyl tertiary-butyl ether	59	6.345	6.343	(0.789)	203870	20.0000	18.8	
	28	Vinyl Acetate	43	6.374	6.372	(0.733)	108155	20.0000	17.7	
	29	cis-1,2-Dichloroethene	96	6.760	6.758	(0.841)	91297	20.0000	20.2	
M	30	1,2-Dichloroethylene (total)	96				179199	20.0000	40.4	
	31	Methyl Methacrylate	41	9.569	9.567	(1.100)	30277	20.0000	17.6	
	32	2,2-Dichloropropane	77	6.903	6.908	(0.859)	155405	20.0000	20.0	
	33	Bromochloromethane	128	7.039	7.036	(0.876)	34365	20.0000	19.9	
	34	Chloroform	83	7.153	7.151	(0.890)	184112	20.0000	20.4	
	35	Carbon Tetrachloride	117	7.317	7.315	(0.841)	119444	20.0000	20.2	
	36	Tetrahydrofuran	42	7.360	7.358	(0.916)	53113	100.000	97.2	
$	37	Dibromofluoromethane	113	7.403	7.401	(0.921)	65342	20.0000	18.8	
	38	1,1,1-Trichloroethane	97	7.410	7.415	(0.922)	176731	20.0000	20.4	
	39	1,1-Dichloropropene	75	7.582	7.580	(0.872)	126020	20.0000	20.2	
	40	2-Butanone	43	7.582	7.580	(0.943)	83763	100.000	98.0	
	41	Benzene	78	7.911	7.908	(0.910)	323402	20.0000	20.7	
*	42	Pentafluorobenzene	168	8.039	8.037	(1.000)	301973	50.0000		
	43	Cyclohexane	56	7.017	7.022	(0.873)	149848	20.0000	20.2	
	44	Ethyl Methacrylate	69	11.056	11.054	(1.271)	50416	20.0000	17.8	
$	45	1,2-Dichloroethane-D4	65	8.089	8.087	(1.006)	71209	20.0000	18.0	
	46	Tertiary-amyl methyl ether	73	8.075	8.073	(1.004)	136838	20.0000	18.8	
	47	1,2-Dichloroethane	62	8.175	8.173	(0.940)	123302	20.0000	19.8	
	48	Trichloroethene	95	8.647	8.651	(0.994)	95287	20.0000	20.6	
*	49	1,4-Difluorobenzene	114	8.697	8.702	(1.000)	491855	50.0000		
	50	Dibromomethane	93	9.162	9.166	(1.053)	40616	20.0000	19.8	
	51	1,2-Dichloropropane	63	9.283	9.281	(1.067)	78732	20.0000	20.2	
	52	Bromodichloromethane	83	9.369	9.367	(1.077)	128781	20.0000	20.0	
	53	cis-1,3-dichloropropene	75	10.105	10.110	(1.162)	132740	20.0000	19.7	
	54	1,4-Dioxane	88	9.612	9.610	(1.105)	10888	400.000	570	
$	55	Toluene-D8	98	10.320	10.317	(1.187)	211888	20.0000	19.8	
	56	2-Chloroethylvinylether	63	10.055	10.046	(1.156)	3643	20.0000	18.4	
	57	Toluene	92	10.377	10.374	(1.193)	215873	20.0000	20.9	
	58	4-methyl-2-pentanone	43	10.827	10.825	(1.245)	161258	100.000	91.9	
	59	Tetrachloroethene	164	10.820	10.818	(0.888)	69973	20.0000	20.7	
	60	trans-1,3-Dichloropropene	75	10.870	10.868	(1.250)	108933	20.0000	19.3	
	61	1,1,2-Trichloroethane	83	11.056	11.054	(1.271)	47042	20.0000	19.9	
	62	Dibromochloromethane	129	11.263	11.268	(0.924)	72398	20.0000	19.1	
	63	1,3-Dichloropropane	76	11.378	11.382	(0.934)	106974	20.0000	19.5	
	64	1,2-Dibromoethane	107	11.549	11.554	(1.328)	54840	20.0000	19.3	
	65	2-Hexanone	43	11.835	11.833	(0.971)	112062	100.000	91.1	
*	66	Chlorobenzene-D5	117	12.185	12.190	(1.000)	498379	50.0000		
	67	Chlorobenzene	112	12.214	12.212	(1.002)	231409	20.0000	20.8	
	152	1-Chlorohexane	91	12.178	12.183	(0.999)	134693	20.0000	20.7	
	68	Ethylbenzene	106	12.242	12.247	(1.005)	129289	20.0000	20.4	
	69	1,1,1,2-Tetrachloroethane	131	12.292	12.290	(1.009)	89109	20.0000	20.3	
M	70	Xylenes (total)	106				472209	60.0000	62.2	
	71	m+p-Xylenes	106	12.435	12.433	(1.021)	324558	40.0000	41.9	
	72	o-Xylene	106	13.007	13.005	(1.067)	147651	20.0000	20.3	
	73	Styrene	104	13.079	13.076	(1.073)	257531	20.0000	20.2	
	74	Bromoform	173	13.114	13.112	(1.076)	35656	20.0000	18.6	
	75	Isopropylbenzene	105	13.436	13.434	(0.866)	438208	20.0000	21.5	
$	76	P-Bromofluorobenzene	95	13.836	13.834	(1.591)	110153	20.0000	19.4	
	77	cis-1,4-Dichloro-2-Butene	53	13.937	13.934	(0.898)	18956	20.0000	17.7	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2114.D
Report Date: 07-Apr-2015 07:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	78 trans-1,4-Dichloro-2-Butene	53	14.394	14.399	(0.928)	13985	20.0000	17.4	
	79 Bromobenzene	156	13.987	13.984	(0.901)	94421	20.0000	20.9	
	80 N-Propylbenzene	91	14.022	14.027	(0.904)	531365	20.0000	21.4	
	81 1,1,2,2-Tetrachloroethane	83	14.137	14.134	(0.911)	58946	20.0000	19.4	
	82 1,3,5-Trimethylbenzene	105	14.315	14.320	(0.923)	410678	20.0000	21.5	
	83 2-Chlorotoluene	91	14.251	14.256	(0.918)	339348	20.0000	21.5	
	84 1,2,3-Trichloropropane	75	14.330	14.334	(0.924)	52002	20.0000	19.7	
	85 4-Chlorotoluene	91	14.501	14.499	(0.935)	332351	20.0000	21.2	
	86 tert-Butylbenzene	119	14.787	14.792	(0.953)	353200	20.0000	21.2	
	87 Pentachloroethane	117	14.823	14.821	(0.955)	68463	20.0000	20.3	
	88 1,2,4-Trimethylbenzene	105	14.901	14.899	(0.960)	396019	20.0000	21.2	
	89 P-Isopropyltoluene	119	15.295	15.292	(0.986)	390463	20.0000	21.5	
	90 1,3-Dichlorobenzene	146	15.402	15.400	(0.993)	171120	20.0000	21.1	
*	91 1,4-Dichlorobenzene-D4	152	15.516	15.514	(1.000)	273594	50.0000		
	92 1,4-Dichlorobenzene	146	15.538	15.542	(1.001)	175244	20.0000	20.8	
	93 N-Butylbenzene	91	15.967	15.964	(1.029)	409840	20.0000	21.3	
	94 sec-Butylbenzene	105	15.066	15.064	(0.971)	469956	20.0000	21.6	
	95 1,2-Dichlorobenzene	146	16.217	16.213	(1.045)	136699	20.0000	20.2	
	96 1,2-Dibromo-3-Chloropropane	75	17.561	17.565	(1.132)	6059	20.0000	17.0	
	97 1,3,5-Trichlorobenzene	180	17.625	17.623	(1.136)	102026	20.0000	20.1	
	98 Hexachlorobutadiene	225	18.726	18.723	(1.207)	54922	20.0000	21.5	
	99 1,2,4-Trichlorobenzene	180	18.761	18.759	(1.209)	40094	20.0000	16.4	
	100 1,2,3-Trimethylbenzene	105	15.581	15.585	(1.004)	349175	20.0000	20.8	
	101 Naphthalene	128	19.348	19.352	(1.247)	29104	20.0000	13.4	
	102 1,2,3-Trichlorobenzene	180	19.684	19.681	(1.269)	15943	20.0000	16.1	
	103 Methyl Acetate	43	4.973	4.971	(0.619)	27725	20.0000	18.6	
	104 Methylcyclohexane	83	8.633	8.630	(1.074)	144949	20.0000	20.2	
M	153 Total Alkylbenzenes	100				2961521	20.0000	150	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2114.D
Date : 06-APR-2015 12:18
Client ID: Initial Calibration
Sample Info: WG160815-3
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2115.D
Report Date: 07-Apr-2015 07:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2115.D
Lab Smp Id: WG160815-2 Client Smp ID: Initial Calibration
Inj Date : 06-APR-2015 12:50
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-2
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 12:50 Cal File: C2115.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

WAS

2:49 pm, Apr 13, 2015

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.989	1.990	(0.248)	23487	5.00000	5.1	
2 Chloromethane	50	2.218	2.219	(0.276)	36599	5.00000	5.2	
3 Vinyl chloride	62	2.325	2.326	(0.289)	27629	5.00000	5.2	
4 Bromomethane	94	2.725	2.726	(0.339)	15893	5.00000	4.5	
5 Chloroethane	64	2.890	2.891	(0.360)	15725	5.00000	5.2	
6 Trichlorofluoromethane	101	3.068	3.062	(0.382)	39084	5.00000	5.3	
7 Diethyl Ether	59	3.483	3.484	(0.433)	12944	5.00000	4.8	
8 Tertiary-butyl alcohol	59	5.313	5.335	(0.661)	8957	25.0000	39.4(M)	M9
9 1,1-Dichloroethene	96	3.754	3.755	(0.467)	17606	5.00000	4.6	
10 Carbon Disulfide	76	3.783	3.784	(0.471)	51845	5.00000	4.6	
11 Freon-113	151	3.812	3.813	(0.474)	11946	5.00000	5.0	
12 Iodomethane	142	3.955	3.956	(0.492)	14048	5.00000	4.4	
13 Acrolein	56	4.269	4.263	(0.531)	5508	25.0000	23.7	
14 Methylene Chloride	84	4.655	4.649	(0.579)	27610	5.00000	4.5(a)	
15 Acetone	43	4.741	4.742	(0.590)	19153	25.0000	25.6	
16 Isobutyl Alcohol	43	8.251	8.252	(1.027)	9525	100.000	137	
17 trans-1,2-Dichloroethene	96	4.920	4.913	(0.612)	19815	5.00000	4.6	
18 Allyl Chloride	41	4.476	4.477	(0.557)	21987	5.00000	4.9	
19 Methyl tert-butyl ether	73	5.127	5.121	(0.638)	59195	10.0000	8.4	
20 Acetonitrile	39	5.549	5.542	(0.690)	3742	50.0000	64.9	
21 Di-isopropyl ether	45	5.784	5.778	(0.720)	51790	5.00000	4.7	
22 Chloroprene	53	5.906	5.907	(0.735)	29946	5.00000	4.8	
23 Propionitrile	54	7.965	7.958	(0.991)	19217	50.0000	53.6	
24 Methacrylonitrile	41	7.986	7.987	(0.994)	52495	50.0000	45.9	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2115.D
Report Date: 07-Apr-2015 07:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.949	5.950	(0.740)	41752	5.00000	4.9	
	26 Acrylonitrile	52	6.042	6.036	(0.752)	14515	25.0000	25.0	
	27 Ethyl tertiary-butyl ether	59	6.342	6.343	(0.789)	44210	5.00000	5.1	
	28 Vinyl Acetate	43	6.378	6.372	(0.733)	20392	5.00000	3.8	
	29 cis-1,2-Dichloroethene	96	6.757	6.758	(0.841)	19077	5.00000	4.4	
M	30 1,2-Dichloroethylene (total)	96				38892	5.00000	8.9	
	31 Methyl Methacrylate	41	9.573	9.567	(1.100)	6563	5.00000	4.2	
	32 2,2-Dichloropropane	77	6.907	6.908	(0.859)	32427	5.00000	4.5	
	33 Bromochloromethane	128	7.035	7.036	(0.875)	7082	5.00000	4.4	
	34 Chloroform	83	7.157	7.151	(0.891)	43352	5.00000	5.0	
	35 Carbon Tetrachloride	117	7.321	7.315	(0.841)	24596	5.00000	4.7	
	36 Tetrahydrofuran	42	7.357	7.358	(0.916)	12749	25.0000	23.6	
$	37 Dibromofluoromethane	113	7.400	7.401	(0.921)	16089	5.00000	4.4	
	38 1,1,1-Trichloroethane	97	7.421	7.415	(0.924)	37473	5.00000	4.6	
	39 1,1-Dichloropropene	75	7.586	7.580	(0.872)	28252	5.00000	4.7	
	40 2-Butanone	43	7.579	7.580	(0.943)	19068	25.0000	24.1	
	41 Benzene	78	7.907	7.908	(0.909)	72704	5.00000	4.8	
*	42 Pentafluorobenzene	168	8.036	8.037	(1.000)	297714	50.0000		
	43 Cyclohexane	56	7.014	7.022	(0.873)	34144	5.00000	4.6	
	44 Ethyl Methacrylate	69	11.060	11.054	(1.271)	10406	5.00000	4.3	
$	45 1,2-Dichloroethane-D4	65	8.086	8.087	(1.006)	17868	5.00000	4.5	
	46 Tertiary-amyl methyl ether	73	8.079	8.073	(1.005)	32645	5.00000	4.8	
	47 1,2-Dichloroethane	62	8.179	8.173	(0.940)	27677	5.00000	4.7	
	48 Trichloroethene	95	8.651	8.651	(0.994)	20783	5.00000	4.6	
*	49 1,4-Difluorobenzene	114	8.701	8.702	(1.000)	478101	50.0000		
	50 Dibromomethane	93	9.158	9.166	(1.053)	10179	5.00000	4.9	
	51 1,2-Dichloropropane	63	9.280	9.281	(1.067)	16798	5.00000	4.6	
	52 Bromodichloromethane	83	9.366	9.367	(1.076)	25138	5.00000	4.3	
	53 cis-1,3-dichloropropene	75	10.109	10.110	(1.162)	28857	5.00000	4.7	
	54 1,4-Dioxane	88	9.609	9.610	(1.104)	4104	100.000	158	
$	55 Toluene-D8	98	10.323	10.317	(1.186)	50177	5.00000	4.8	
	56 2-Chloroethylvinylether	63	10.045	10.046	(1.154)	862	5.00000	4.6(M)	M6
	57 Toluene	92	10.381	10.374	(1.193)	49669	5.00000	4.9	
	58 4-methyl-2-pentanone	43	10.824	10.825	(1.244)	32347	25.0000	22.2	
	59 Tetrachloroethene	164	10.824	10.818	(0.888)	15435	5.00000	4.8	
	60 trans-1,3-Dichloropropene	75	10.867	10.868	(1.249)	22431	5.00000	4.5	
	61 1,1,2-Trichloroethane	83	11.060	11.054	(1.271)	9752	5.00000	4.6	
	62 Dibromochloromethane	129	11.267	11.268	(0.924)	14849	5.00000	4.5	
	63 1,3-Dichloropropane	76	11.381	11.382	(0.934)	23037	5.00000	4.4	
	64 1,2-Dibromoethane	107	11.553	11.554	(1.328)	12400	5.00000	4.6(M)	M6
	65 2-Hexanone	43	11.839	11.833	(0.971)	21585	25.0000	20.7	
*	66 Chlorobenzene-D5	117	12.189	12.190	(1.000)	487810	50.0000		
	67 Chlorobenzene	112	12.211	12.212	(1.002)	52498	5.00000	4.7	
	152 1-Chlorohexane	91	12.182	12.183	(0.999)	29075	5.00000	4.6	
	68 Ethylbenzene	106	12.246	12.247	(1.005)	29226	5.00000	4.6	
	69 1,1,1,2-Tetrachloroethane	131	12.289	12.290	(1.008)	19079	5.00000	4.6	
M	70 Xylenes (total)	106				105369	15.0000	14.7	
	71 m+p-Xylenes	106	12.432	12.433	(1.020)	73998	10.0000	10.0	
	72 o-Xylene	106	13.004	13.005	(1.067)	31371	5.00000	4.7	
	73 Styrene	104	13.075	13.076	(1.073)	54592	5.00000	4.7	
	74 Bromoform	173	13.111	13.112	(1.076)	6551	5.00000	3.9	
	75 Isopropylbenzene	105	13.433	13.434	(0.866)	96161	5.00000	5.0	
$	76 P-Bromofluorobenzene	95	13.833	13.834	(1.590)	26549	5.00000	4.9	
	77 cis-1,4-Dichloro-2-Butene	53	13.940	13.934	(0.899)	4080	5.00000	5.0	

WAS

2:49 pm, Apr 13, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2115.D
Report Date: 07-Apr-2015 07:35

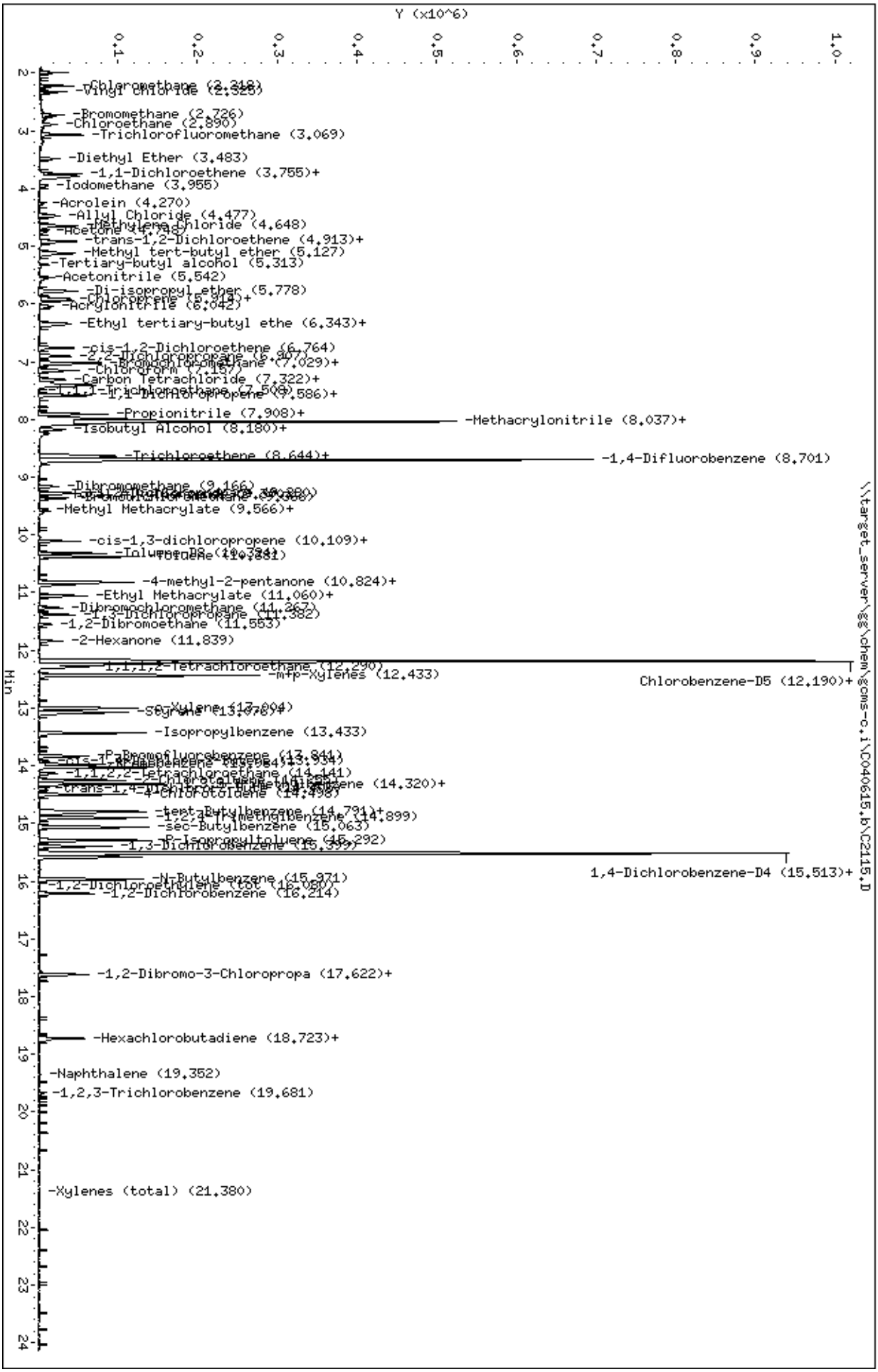
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	78 trans-1,4-Dichloro-2-Butene	53	14.391	14.399	(0.928)	2712	5.00000	4.7	
	79 Bromobenzene	156	13.983	13.984	(0.901)	22021	5.00000	5.0	
	80 N-Propylbenzene	91	14.026	14.027	(0.904)	120164	5.00000	5.0	
	81 1,1,2,2-Tetrachloroethane	83	14.133	14.134	(0.911)	13538	5.00000	4.8	
	82 1,3,5-Trimethylbenzene	105	14.319	14.320	(0.923)	91811	5.00000	5.1	
	83 2-Chlorotoluene	91	14.255	14.256	(0.919)	74067	5.00000	4.9	
	84 1,2,3-Trichloropropane	75	14.333	14.334	(0.924)	11512	5.00000	4.6	
	85 4-Chlorotoluene	91	14.498	14.499	(0.935)	75644	5.00000	5.0	
	86 tert-Butylbenzene	119	14.791	14.792	(0.953)	80785	5.00000	5.1	
	87 Pentachloroethane	117	14.820	14.821	(0.955)	15537	5.00000	4.9	
	88 1,2,4-Trimethylbenzene	105	14.898	14.899	(0.960)	88458	5.00000	5.1	
	89 P-Isopropyltoluene	119	15.291	15.292	(0.986)	83887	5.00000	5.1	
	90 1,3-Dichlorobenzene	146	15.399	15.400	(0.993)	38873	5.00000	4.9	
*	91 1,4-Dichlorobenzene-D4	152	15.513	15.514	(1.000)	256406	50.0000		
	92 1,4-Dichlorobenzene	146	15.541	15.542	(1.002)	40574	5.00000	4.9	
	93 N-Butylbenzene	91	15.970	15.964	(1.029)	81424	5.00000	5.0	
	94 sec-Butylbenzene	105	15.063	15.064	(0.971)	104685	5.00000	5.0	
	95 1,2-Dichlorobenzene	146	16.221	16.213	(1.046)	31282	5.00000	5.0	
	96 1,2-Dibromo-3-Chloropropane	75	17.564	17.565	(1.132)	1186	5.00000	3.9	
	97 1,3,5-Trichlorobenzene	180	17.622	17.623	(1.136)	20267	5.00000	4.9	
	98 Hexachlorobutadiene	225	18.715	18.723	(1.206)	14220	5.00000	5.0	
	99 1,2,4-Trichlorobenzene	180	18.758	18.759	(1.209)	4770	5.00000	2.6	
	100 1,2,3-Trimethylbenzene	105	15.584	15.585	(1.005)	84588	5.00000	5.2	
	101 Naphthalene	128	19.351	19.352	(1.247)	2761	5.00000	1.8	
	102 1,2,3-Trichlorobenzene	180	19.687	19.681	(1.269)	2460	5.00000	3.1	
	103 Methyl Acetate	43	4.970	4.971	(0.618)	6572	5.00000	4.8	
	104 Methylcyclohexane	83	8.622	8.630	(1.073)	32723	5.00000	5.2	
M	153 Total Alkylbenzenes	100				651214	5.00000	35.4	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2115.D
Date : 06-APR-2015 12:50
Client ID: Initial Calibration
Sample Info: WG160815-2
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2117.D
Report Date: 07-Apr-2015 07:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2117.D
Lab Smp Id: WG160815-6 Client Smp ID: Initial Calibration
Inj Date : 06-APR-2015 13:54 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-6
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 13:54 Cal File: C2117.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.993	1.990	(0.248)	880119	200.000	191	
2 Chloromethane	50	2.222	2.219	(0.276)	1157421	200.000	170	
3 Vinyl chloride	62	2.329	2.326	(0.290)	1021493	200.000	192	
4 Bromomethane	94	2.729	2.726	(0.339)	598149	200.000	200	
5 Chloroethane	64	2.886	2.891	(0.359)	594276	200.000	196	
6 Trichlorofluoromethane	101	3.065	3.062	(0.381)	1332345	200.000	183	
7 Diethyl Ether	59	3.487	3.484	(0.434)	572642	200.000	209(A)	
8 Tertiary-butyl alcohol	59	5.324	5.335	(0.662)	115081	1000.00	380	
9 1,1-Dichloroethene	96	3.751	3.755	(0.467)	749511	200.000	194	
10 Carbon Disulfide	76	3.787	3.784	(0.471)	2099185	200.000	187	
11 Freon-113	151	3.816	3.813	(0.475)	557223	200.000	207(A)	
12 Iodomethane	142	3.959	3.956	(0.492)	827996	200.000	242(A)	
13 Acrolein	56	4.259	4.263	(0.530)	268404	1000.00	1050(A)	
14 Methylene Chloride	84	4.652	4.649	(0.579)	877250	200.000	152	
15 Acetone	43	4.738	4.742	(0.589)	511132	1000.00	670	
16 Isobutyl Alcohol	43	8.247	8.252	(1.026)	178080	4000.00	2130	
17 trans-1,2-Dichloroethene	96	4.916	4.913	(0.612)	866443	200.000	198	
18 Allyl Chloride	41	4.473	4.477	(0.556)	923495	200.000	204(A)	
19 Methyl tert-butyl ether	73	5.124	5.121	(0.637)	2926088	400.000	410(A)	
20 Acetonitrile	39	5.538	5.542	(0.689)	75131	2000.00	1390	
21 Di-isopropyl ether	45	5.781	5.778	(0.719)	2450141	200.000	217(A)	
22 Chloroprene	53	5.910	5.907	(0.735)	1403553	200.000	220(A)	
23 Propionitrile	54	7.961	7.958	(0.990)	472521	2000.00	1400	
24 Methacrylonitrile	41	7.990	7.987	(0.994)	2160318	2000.00	1900	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2117.D
Report Date: 07-Apr-2015 07:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.946	5.950	(0.740)	1734406	200.000	200(A)	
	26 Acrylonitrile	52	6.039	6.036	(0.751)	617129	1000.00	1040(A)	
	27 Ethyl tertiary-butyl ether	59	6.346	6.343	(0.789)	2145642	200.000	215(A)	
	28 Vinyl Acetate	43	6.367	6.372	(0.732)	1267303	200.000	234(A)	
	29 cis-1,2-Dichloroethene	96	6.761	6.758	(0.841)	922604	200.000	208(A)	
	31 Methyl Methacrylate	41	9.563	9.567	(1.099)	353616	200.000	222(A)	
	32 2,2-Dichloropropane	77	6.904	6.908	(0.859)	1613016	200.000	217(A)	
	33 Bromochloromethane	128	7.039	7.036	(0.876)	349161	200.000	212(A)	
	34 Chloroform	83	7.154	7.151	(0.890)	1764995	200.000	200(A)	
	35 Carbon Tetrachloride	117	7.318	7.315	(0.841)	1276615	200.000	221(A)	
	36 Tetrahydrofuran	42	7.354	7.358	(0.915)	461707	1000.00	874	
$	37 Dibromofluoromethane	113	7.397	7.401	(0.920)	692360	200.000	192	
	38 1,1,1-Trichloroethane	97	7.418	7.415	(0.923)	1689716	200.000	206(A)	
	39 1,1-Dichloropropene	75	7.583	7.580	(0.872)	1310320	200.000	203(A)	
	40 2-Butanone	43	7.575	7.580	(0.942)	673361	1000.00	872	
	41 Benzene	78	7.911	7.908	(0.910)	3010347	200.000	189	
*	42 Pentafluorobenzene	168	8.040	8.037	(1.000)	299978	50.0000		
	43 Cyclohexane	56	7.025	7.022	(0.874)	1566555	200.000	209(A)	
	44 Ethyl Methacrylate	69	11.057	11.054	(1.271)	586016	200.000	220(A)	
$	45 1,2-Dichloroethane-D4	65	8.090	8.087	(1.006)	744095	200.000	189	
	46 Tertiary-amyl methyl ether	73	8.076	8.073	(1.004)	1479682	200.000	211(A)	
	47 1,2-Dichloroethane	62	8.176	8.173	(0.940)	1194455	200.000	192	
	48 Trichloroethene	95	8.648	8.651	(0.994)	942916	200.000	196	
*	49 1,4-Difluorobenzene	114	8.698	8.702	(1.000)	511292	50.0000		
	50 Dibromomethane	93	9.162	9.166	(1.053)	419115	200.000	191	
	51 1,2-Dichloropropane	63	9.284	9.281	(1.067)	836005	200.000	211(A)	
	52 Bromodichloromethane	83	9.370	9.367	(1.077)	1312331	200.000	209(A)	
	53 cis-1,3-dichloropropene	75	10.106	10.110	(1.162)	1404267	200.000	210(A)	
	54 1,4-Dioxane	88	9.605	9.610	(1.104)	31230	4000.00	1120	
$	55 Toluene-D8	98	10.320	10.317	(1.187)	2066236	200.000	187	
	56 2-Chloroethylvinylether	63	10.049	10.046	(1.155)	20041	200.000	125	
	57 Toluene	92	10.377	10.374	(1.193)	2011774	200.000	189	
	58 4-methyl-2-pentanone	43	10.828	10.825	(1.245)	1450763	1000.00	943	
	59 Tetrachloroethene	164	10.821	10.818	(0.888)	663636	200.000	203(A)	
	60 trans-1,3-Dichloropropene	75	10.871	10.868	(1.250)	1167116	200.000	216(A)	
	61 1,1,2-Trichloroethane	83	11.057	11.054	(1.271)	469042	200.000	207(A)	
	62 Dibromochloromethane	129	11.271	11.268	(0.925)	797278	200.000	230(A)	
	63 1,3-Dichloropropane	76	11.385	11.382	(0.934)	1075519	200.000	205(A)	
	64 1,2-Dibromoethane	107	11.550	11.554	(1.328)	570897	200.000	202(A)	
	65 2-Hexanone	43	11.836	11.833	(0.971)	1093253	1000.00	1030(A)	
*	66 Chlorobenzene-D5	117	12.186	12.190	(1.000)	491223	50.0000		
	67 Chlorobenzene	112	12.214	12.212	(1.002)	2122876	200.000	192	
	152 1-Chlorohexane	91	12.186	12.183	(1.000)	1340898	200.000	210(A)	
	68 Ethylbenzene	106	12.250	12.247	(1.005)	1298812	200.000	203(A)	
	69 1,1,1,2-Tetrachloroethane	131	12.300	12.290	(1.009)	896890	200.000	211(A)	
	71 m+p-Xylenes	106	12.436	12.433	(1.021)	2924629	400.000	394	
	72 o-Xylene	106	13.008	13.005	(1.067)	1462821	200.000	213(A)	
	73 Styrene	104	13.079	13.076	(1.073)	2457724	200.000	208(A)	
	74 Bromoform	173	13.115	13.112	(1.076)	392025	200.000	235(A)	
	75 Isopropylbenzene	105	13.437	13.434	(0.866)	3750727	200.000	173	
$	76 P-Bromofluorobenzene	95	13.837	13.834	(1.591)	1146901	200.000	198	
	77 cis-1,4-Dichloro-2-Butene	53	13.937	13.934	(0.898)	234764	200.000	236(A)	
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.399	(0.928)	176817	200.000	247(A)	
	79 Bromobenzene	156	13.987	13.984	(0.901)	912327	200.000	183	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2117.D
Report Date: 07-Apr-2015 07:35

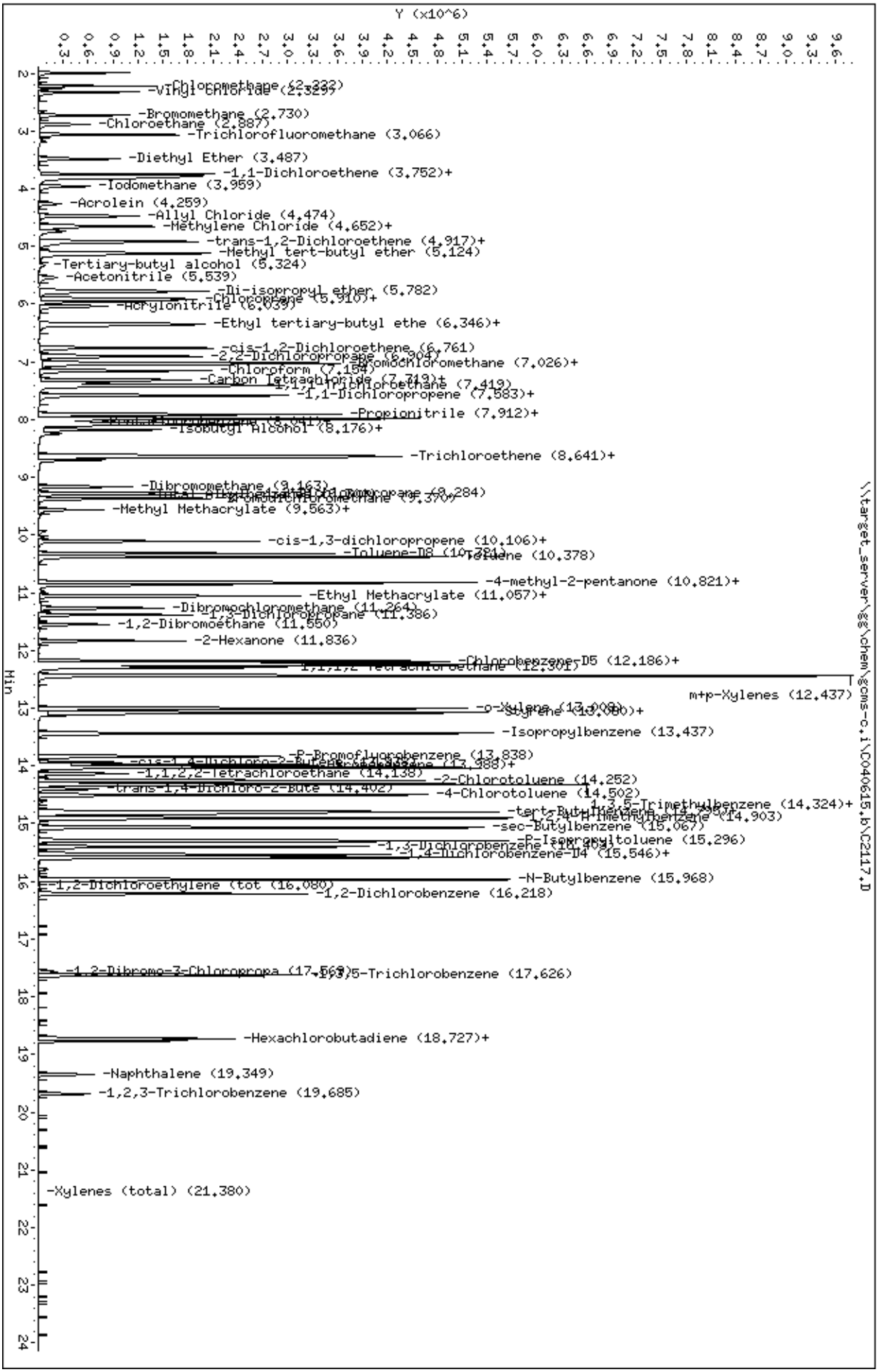
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.030	14.027	(0.904)	4389893	200.000	166	
81 1,1,2,2-Tetrachloroethane	83	14.137	14.134	(0.911)	590632	200.000	185	
82 1,3,5-Trimethylbenzene	105	14.323	14.320	(0.923)	3468577	200.000	173	
83 2-Chlorotoluene	91	14.252	14.256	(0.918)	2967576	200.000	175	
84 1,2,3-Trichloropropane	75	14.330	14.334	(0.924)	494649	200.000	178	
85 4-Chlorotoluene	91	14.502	14.499	(0.935)	2995628	200.000	177	
86 tert-Butylbenzene	119	14.795	14.792	(0.953)	3283400	200.000	182	
87 Pentachloroethane	117	14.824	14.821	(0.955)	727451	200.000	199	
88 1,2,4-Trimethylbenzene	105	14.902	14.899	(0.960)	3449660	200.000	176	
89 P-Isopropyltoluene	119	15.295	15.292	(0.986)	3451506	200.000	185	
90 1,3-Dichlorobenzene	146	15.402	15.400	(0.993)	1620814	200.000	182	
* 91 1,4-Dichlorobenzene-D4	152	15.517	15.514	(1.000)	296648	50.0000		
92 1,4-Dichlorobenzene	146	15.545	15.542	(1.002)	1703168	200.000	181	
93 N-Butylbenzene	91	15.974	15.964	(1.029)	3593020	200.000	192	
94 sec-Butylbenzene	105	15.067	15.064	(0.971)	4032092	200.000	172	
95 1,2-Dichlorobenzene	146	16.217	16.213	(1.045)	1364856	200.000	189	
96 1,2-Dibromo-3-Chloropropane	75	17.561	17.565	(1.132)	78152	200.000	217(A)	
97 1,3,5-Trichlorobenzene	180	17.626	17.623	(1.136)	1100947	200.000	222(A)	
98 Hexachlorobutadiene	225	18.726	18.723	(1.207)	526721	200.000	168	
99 1,2,4-Trichlorobenzene	180	18.762	18.759	(1.209)	582793	200.000	250(A)	
100 1,2,3-Trimethylbenzene	105	15.588	15.585	(1.005)	3160941	200.000	175	
101 Naphthalene	128	19.348	19.352	(1.247)	572468	200.000	342(A)	
102 1,2,3-Trichlorobenzene	180	19.684	19.681	(1.269)	209640	200.000	271(A)	
103 Methyl Acetate	43	4.966	4.971	(0.618)	292351	200.000	209(A)	
104 Methylcyclohexane	83	8.626	8.630	(1.073)	1535390	200.000	215(A)	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2117.D
Date : 06-APR-2015 13:54
Client ID: Initial Calibration
Sample Info: WG160815-6
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2118.D
Report Date: 07-Apr-2015 07:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2118.D
Lab Smp Id: WG160815-5 Client Smp ID: Initial Calibration
Inj Date : 06-APR-2015 14:26 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-5
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 14:26 Cal File: C2118.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.992	1.990	(0.248)	455791	100.000	95.5	
2 Chloromethane	50	2.221	2.219	(0.276)	648698	100.000	92.4	
3 Vinyl chloride	62	2.328	2.326	(0.290)	547485	100.000	98.9	
4 Bromomethane	94	2.729	2.726	(0.339)	299179	100.000	96.1	
5 Chloroethane	64	2.886	2.891	(0.359)	283557	100.000	90.9	
6 Trichlorofluoromethane	101	3.057	3.062	(0.380)	663305	100.000	89.0	
7 Diethyl Ether	59	3.486	3.484	(0.434)	299705	100.000	104	
8 Tertiary-butyl alcohol	59	5.330	5.335	(0.663)	140266	500.000	501	
9 1,1-Dichloroethene	96	3.751	3.755	(0.467)	398981	100.000	99.2	
10 Carbon Disulfide	76	3.786	3.784	(0.471)	1137636	100.000	97.6	
11 Freon-113	151	3.815	3.813	(0.475)	287778	100.000	102	
12 Iodomethane	142	3.958	3.956	(0.492)	474255	100.000	126	
13 Acrolein	56	4.258	4.263	(0.530)	143487	500.000	531	
14 Methylene Chloride	84	4.651	4.649	(0.579)	462995	100.000	100	
15 Acetone	43	4.744	4.742	(0.590)	347823	500.000	446	
16 Isobutyl Alcohol	43	8.247	8.252	(1.026)	203389	2000.00	2000	
17 trans-1,2-Dichloroethene	96	4.916	4.913	(0.611)	466696	100.000	102	
18 Allyl Chloride	41	4.473	4.477	(0.556)	483775	100.000	102	
19 Methyl tert-butyl ether	73	5.123	5.121	(0.637)	1558694	200.000	207	
20 Acetonitrile	39	5.538	5.542	(0.689)	69101	1000.00	1440	
21 Di-isopropyl ether	45	5.781	5.778	(0.719)	1285527	100.000	107	
22 Chloroprene	53	5.909	5.907	(0.735)	729908	100.000	108	
23 Propionitrile	54	7.961	7.958	(0.990)	340650	1000.00	1240	
24 Methacrylonitrile	41	7.982	7.987	(0.993)	1166200	1000.00	983	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2118.D
Report Date: 07-Apr-2015 07:35

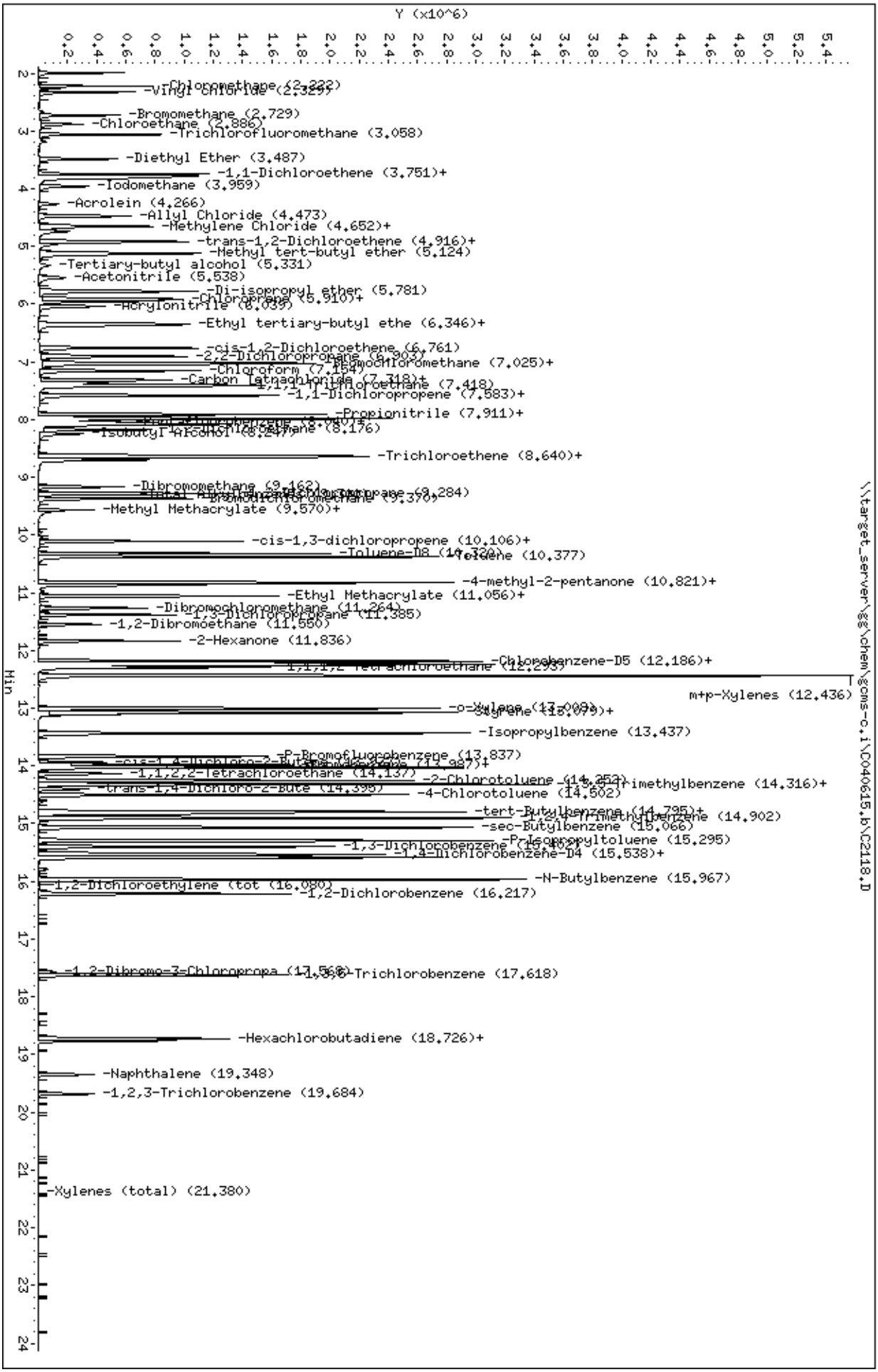
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.945	5.950	(0.740)	925358	100.000	102	
	26 Acrylonitrile	52	6.038	6.036	(0.751)	336746	500.000	537	
	27 Ethyl tertiary-butyl ether	59	6.345	6.343	(0.789)	1128092	100.000	107	
	28 Vinyl Acetate	43	6.367	6.372	(0.731)	641034	100.000	98.2	
	29 cis-1,2-Dichloroethene	96	6.760	6.758	(0.841)	487706	100.000	104	
	31 Methyl Methacrylate	41	9.562	9.567	(1.099)	178988	100.000	98.2	
	32 2,2-Dichloropropane	77	6.903	6.908	(0.859)	809701	100.000	104	
	33 Bromochloromethane	128	7.032	7.036	(0.875)	178396	100.000	103	
	34 Chloroform	83	7.153	7.151	(0.890)	938077	100.000	102	
	35 Carbon Tetrachloride	117	7.318	7.315	(0.841)	642036	100.000	107	
	36 Tetrahydrofuran	42	7.353	7.358	(0.915)	277188	500.000	501	
$	37 Dibromofluoromethane	113	7.396	7.401	(0.920)	367161	100.000	97.8	
	38 1,1,1-Trichloroethane	97	7.418	7.415	(0.923)	878079	100.000	102	
	39 1,1-Dichloropropene	75	7.582	7.580	(0.871)	684097	100.000	102	
	40 2-Butanone	43	7.575	7.580	(0.942)	435601	500.000	532	
	41 Benzene	78	7.911	7.908	(0.909)	1639763	100.000	100	
*	42 Pentafluorobenzene	168	8.040	8.037	(1.000)	313733	50.0000		
	43 Cyclohexane	56	7.017	7.022	(0.873)	813722	100.000	103	
	44 Ethyl Methacrylate	69	11.056	11.054	(1.270)	299012	100.000	98.9	
$	45 1,2-Dichloroethane-D4	65	8.090	8.087	(1.006)	390738	100.000	95.8	
	46 Tertiary-amyl methyl ether	73	8.075	8.073	(1.004)	761970	100.000	103	
	47 1,2-Dichloroethane	62	8.175	8.173	(0.939)	609843	100.000	96.0	
	48 Trichloroethene	95	8.647	8.651	(0.993)	478392	100.000	97.3	
*	49 1,4-Difluorobenzene	114	8.704	8.702	(1.000)	525519	50.0000		
	50 Dibromomethane	93	9.162	9.166	(1.053)	220481	100.000	98.3	
	51 1,2-Dichloropropane	63	9.283	9.281	(1.067)	435475	100.000	106	
	52 Bromodichloromethane	83	9.369	9.367	(1.076)	672595	100.000	103	
	53 cis-1,3-dichloropropene	75	10.105	10.110	(1.161)	736128	100.000	106	
	54 1,4-Dioxane	88	9.605	9.610	(1.103)	55874	2000.00	1960	
$	55 Toluene-D8	98	10.320	10.317	(1.186)	1151840	100.000	101	
	56 2-Chloroethylvinylether	63	10.048	10.046	(1.154)	9604	100.000	65.9	
	57 Toluene	92	10.377	10.374	(1.192)	1089470	100.000	99.8	
	58 4-methyl-2-pentanone	43	10.827	10.825	(1.244)	802689	500.000	514	
	59 Tetrachloroethene	164	10.820	10.818	(0.887)	350174	100.000	101	
	60 trans-1,3-Dichloropropene	75	10.870	10.868	(1.249)	593288	100.000	106	
	61 1,1,2-Trichloroethane	83	11.056	11.054	(1.270)	244310	100.000	104	
	62 Dibromochloromethane	129	11.263	11.268	(0.924)	402785	100.000	108	
	63 1,3-Dichloropropane	76	11.385	11.382	(0.934)	564217	100.000	101	
	64 1,2-Dibromoethane	107	11.549	11.554	(1.327)	296305	100.000	102	
	65 2-Hexanone	43	11.835	11.833	(0.971)	598000	500.000	505	
*	66 Chlorobenzene-D5	117	12.192	12.190	(1.000)	520517	50.0000		
	67 Chlorobenzene	112	12.214	12.212	(1.002)	1138645	100.000	97.7	
	152 1-Chlorohexane	91	12.185	12.183	(0.999)	711158	100.000	104	
	68 Ethylbenzene	106	12.250	12.247	(1.005)	680362	100.000	100	
	69 1,1,1,2-Tetrachloroethane	131	12.293	12.290	(1.008)	458453	100.000	102	
	71 m+p-Xylenes	106	12.436	12.433	(1.020)	1586836	200.000	202	
	72 o-Xylene	106	13.007	13.005	(1.067)	779899	100.000	106	
	73 Styrene	104	13.079	13.076	(1.073)	1341110	100.000	106	
	74 Bromoform	173	13.115	13.112	(1.076)	192376	100.000	94.2	
	75 Isopropylbenzene	105	13.436	13.434	(0.866)	2118923	100.000	96.4	
$	76 P-Bromofluorobenzene	95	13.837	13.834	(1.590)	615426	100.000	103	
	77 cis-1,4-Dichloro-2-Butene	53	13.937	13.934	(0.898)	115678	100.000	97.0	
	78 trans-1,4-Dichloro-2-Butene	53	14.394	14.399	(0.928)	86598	100.000	96.5	
	79 Bromobenzene	156	13.987	13.984	(0.901)	487570	100.000	96.6	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2118.D
Report Date: 07-Apr-2015 07:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	80 N-Propylbenzene	91	14.030	14.027	(0.904)	2541758	100.000	95.3	
	81 1,1,2,2-Tetrachloroethane	83	14.137	14.134	(0.911)	320621	100.000	98.8	
	82 1,3,5-Trimethylbenzene	105	14.315	14.320	(0.923)	1981308	100.000	97.7	
	83 2-Chlorotoluene	91	14.251	14.256	(0.918)	1651927	100.000	96.4	
	84 1,2,3-Trichloropropane	75	14.330	14.334	(0.924)	259153	100.000	92.8	
	85 4-Chlorotoluene	91	14.501	14.499	(0.935)	1667886	100.000	97.2	
	86 tert-Butylbenzene	119	14.794	14.792	(0.953)	1810516	100.000	99.0	
	87 Pentachloroethane	117	14.823	14.821	(0.955)	379461	100.000	102	
	88 1,2,4-Trimethylbenzene	105	14.902	14.899	(0.960)	1959365	100.000	98.7	
	89 P-Isopropyltoluene	119	15.295	15.292	(0.986)	1940214	100.000	102	
	90 1,3-Dichlorobenzene	146	15.402	15.400	(0.993)	879107	100.000	97.3	
*	91 1,4-Dichlorobenzene-D4	152	15.516	15.514	(1.000)	302260	50.0000		
	92 1,4-Dichlorobenzene	146	15.545	15.542	(1.002)	926810	100.000	97.2	
	93 N-Butylbenzene	91	15.967	15.964	(1.029)	2063246	100.000	107	
	94 sec-Butylbenzene	105	15.066	15.064	(0.971)	2299781	100.000	97.0	
	95 1,2-Dichlorobenzene	146	16.217	16.213	(1.045)	733571	100.000	99.9	
	96 1,2-Dibromo-3-Chloropropane	75	17.561	17.565	(1.132)	40858	100.000	101	
	97 1,3,5-Trichlorobenzene	180	17.618	17.623	(1.135)	587400	100.000	104	
	98 Hexachlorobutadiene	225	18.726	18.723	(1.207)	303871	100.000	110	
	99 1,2,4-Trichlorobenzene	180	18.762	18.759	(1.209)	311141	100.000	104	
	100 1,2,3-Trimethylbenzene	105	15.581	15.585	(1.004)	1755365	100.000	96.2	
	101 Naphthalene	128	19.348	19.352	(1.247)	328999	100.000	110	
	102 1,2,3-Trichlorobenzene	180	19.684	19.681	(1.269)	131032	100.000	115	
	103 Methyl Acetate	43	4.966	4.971	(0.618)	150614	100.000	103	
	104 Methylcyclohexane	83	8.626	8.630	(1.073)	803546	100.000	106	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2118.D
Date : 06-APR-2015 14:26
Client ID: Initial Calibration
Sample Info: WG160815-5
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Report Date: 07-Apr-2015 07:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Lab Smp Id: WG160815-1 Client Smp ID: Initial Calibration
Inj Date : 06-APR-2015 15:49 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-1
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 15:49 Cal File: C2120.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

WAS

2:50 pm, Apr 13, 2015

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.990	(0.247)	3964	1.00000	0.87(a)	
2 Chloromethane	50	2.222	2.219	(0.276)	8776	1.00000	1.2	
3 Vinyl chloride	62	2.329	2.326	(0.290)	6448	1.00000	1.2	
4 Bromomethane	94	2.730	2.726	(0.340)	3965	1.00000	1.0	
5 Chloroethane	64	2.887	2.891	(0.359)	3748	1.00000	1.2	
6 Trichlorofluoromethane	101	3.066	3.062	(0.381)	7163	1.00000	1.0	
7 Diethyl Ether	59	3.480	3.484	(0.433)	3205	1.00000	1.1	
8 Tertiary-butyl alcohol	59	5.346	5.335	(0.665)	3997	5.00000	12.3(M)	M9
9 1,1-Dichloroethene	96	3.759	3.755	(0.468)	4317	1.00000	1.1	
10 Carbon Disulfide	76	3.788	3.784	(0.471)	17179	1.00000	1.4	
11 Freon-113	151	3.823	3.813	(0.476)	3015	1.00000	1.1(M)	M9
12 Iodomethane	142	3.952	3.956	(0.492)	4186	1.00000	2.7	
13 Acrolein	56	4.266	4.263	(0.531)	1449	5.00000	5.3	
15 Acetone	43	4.745	4.742	(0.590)	5549	5.00000	12.8(M)	M9
16 Isobutyl Alcohol	43	8.262	8.252	(1.028)	5133	20.0000	48.4(M)	M9
17 trans-1,2-Dichloroethene	96	4.917	4.913	(0.612)	5042	1.00000	1.1	
18 Allyl Chloride	41	4.474	4.477	(0.556)	4494	1.00000	0.97(a)	
19 Methyl tert-butyl ether	73	5.131	5.121	(0.638)	12435	2.00000	1.7(M)	M9
20 Acetonitrile	39	5.553	5.542	(0.691)	1130	10.0000	17.3(a)	
21 Di-isopropyl ether	45	5.789	5.778	(0.720)	10683	1.00000	0.90(a)	
22 Chloroprene	53	5.910	5.907	(0.735)	6683	1.00000	0.98(a)	
23 Propionitrile	54	7.976	7.958	(0.992)	4208	10.0000	12.4	
24 Methacrylonitrile	41	7.991	7.987	(0.994)	11340	10.0000	9.6(a)	
25 1,1-Dichloroethane	63	5.946	5.950	(0.740)	9524	1.00000	1.0	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Report Date: 07-Apr-2015 07:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	26 Acrylonitrile	52	6.061	6.036	(0.754)	3486	5.00000	5.4(M)	M9
	27 Ethyl tertiary-butyl ether	59	6.347	6.343	(0.789)	9316	1.00000	0.89(a)	
	28 Vinyl Acetate	43	6.397	6.372	(0.735)	4621	1.00000	0.90(aM)	M6
	29 cis-1,2-Dichloroethene	96	6.754	6.758	(0.840)	5627	1.00000	1.2	
	31 Methyl Methacrylate	41	9.577	9.567	(1.101)	1761	1.00000	0.89(aM)	M6
	32 2,2-Dichloropropane	77	6.904	6.908	(0.859)	7043	1.00000	0.92(a)	
	33 Bromochloromethane	128	7.040	7.036	(0.876)	1859	1.00000	1.1	
	34 Chloroform	83	7.154	7.151	(0.890)	9242	1.00000	1.0	
	35 Carbon Tetrachloride	117	7.312	7.315	(0.841)	4963	1.00000	0.87(a)	
	36 Tetrahydrofuran	42	7.369	7.358	(0.916)	2736	5.00000	5.1(M)	M9
$	37 Dibromofluoromethane	113	7.397	7.401	(0.920)	3134	1.00000	0.91(a)	
	38 1,1,1-Trichloroethane	97	7.412	7.415	(0.922)	7583	1.00000	0.91(a)	
	39 1,1-Dichloropropene	75	7.590	7.580	(0.873)	5723	1.00000	0.93(a)	
	40 2-Butanone	43	7.605	7.580	(0.946)	4108	5.00000	5.0(M)	M9
	41 Benzene	78	7.912	7.908	(0.910)	17000	1.00000	1.1	
*	42 Pentafluorobenzene	168	8.041	8.037	(1.000)	307602	50.0000		
	43 Cyclohexane	56	7.026	7.022	(0.874)	6774	1.00000	0.90(a)	
	44 Ethyl Methacrylate	69	11.064	11.054	(1.272)	2118	1.00000	0.81(a)	
$	45 1,2-Dichloroethane-D4	65	8.091	8.087	(1.006)	3962	1.00000	1.0	
	46 Tertiary-amyl methyl ether	73	8.076	8.073	(1.004)	7925	1.00000	1.1(M)	M6
	47 1,2-Dichloroethane	62	8.176	8.173	(0.940)	7100	1.00000	1.2	
	48 Trichloroethene	95	8.655	8.651	(0.995)	4701	1.00000	1.0	
*	49 1,4-Difluorobenzene	114	8.698	8.702	(1.000)	497127	50.0000		
	50 Dibromomethane	93	9.170	9.166	(1.054)	3016	1.00000	1.3	
	51 1,2-Dichloropropane	63	9.277	9.281	(1.067)	3687	1.00000	0.95(aM)	M6
	52 Bromodichloromethane	83	9.363	9.367	(1.076)	6483	1.00000	1.0(M)	M6
	53 cis-1,3-dichloropropene	75	10.106	10.110	(1.162)	6465	1.00000	0.97(a)	
	54 1,4-Dioxane	88	9.613	9.610	(1.105)	3135	20.0000	69.1	
$	55 Toluene-D8	98	10.321	10.317	(1.187)	10132	1.00000	0.96(a)	
	56 2-Chloroethylvinylether	63	10.056	10.046	(1.156)	136	1.00000	0.90(aM)	M6
	57 Toluene	92	10.378	10.374	(1.193)	10700	1.00000	1.0	
	59 Tetrachloroethene	164	10.821	10.818	(0.888)	3510	1.00000	1.0	
	60 trans-1,3-Dichloropropene	75	10.871	10.868	(1.250)	5541	1.00000	1.0	
	61 1,1,2-Trichloroethane	83	11.057	11.054	(1.271)	2562	1.00000	1.1	
	62 Dibromochloromethane	129	11.264	11.268	(0.924)	3518	1.00000	0.94(a)	
	63 1,3-Dichloropropane	76	11.386	11.382	(0.934)	5868	1.00000	1.1	
	64 1,2-Dibromoethane	107	11.550	11.554	(1.328)	3379	1.00000	1.2(M)	M6
	65 2-Hexanone	43	11.850	11.833	(0.972)	4713	5.00000	4.2(a)	
*	66 Chlorobenzene-D5	117	12.186	12.190	(1.000)	507705	50.0000		
	67 Chlorobenzene	112	12.208	12.212	(1.002)	12424	1.00000	1.1	
	152 1-Chlorohexane	91	12.186	12.183	(1.000)	7945	1.00000	1.2	
	68 Ethylbenzene	106	12.244	12.247	(1.005)	7420	1.00000	1.1	
	69 1,1,1,2-Tetrachloroethane	131	12.294	12.290	(1.009)	4227	1.00000	0.96(a)	
	71 m+p-Xylenes	106	12.437	12.433	(1.021)	16181	2.00000	2.1	
	72 o-Xylene	106	13.008	13.005	(1.067)	8015	1.00000	1.1	
	73 Styrene	104	13.080	13.076	(1.073)	11724	1.00000	0.94(a)	
	74 Bromoform	173	13.116	13.112	(1.076)	1642	1.00000	2.0(M)	M6
	75 Isopropylbenzene	105	13.437	13.434	(0.866)	19880	1.00000	1.1	
$	76 P-Bromofluorobenzene	95	13.838	13.834	(1.591)	5883	1.00000	1.0	
	77 cis-1,4-Dichloro-2-Butene	53	13.938	13.934	(0.898)	666	1.00000	0.95(a)	
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.399	(0.928)	447	1.00000	1.0(M)	M9
	79 Bromobenzene	156	13.988	13.984	(0.901)	4613	1.00000	1.1	
	80 N-Propylbenzene	91	14.023	14.027	(0.904)	25477	1.00000	1.1	
	81 1,1,2,2-Tetrachloroethane	83	14.138	14.134	(0.911)	3303	1.00000	1.2(M)	M6

WAS

2:50 pm, Apr 13, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Report Date: 07-Apr-2015 07:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
82	1,3,5-Trimethylbenzene	105	14.317	14.320	(0.923)	19474	1.00000	1.1	
83	2-Chlorotoluene	91	14.259	14.256	(0.919)	16242	1.00000	1.1	
84	1,2,3-Trichloropropane	75	14.331	14.334	(0.924)	2512	1.00000	1.1	
85	4-Chlorotoluene	91	14.502	14.499	(0.935)	17592	1.00000	1.2	
86	tert-Butylbenzene	119	14.795	14.792	(0.953)	17167	1.00000	1.1	
88	1,2,4-Trimethylbenzene	105	14.903	14.899	(0.960)	17997	1.00000	1.0	
89	P-Isopropyltoluene	119	15.296	15.292	(0.986)	17571	1.00000	1.0	
90	1,3-Dichlorobenzene	146	15.403	15.400	(0.993)	9354	1.00000	1.2	
* 91	1,4-Dichlorobenzene-D4	152	15.517	15.514	(1.000)	258115	50.0000		
92	1,4-Dichlorobenzene	146	15.546	15.542	(1.002)	10706	1.00000	1.3	
93	N-Butylbenzene	91	15.968	15.964	(1.029)	18862	1.00000	1.1	
94	sec-Butylbenzene	105	15.067	15.064	(0.971)	23713	1.00000	1.2	
95	1,2-Dichlorobenzene	146	16.218	16.213	(1.045)	8653	1.00000	1.3	
96	1,2-Dibromo-3-Chloropropane	75	17.569	17.565	(1.132)	318	1.00000	0.77(aM)	M6
97	1,3,5-Trichlorobenzene	180	17.619	17.623	(1.135)	6425	1.00000	1.2	
98	Hexachlorobutadiene	225	18.727	18.723	(1.207)	8186	1.00000	1.7	
99	1,2,4-Trichlorobenzene	180	18.763	18.759	(1.209)	3172	1.00000	2.1	
100	1,2,3-Trimethylbenzene	105	15.582	15.585	(1.004)	19433	1.00000	1.2	
101	Naphthalene	128	19.356	19.352	(1.247)	1294	1.00000	2.0	
102	1,2,3-Trichlorobenzene	180	19.685	19.681	(1.269)	1846	1.00000	4.4	
103	Methyl Acetate	43	4.981	4.971	(0.620)	1676	1.00000	1.1(M)	M9
104	Methylcyclohexane	83	8.627	8.630	(1.073)	7804	1.00000	1.0	

QC Flag Legend

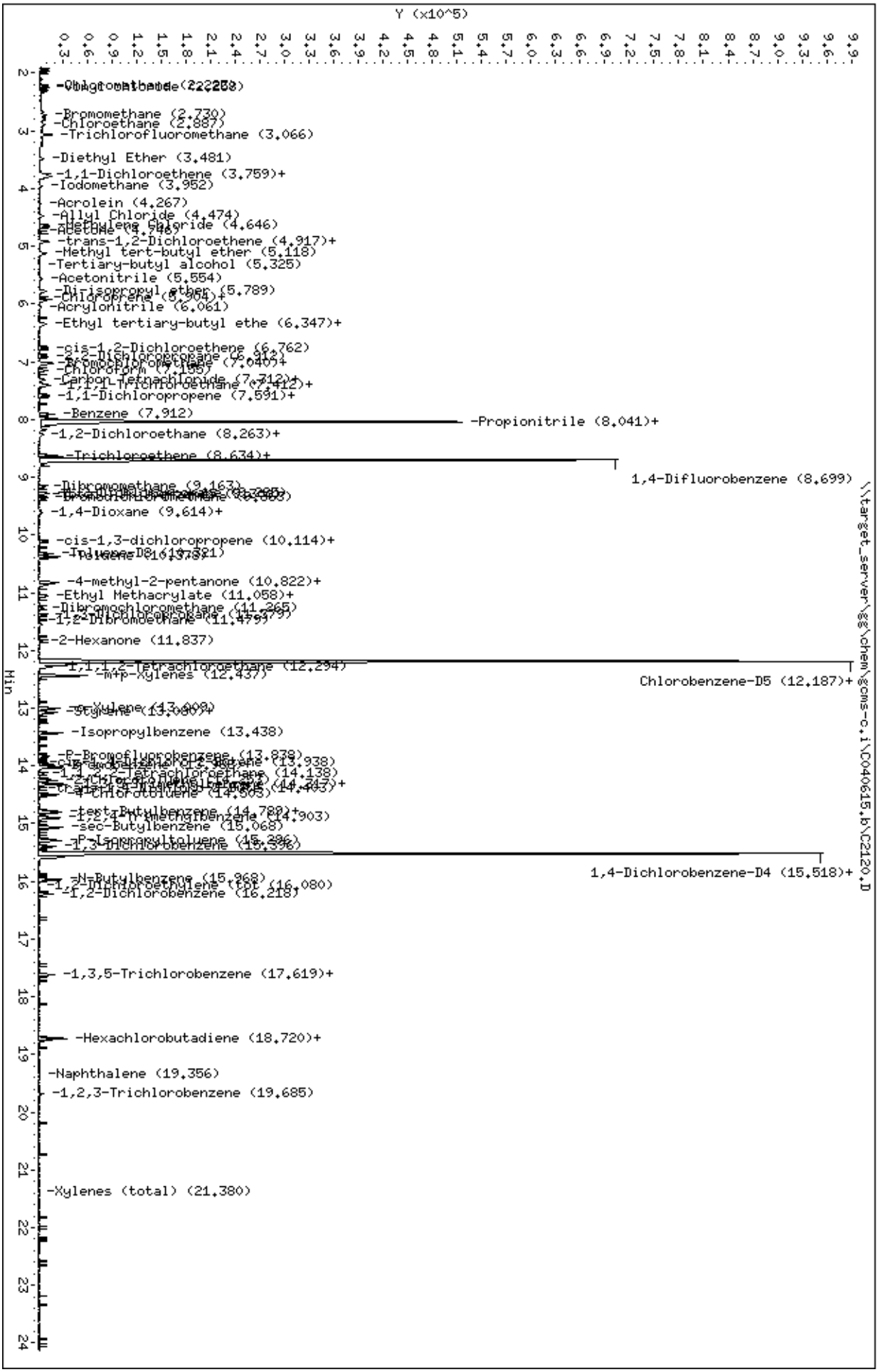
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

WAS

2:50 pm, Apr 13, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Date : 06-APR-2015 15:49
Client ID: Initial Calibration
Sample Info: WG160815-1
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122A.D
Report Date: 07-Apr-2015 12:28

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2122A.D
Lab Smp Id: WG160815-7 Client Smp ID: Independent Source
Inj Date : 06-APR-2015 17:30 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-7,SI1843
Misc Info : WG160815,WG160815-4,SI1843-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 15:49 Cal File: C2120.D
Als bottle: 10 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.993	1.990	(0.248)	197759	42.3375	42.3	
2 Chloromethane	50	2.222	2.219	(0.276)	295449	41.1858	41.2	
3 Vinyl chloride	62	2.329	2.326	(0.290)	242110	42.2851	42.3	
4 Bromomethane	94	2.729	2.726	(0.339)	145933	43.4237	43.4	
5 Chloroethane	64	2.886	2.891	(0.359)	147303	45.4563	45.4	
6 Trichlorofluoromethane	101	3.065	3.062	(0.381)	336008	45.6802	45.7	
7 Diethyl Ether	59	3.487	3.484	(0.434)	151470	50.1527	50.2	
8 Tertiary-butyl alcohol	59	5.331	5.335	(0.663)	44631	133.430	133(R)	
9 1,1-Dichloroethene	96	3.751	3.755	(0.467)	201848	50.4743	50.5	
10 Carbon Disulfide	76	3.787	3.784	(0.471)	601999	53.3820	53.4	
11 Freon-113	151	3.816	3.813	(0.475)	142749	50.0752	50.1	
12 Iodomethane	142	3.959	3.956	(0.492)	235472	54.4580	54.4	
13 Acrolein	56	4.266	4.263	(0.531)	68763	245.900	246	
14 Methylene Chloride	84	4.652	4.649	(0.579)	223486	47.7212	47.7	
15 Acetone	43	4.752	4.742	(0.591)	50762	65.1430	65.1(R)	
16 Isobutyl Alcohol	43	8.247	8.252	(1.026)	62628	575.079	575(R)	
17 trans-1,2-Dichloroethene	96	4.916	4.913	(0.612)	219066	47.3597	47.4	
18 Allyl Chloride	41	4.473	4.477	(0.556)	231630	48.7656	48.8	
19 Methyl tert-butyl ether	73	5.124	5.121	(0.637)	775552	104.696	105	
20 Acetonitrile	39	5.545	5.542	(0.690)	23055	342.912	343(R)	
21 Di-isopropyl ether	45	5.774	5.778	(0.718)	644829	52.8020	52.8	
22 Chloroprene	53	5.910	5.907	(0.735)	353859	50.3113	50.3	
23 Propionitrile	54	7.962	7.958	(0.990)	146990	421.170	421	
24 Methacrylonitrile	41	7.983	7.987	(0.993)	599798	496.137	496	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122A.D
Report Date: 07-Apr-2015 12:28

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	25	1,1-Dichloroethane	63	5.946	5.950	(0.740)	466551	50.4155	50.4	
	26	Acrylonitrile	52	6.039	6.036	(0.751)	158827	239.299	239	
	27	Ethyl tertiary-butyl ether	59	6.346	6.343	(0.789)	535038	49.9701	50.0	
	28	Vinyl Acetate	43	6.368	6.372	(0.732)	329349	50.8991	50.9	
	29	cis-1,2-Dichloroethene	96	6.761	6.758	(0.841)	244241	50.4757	50.5	
M	30	1,2-Dichloroethylene (total)	96				463307	97.8355	97.8	
	31	Methyl Methacrylate	41	9.563	9.567	(1.099)	83023	47.4014	47.4	
	32	2,2-Dichloropropane	77	6.904	6.908	(0.859)	407394	51.9344	51.9	
	33	Bromochloromethane	128	7.039	7.036	(0.876)	92406	52.0196	52.0	
	34	Chloroform	83	7.154	7.151	(0.890)	478952	51.0521	51.0	
	35	Carbon Tetrachloride	117	7.318	7.315	(0.841)	308793	51.4001	51.4	
	36	Tetrahydrofuran	42	7.368	7.358	(0.916)	26505	48.3275	48.3	
$	37	Dibromofluoromethane	113	7.397	7.401	(0.920)	188387	53.1641	53.2	
	38	1,1,1-Trichloroethane	97	7.411	7.415	(0.922)	439900	51.1782	51.2	
	39	1,1-Dichloropropene	75	7.583	7.580	(0.872)	353519	54.5669	54.6	
	40	2-Butanone	43	7.583	7.580	(0.943)	48147	57.4545	57.4	
	41	Benzene	78	7.911	7.908	(0.910)	830073	50.5380	50.5	
*	42	Pentafluorobenzene	168	8.040	8.037	(1.000)	315956	50.0000		
	43	Cyclohexane	56	7.025	7.022	(0.874)	395406	51.3788	51.4	
	44	Ethyl Methacrylate	69	11.057	11.054	(1.271)	141429	47.0828	47.1	
$	45	1,2-Dichloroethane-D4	65	8.090	8.087	(1.006)	226681	56.6626	56.7	
	46	Tertiary-amyl methyl ether	73	8.076	8.073	(1.004)	362968	47.5535	47.6	
	47	1,2-Dichloroethane	62	8.176	8.173	(0.940)	321455	49.6472	49.6	
	48	Trichloroethene	95	8.648	8.651	(0.994)	251748	52.3353	52.3	
*	49	1,4-Difluorobenzene	114	8.698	8.702	(1.000)	521841	50.0000		
	50	Dibromomethane	93	9.162	9.166	(1.053)	108114	49.8687	49.9	
	51	1,2-Dichloropropane	63	9.284	9.281	(1.067)	224353	55.1709	55.2	
	52	Bromodichloromethane	83	9.370	9.367	(1.077)	353510	53.9797	54.0	
	53	cis-1,3-dichloropropene	75	10.106	10.110	(1.162)	356966	51.1991	51.2	
	54	1,4-Dioxane	88	9.606	9.610	(1.104)	18380	386.122	386(R)	
$	55	Toluene-D8	98	10.320	10.317	(1.187)	675764	61.1281	61.1	
	56	2-Chloroethylvinylether	63	10.049	10.046	(1.155)	5387	34.0894	34.1(R)	
	57	Toluene	92	10.378	10.374	(1.193)	546310	50.3795	50.4	
	58	4-methyl-2-pentanone	43	10.828	10.825	(1.245)	89246	54.2130	54.2	
	59	Tetrachloroethene	164	10.821	10.818	(0.888)	184945	53.5110	53.5	
	60	trans-1,3-Dichloropropene	75	10.871	10.868	(1.250)	306718	53.2923	53.3	
	61	1,1,2-Trichloroethane	83	11.057	11.054	(1.271)	122771	50.2450	50.2	
	62	Dibromochloromethane	129	11.264	11.268	(0.924)	200527	53.0118	53.0	
	63	1,3-Dichloropropane	76	11.378	11.382	(0.934)	284038	51.0481	51.0	
	64	1,2-Dibromoethane	107	11.550	11.554	(1.328)	150290	49.7050	49.7	
	65	2-Hexanone	43	11.836	11.833	(0.971)	65525	58.3357	58.3	
*	66	Chlorobenzene-D5	117	12.186	12.190	(1.000)	515096	50.0000		
	67	Chlorobenzene	112	12.207	12.212	(1.002)	629373	54.6357	54.6	
	152	1-Chlorohexane	91	12.179	12.183	(0.999)	374973	53.9538	54.0	
	68	Ethylbenzene	106	12.243	12.247	(1.005)	340587	50.6859	50.7	
	69	1,1,1,2-Tetrachloroethane	131	12.293	12.290	(1.009)	230748	51.9715	52.0	
M	70	Xylenes (total)	106				1272216	163.301	163	
	71	m+p-Xylenes	106	12.436	12.433	(1.021)	851389	107.437	107	
	72	o-Xylene	106	13.008	13.005	(1.067)	420827	55.8645	55.9	
	73	Styrene	104	13.079	13.076	(1.073)	680528	53.7916	53.8	
	74	Bromoform	173	13.115	13.112	(1.076)	97637	53.3905	53.4	
	75	Isopropylbenzene	105	13.437	13.434	(0.866)	1200448	54.6092	54.6	
$	76	P-Bromofluorobenzene	95	13.837	13.834	(1.591)	308278	51.4146	51.4	
	77	cis-1,4-Dichloro-2-Butene	53	13.937	13.934	(0.898)	53755	45.0132	45.0	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122A.D
Report Date: 07-Apr-2015 12:28

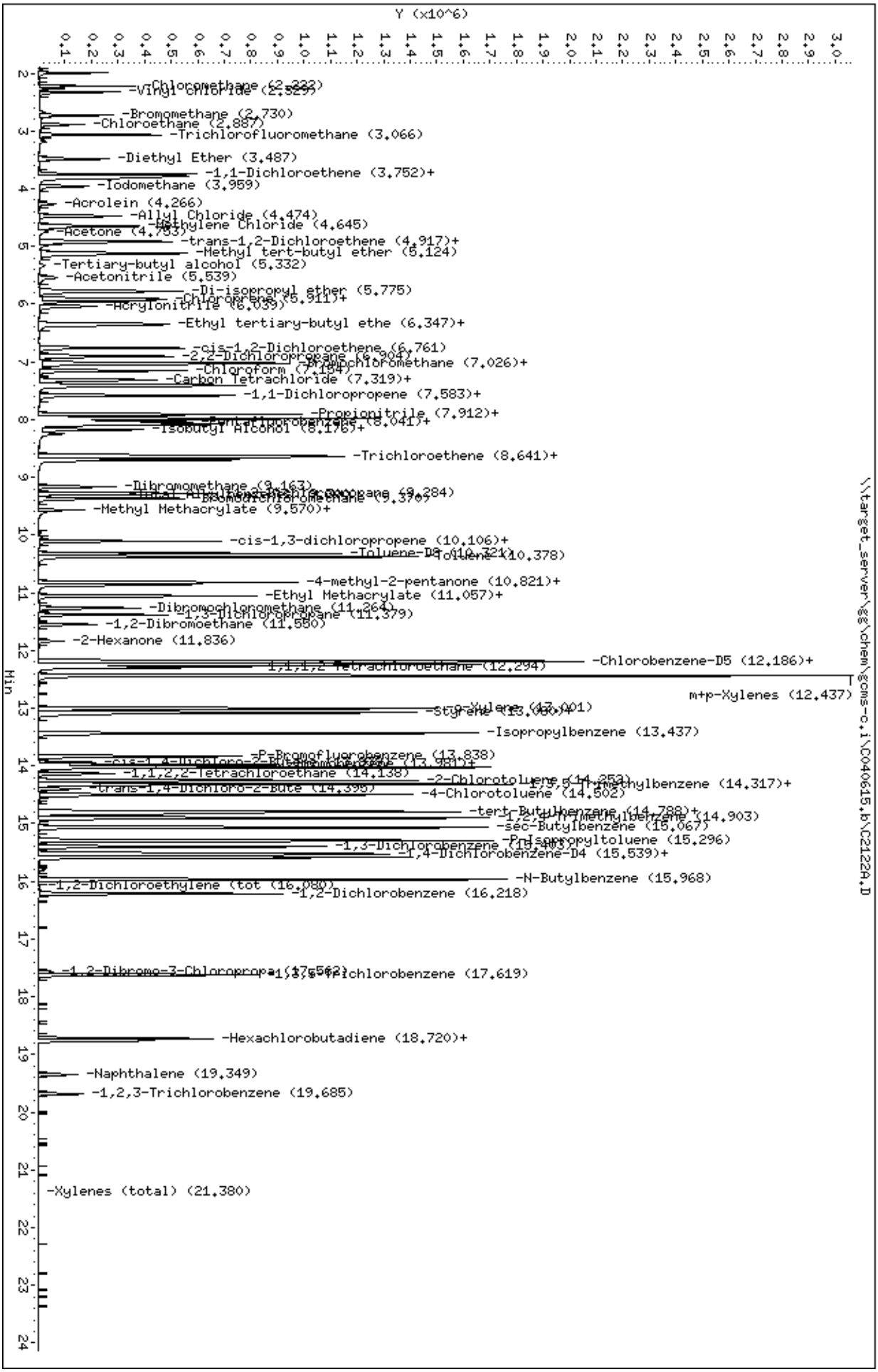
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.399	(0.928)	40742	45.4391	45.4	
	79 Bromobenzene	156	13.987	13.984	(0.901)	251991	49.9834	50.0	
	80 N-Propylbenzene	91	14.023	14.027	(0.904)	1470168	54.6625	54.7	
	81 1,1,2,2-Tetrachloroethane	83	14.137	14.134	(0.911)	160239	47.9149	47.9	
	82 1,3,5-Trimethylbenzene	105	14.316	14.320	(0.923)	1014633	48.8350	48.8	
	83 2-Chlorotoluene	91	14.252	14.256	(0.918)	912102	52.8679	52.9	
	84 1,2,3-Trichloropropane	75	14.330	14.334	(0.924)	135721	48.8594	48.8	
	85 4-Chlorotoluene	91	14.502	14.499	(0.935)	947271	53.8890	53.9	
	86 tert-Butylbenzene	119	14.795	14.792	(0.953)	961951	51.8366	51.8	
	87 Pentachloroethane	117	14.824	14.821	(0.955)	182462	49.1477	49.1	
	88 1,2,4-Trimethylbenzene	105	14.902	14.899	(0.960)	1038833	51.5391	51.5	
	89 P-Isopropyltoluene	119	15.295	15.292	(0.986)	1091249	55.4761	55.5	
	90 1,3-Dichlorobenzene	146	15.403	15.400	(0.993)	480751	52.1467	52.1	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.514	(1.000)	303603	50.0000		
	92 1,4-Dichlorobenzene	146	15.538	15.542	(1.001)	461446	46.9772	47.0	
	93 N-Butylbenzene	91	15.967	15.964	(1.029)	1091601	53.0965	53.1	
	94 sec-Butylbenzene	105	15.067	15.064	(0.971)	1313658	54.4565	54.4	
	95 1,2-Dichlorobenzene	146	16.217	16.213	(1.045)	402287	51.4400	51.4	
	96 1,2-Dibromo-3-Chloropropane	75	17.568	17.565	(1.132)	18632	45.9517	46.0	
	97 1,3,5-Trichlorobenzene	180	17.618	17.623	(1.135)	284675	49.9677	50.0	
	98 Hexachlorobutadiene	225	18.726	18.723	(1.207)	149223	52.7486	52.7	
	99 1,2,4-Trichlorobenzene	180	18.762	18.759	(1.209)	144047	48.3527	48.4	
	100 1,2,3-Trimethylbenzene	105	15.581	15.585	(1.004)	896758	47.1818	47.2	
	101 Naphthalene	128	19.348	19.352	(1.247)	125779	42.8107	42.8	
	102 1,2,3-Trichlorobenzene	180	19.684	19.681	(1.269)	58032	40.9553	41.0	
	103 Methyl Acetate	43	4.974	4.971	(0.619)	73168	47.2400	47.2	
	104 Methylcyclohexane	83	8.626	8.630	(1.073)	389558	50.6422	50.6	
M	153 Total Alkylbenzenes	100				7982093	369.902	370	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122A.D
Date : 06-APR-2015 17:30
Client ID: Independent Source
Sample Info: WG160815-7,SI1843
Purge Volume: 5.0
Column phase: RTX-VMS

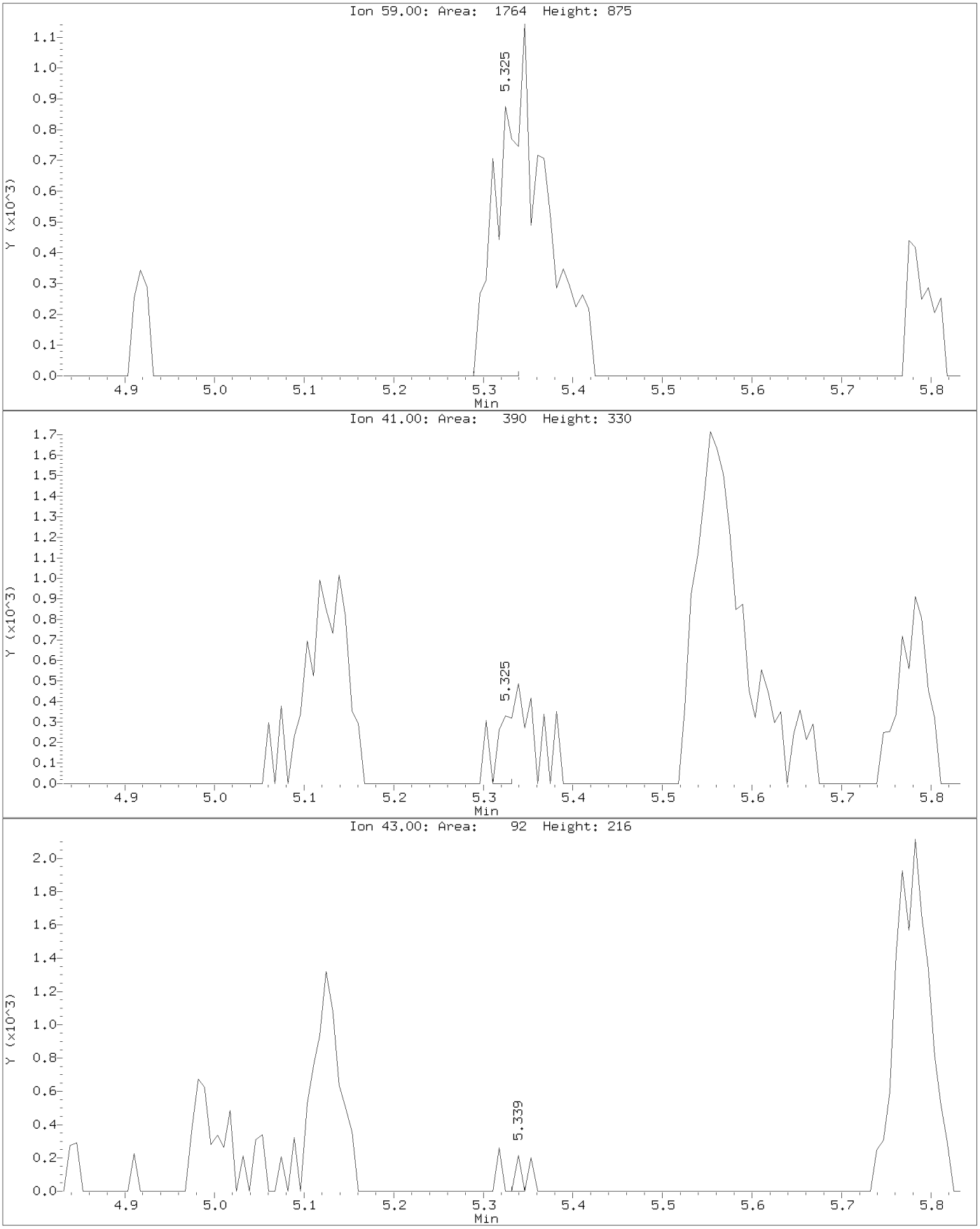
Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Tertiary-butyl alcohol
CAS Number: 75-65-0

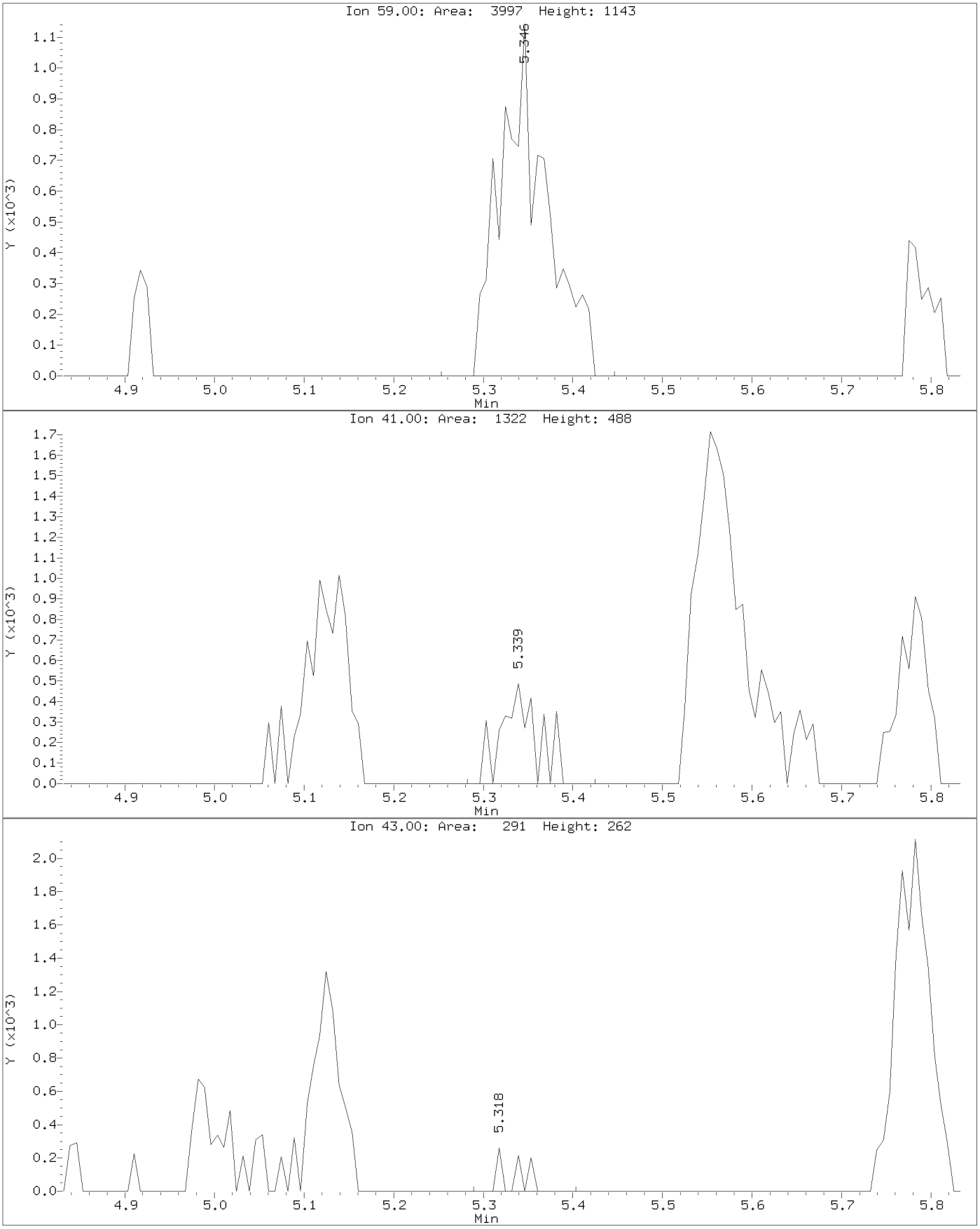
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Tertiary-butyl alcohol
CAS Number: 75-65-0

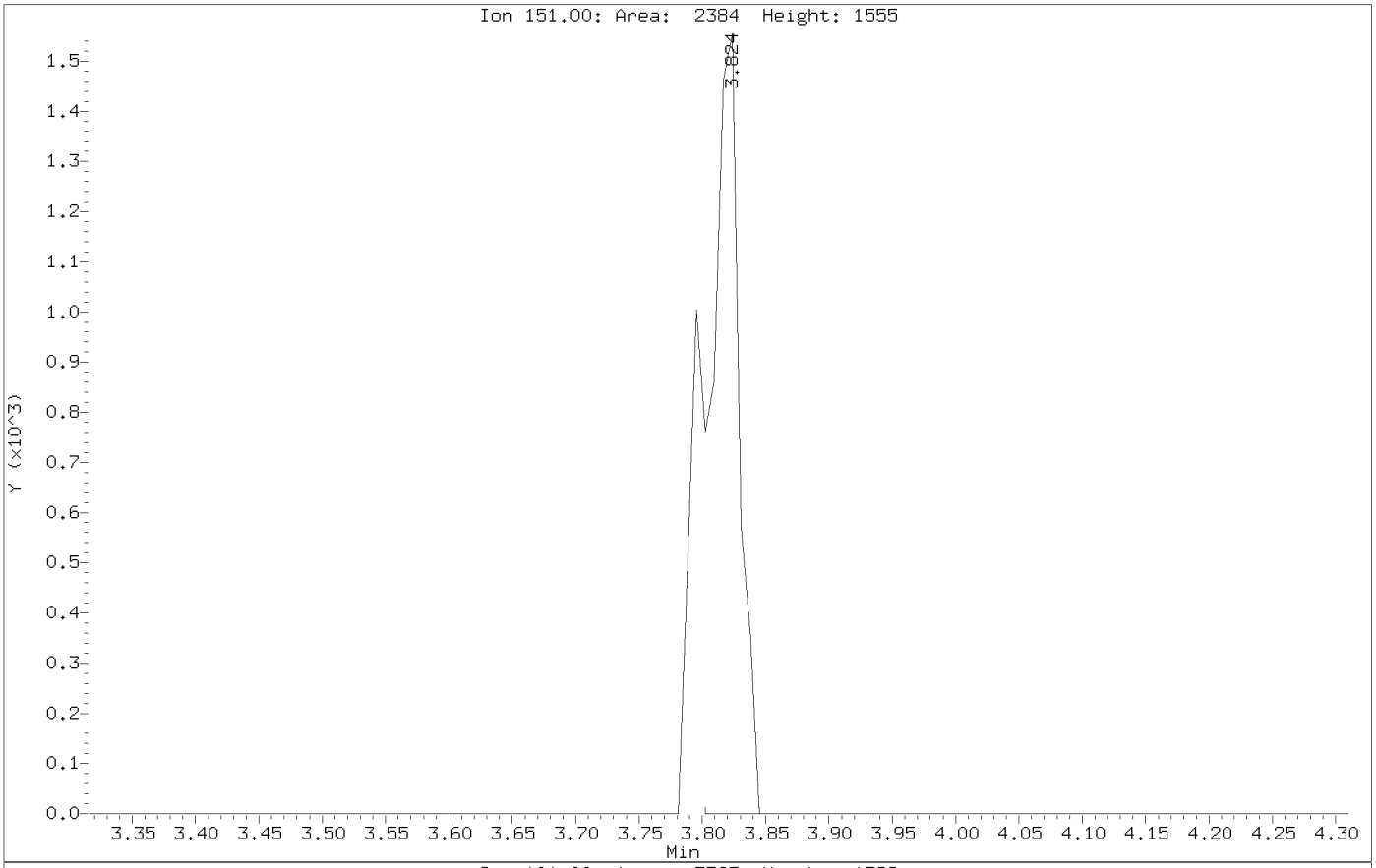
AFTER MANUAL INTEGRATION

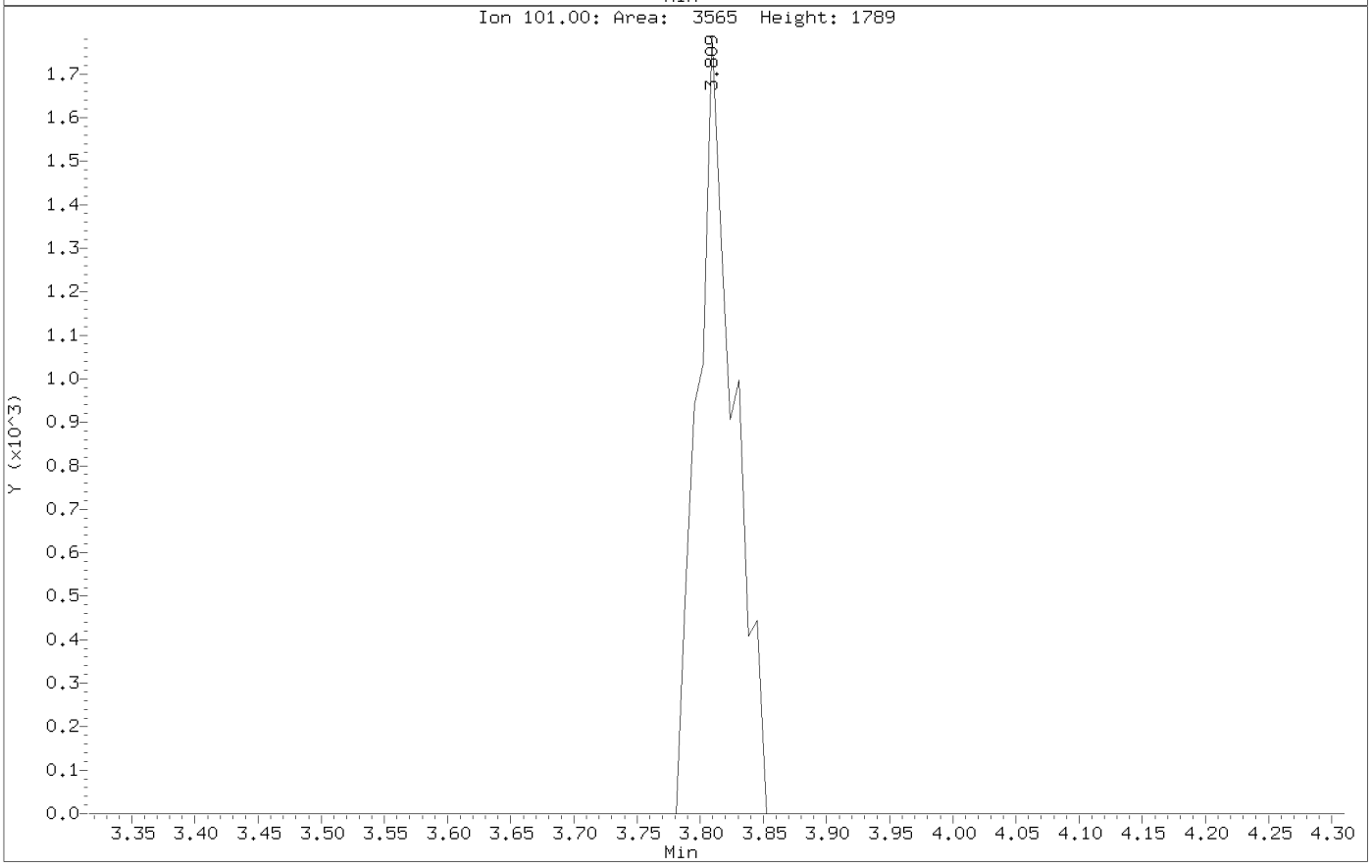


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Freon-113
CAS Number: 76-13-1

BEFORE MANUAL INTEGRATION

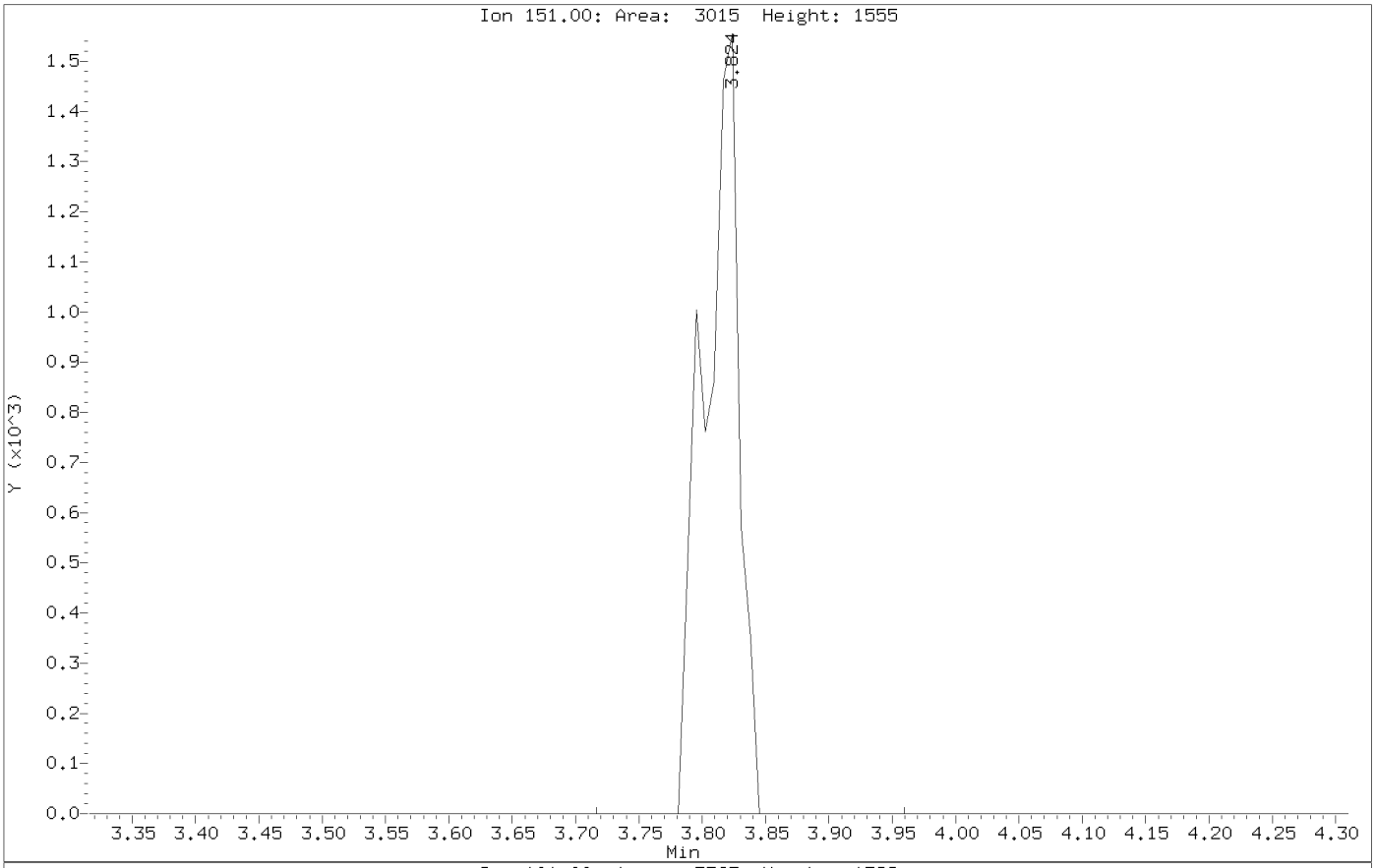


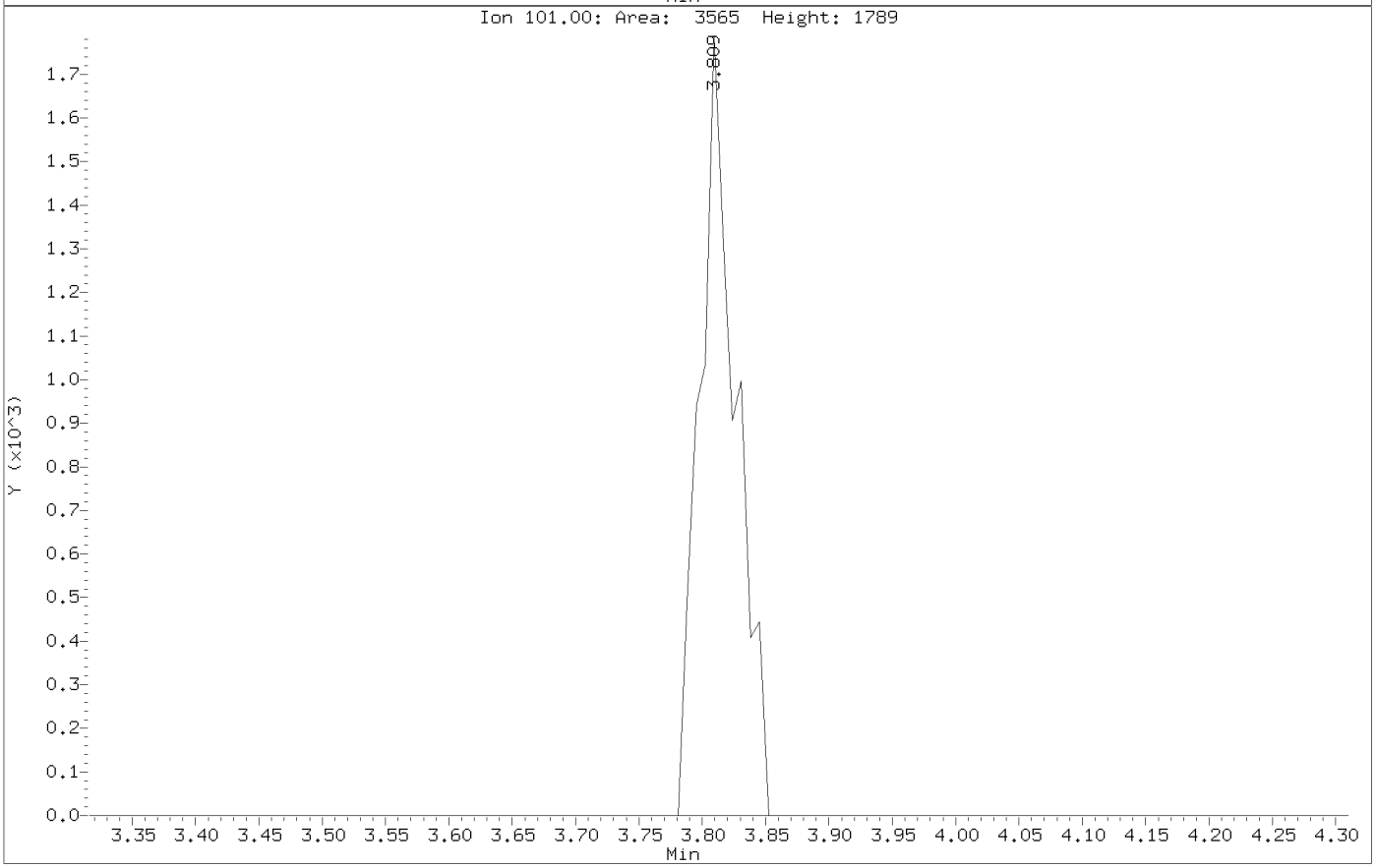


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Freon-113
CAS Number: 76-13-1

AFTER MANUAL INTEGRATION

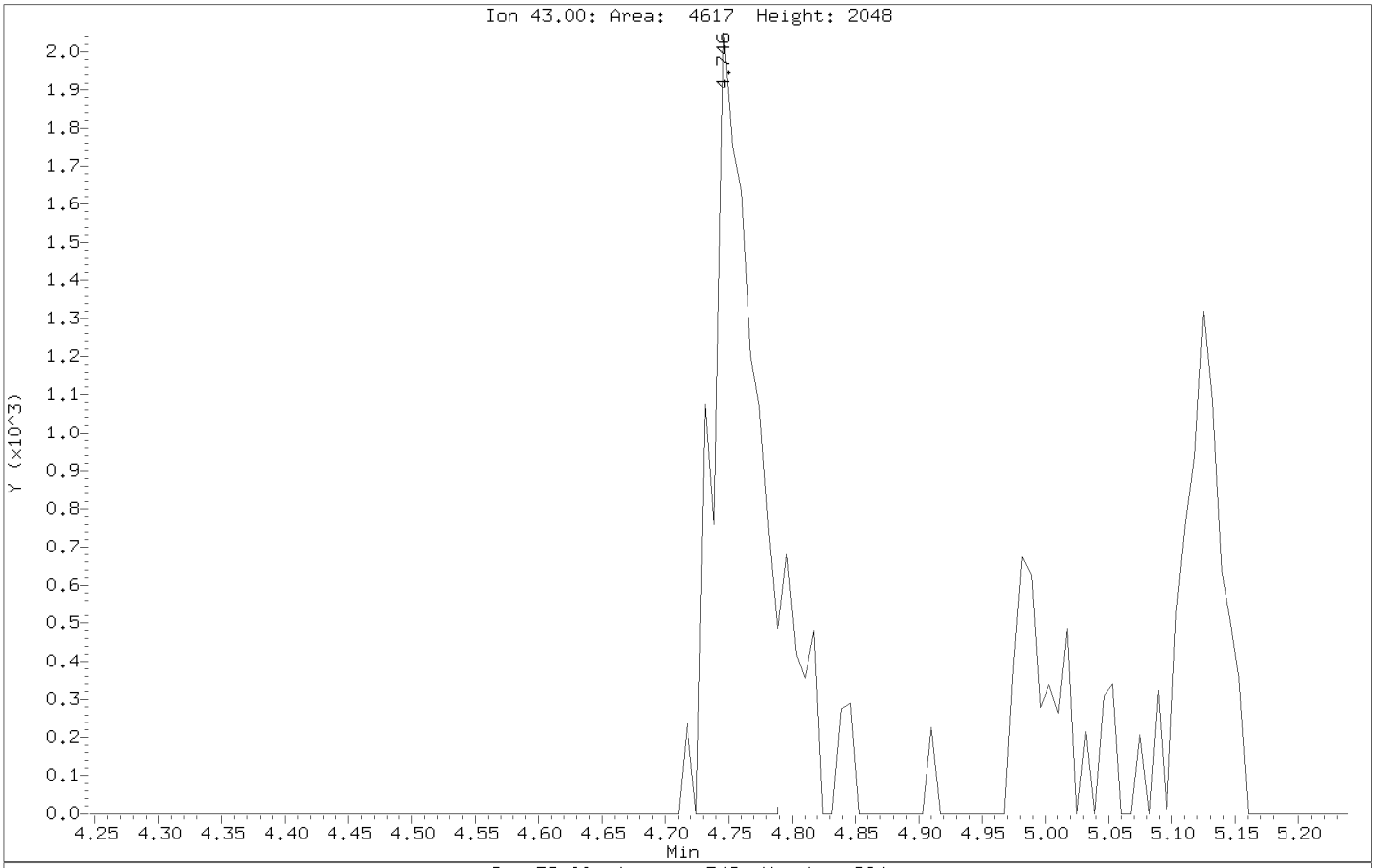


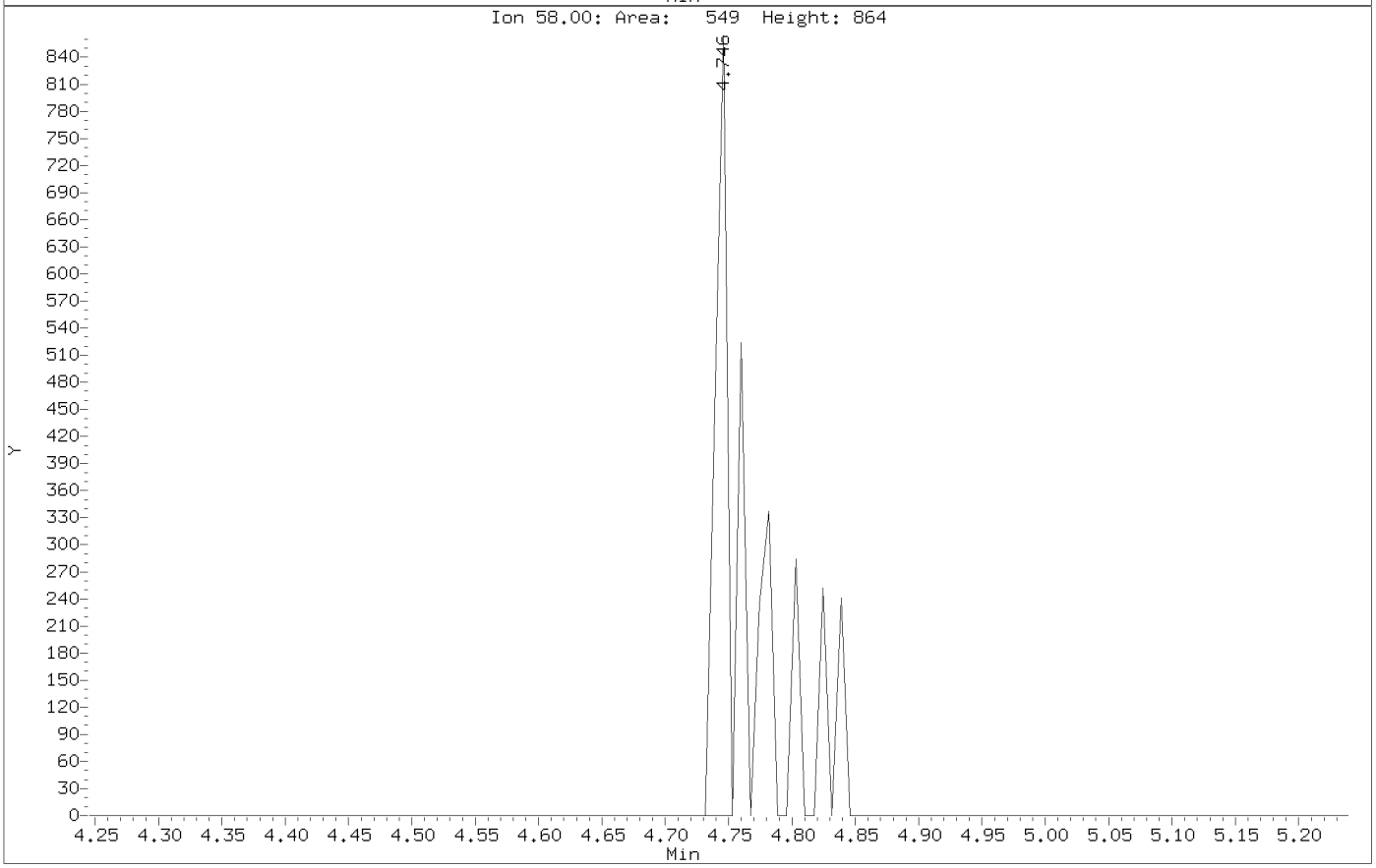


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetone
CAS Number: 67-64-1

BEFORE MANUAL INTEGRATION

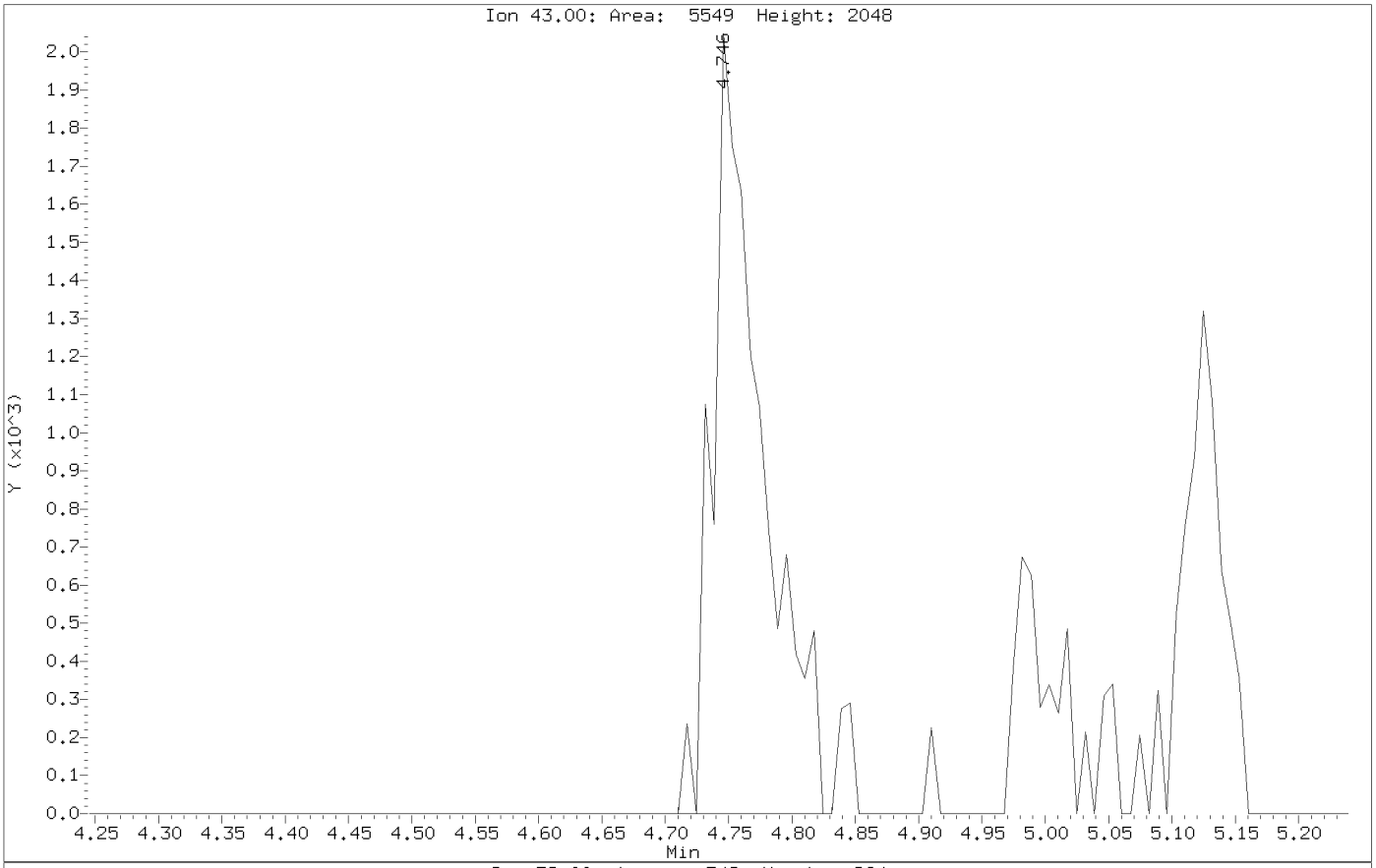


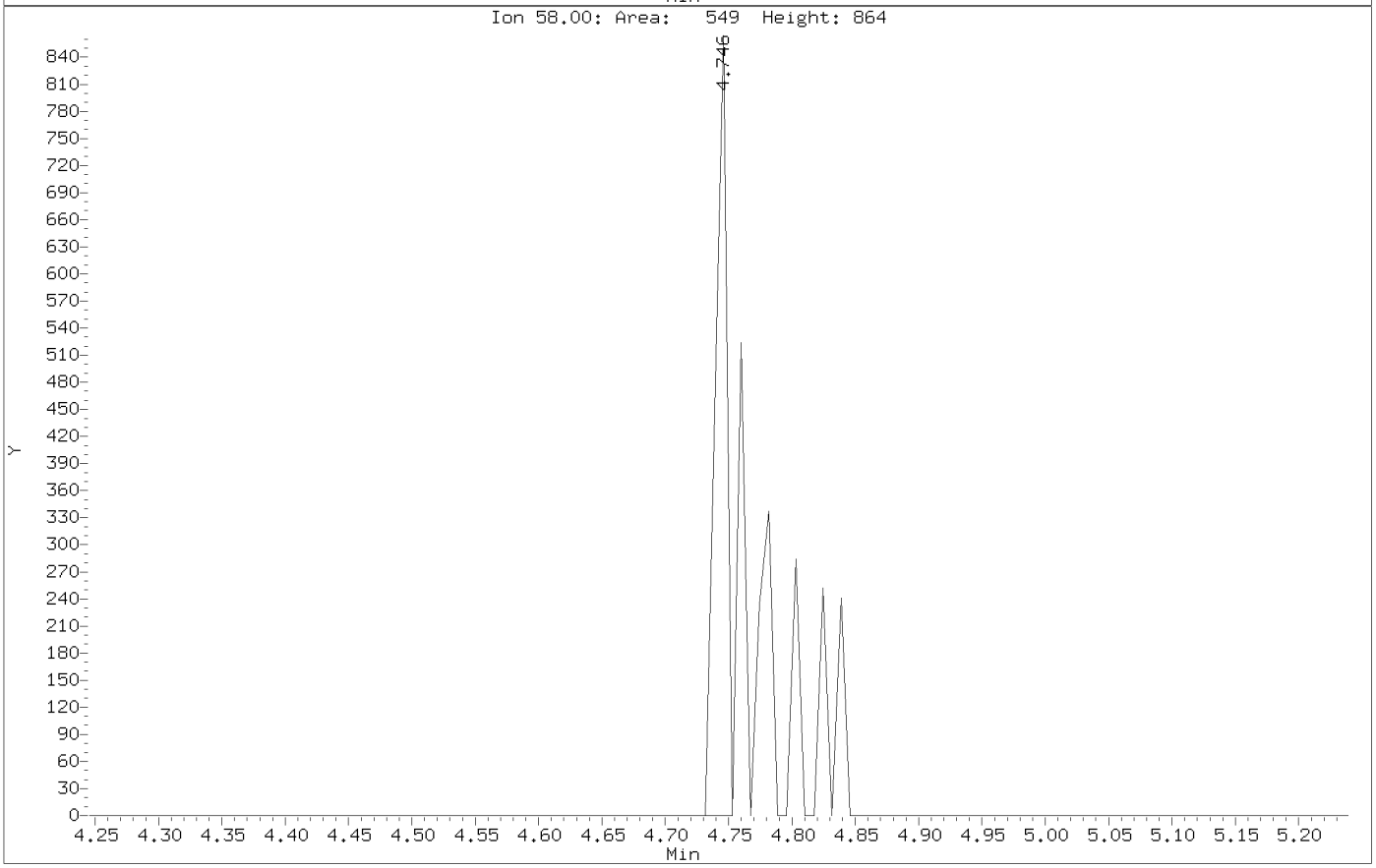


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetone
CAS Number: 67-64-1

AFTER MANUAL INTEGRATION

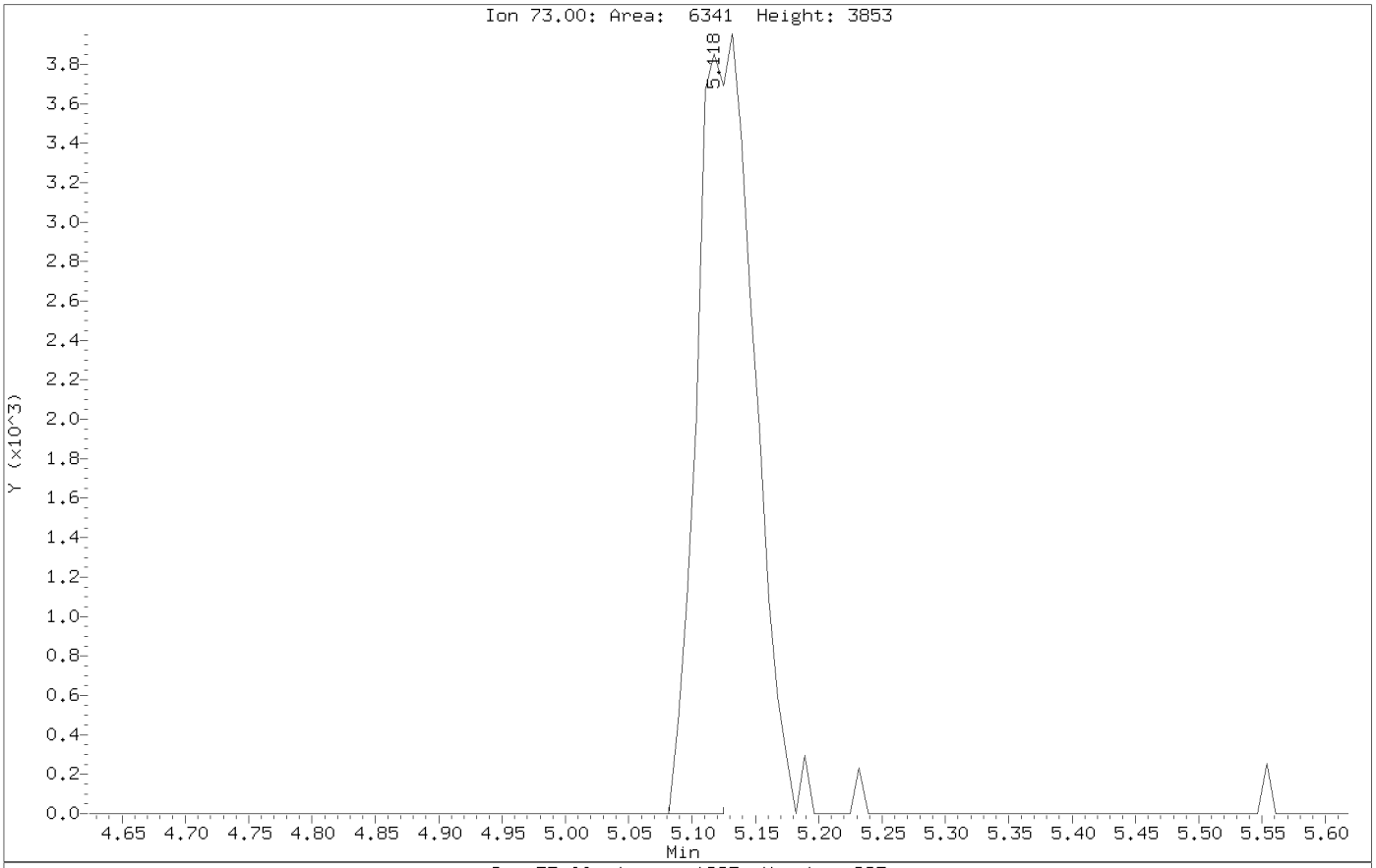


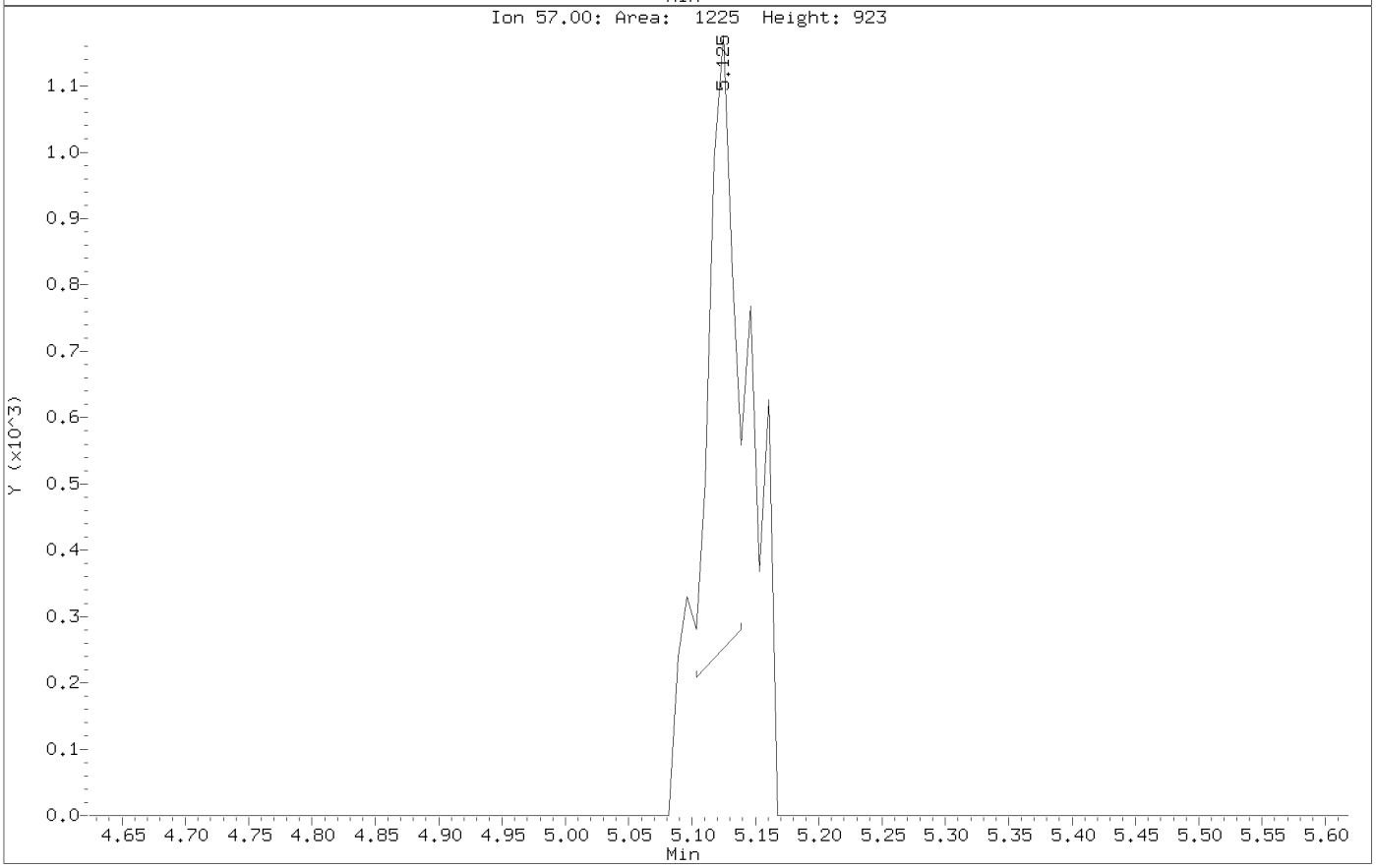


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Methyl tert-butyl ether
CAS Number: 1634-04-4

BEFORE MANUAL INTEGRATION

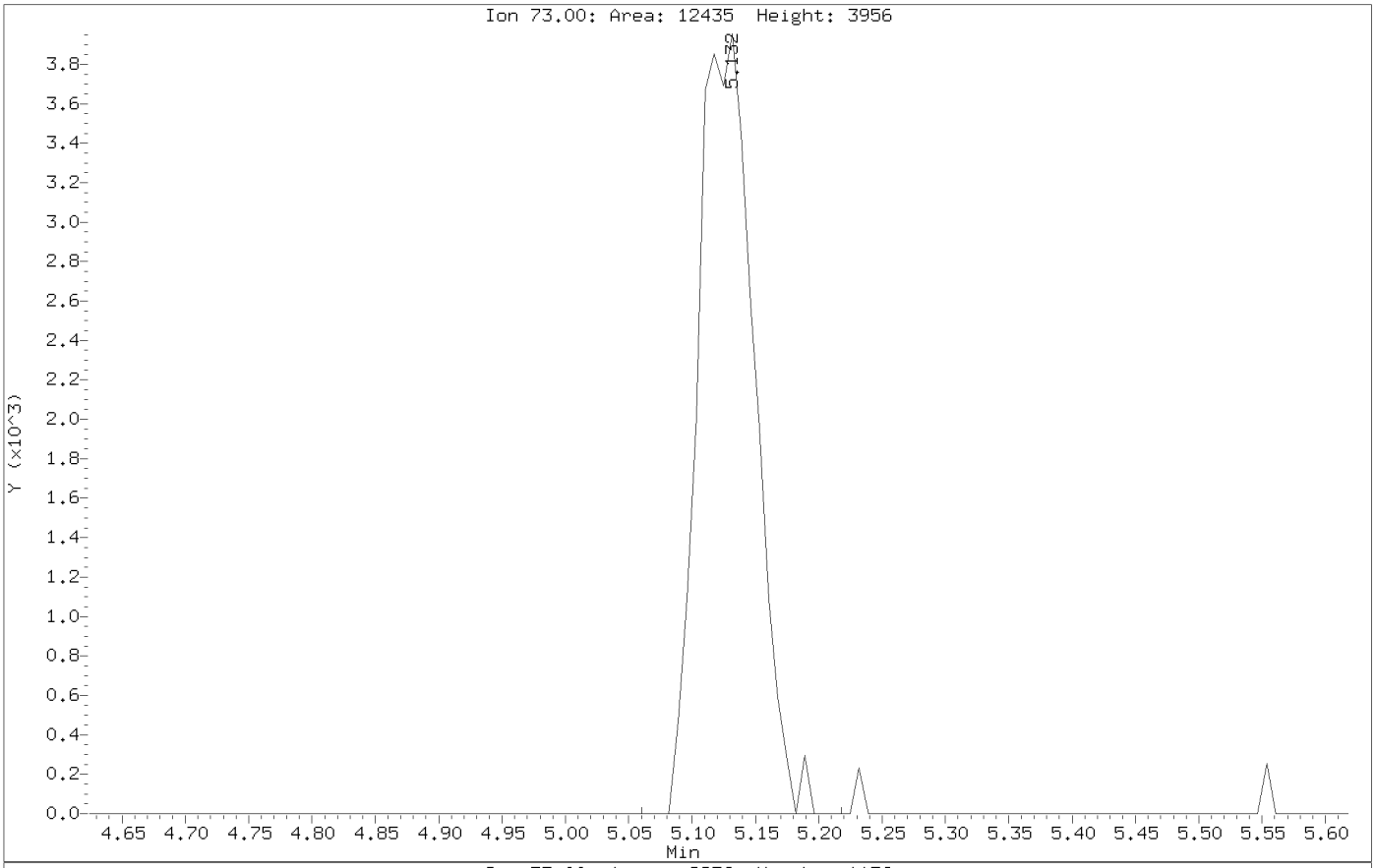


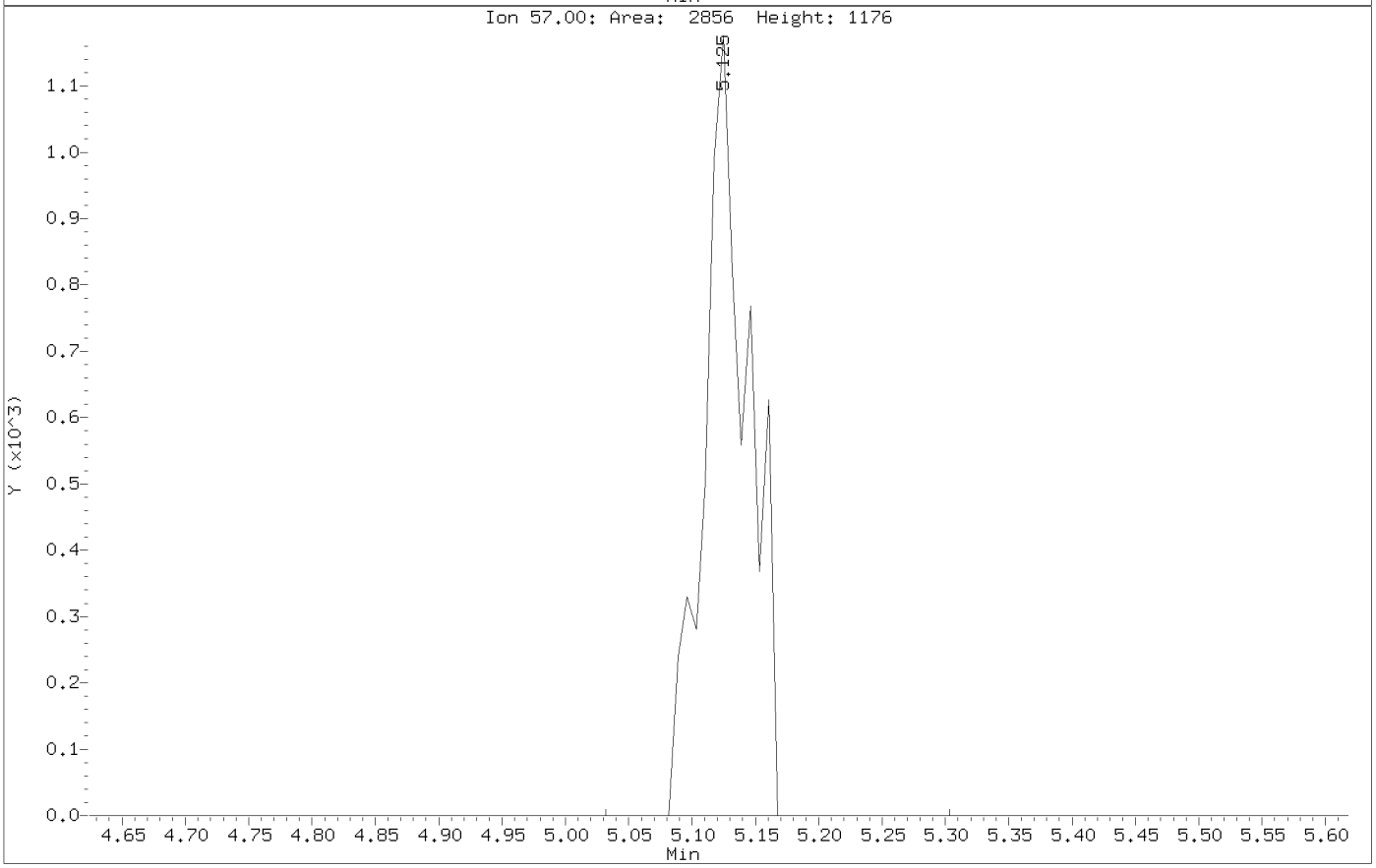


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Methyl tert-butyl ether
CAS Number: 1634-04-4

AFTER MANUAL INTEGRATION

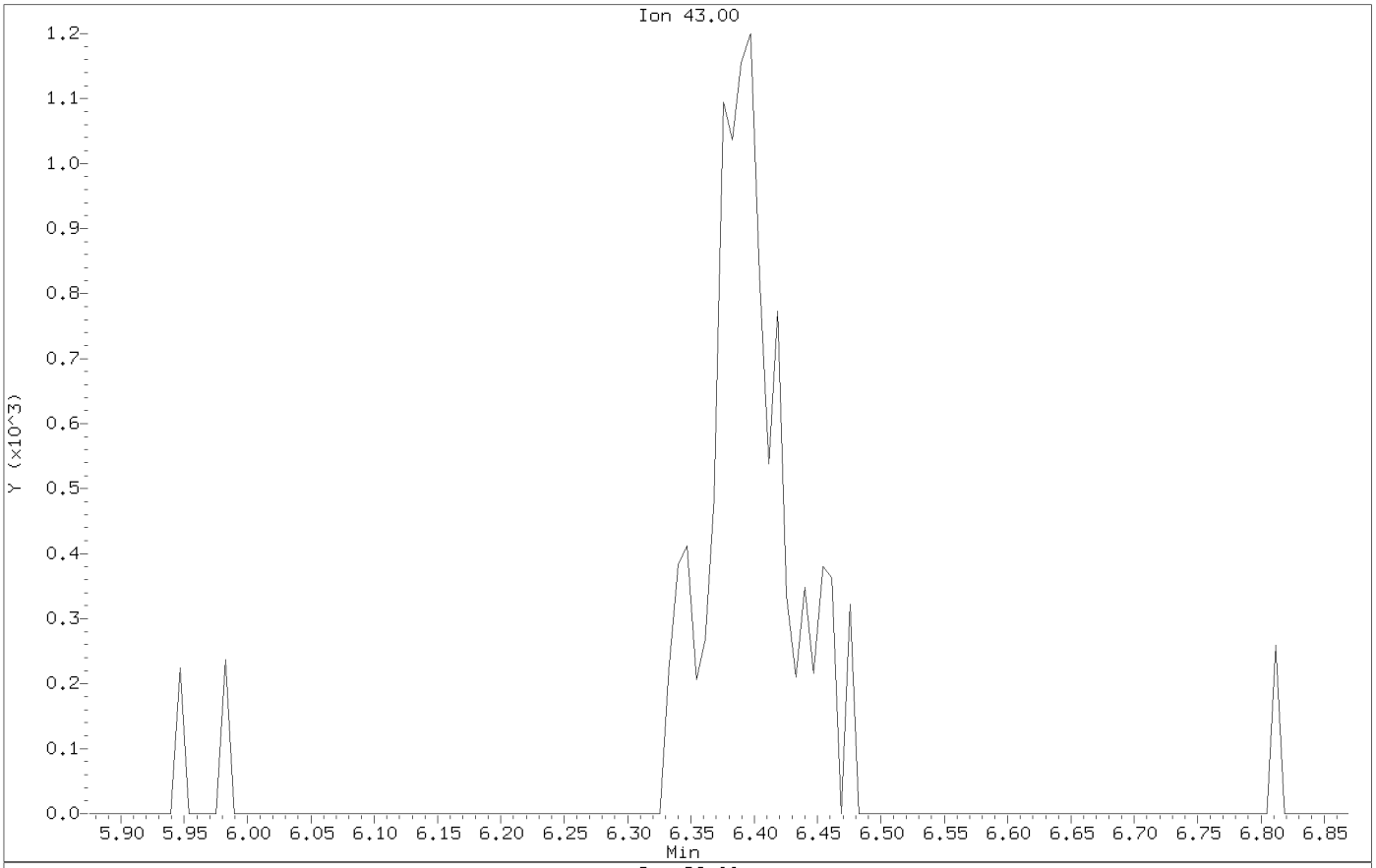


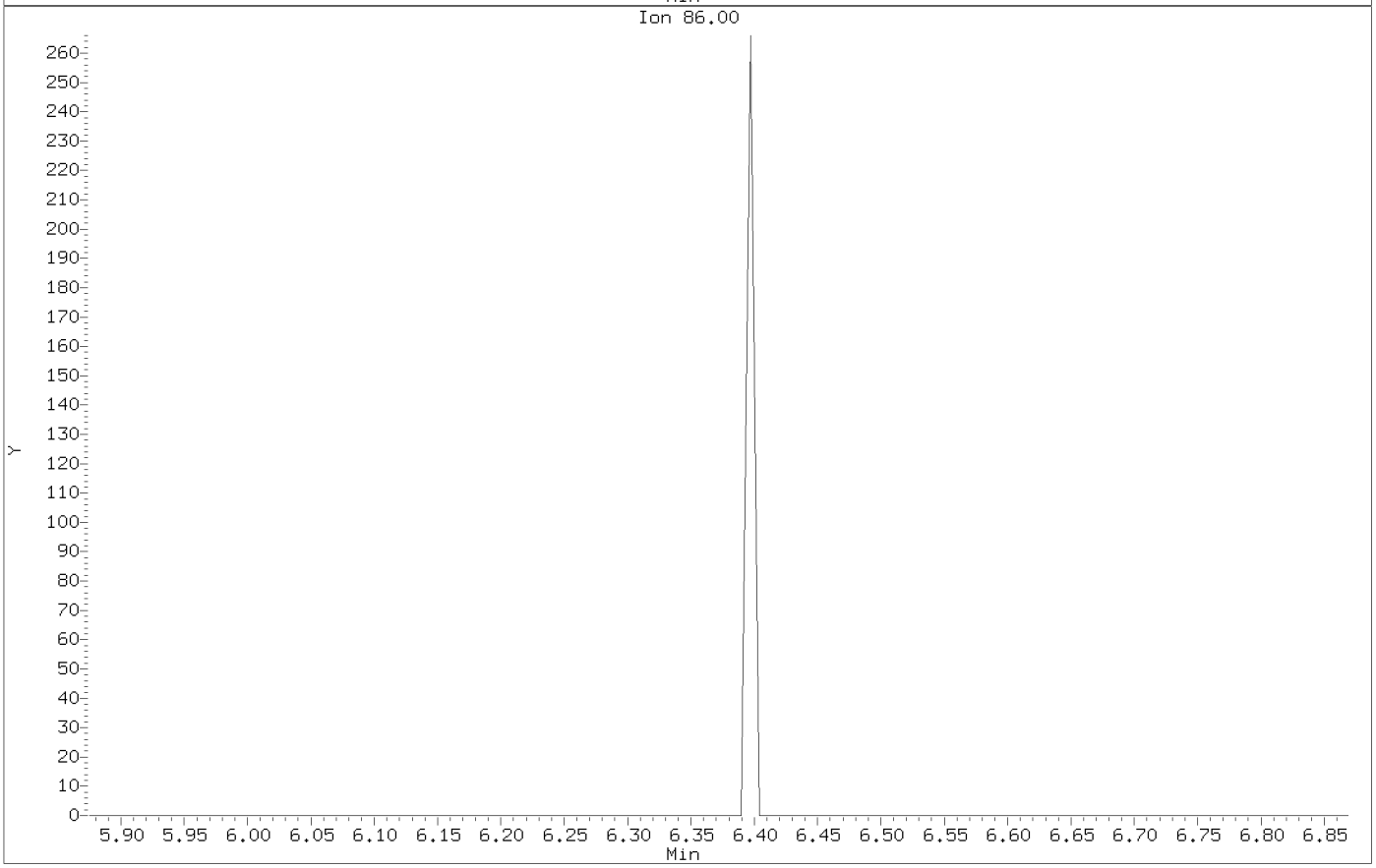


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Vinyl Acetate
CAS Number: 108-05-4

BEFORE MANUAL INTEGRATION

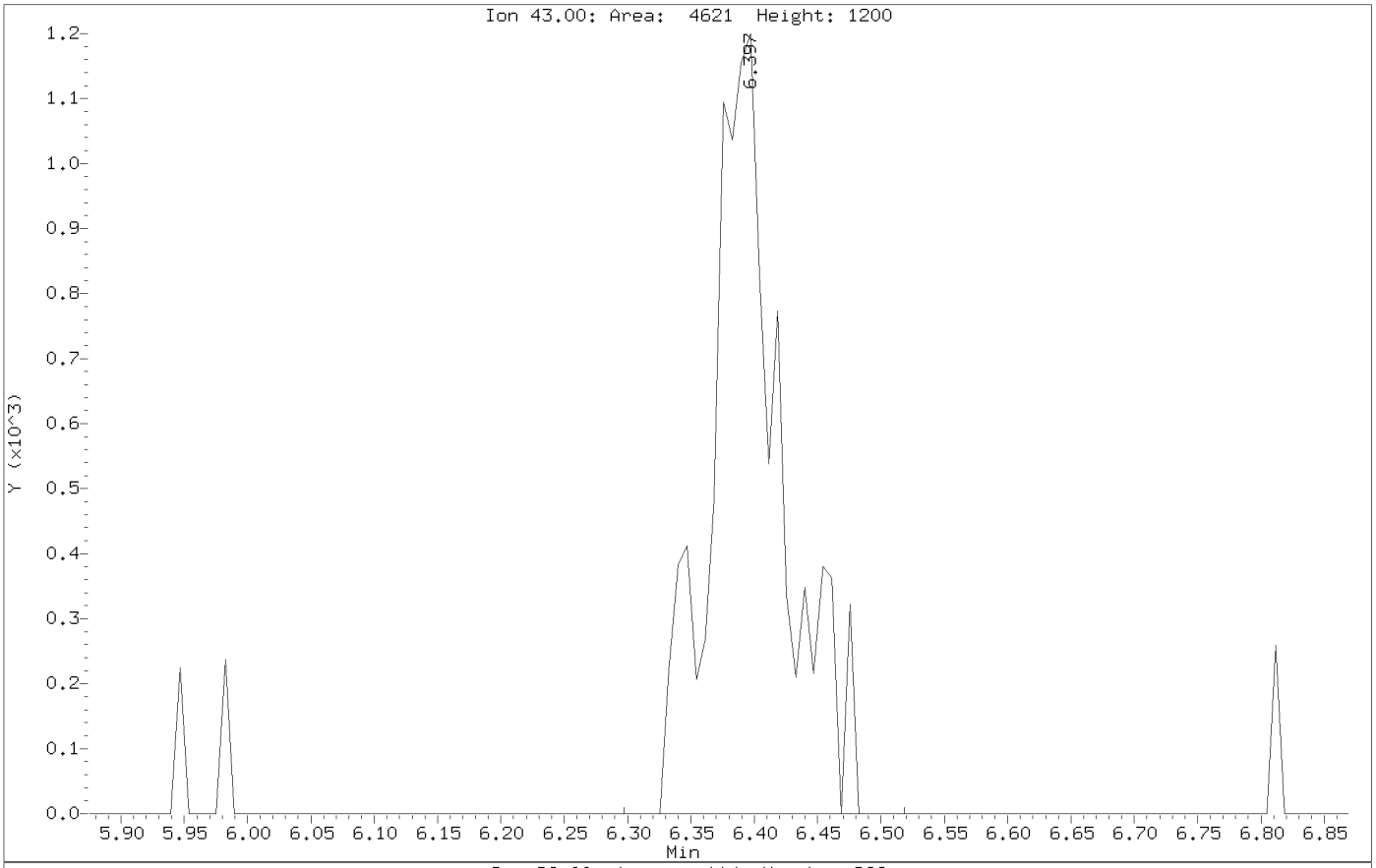


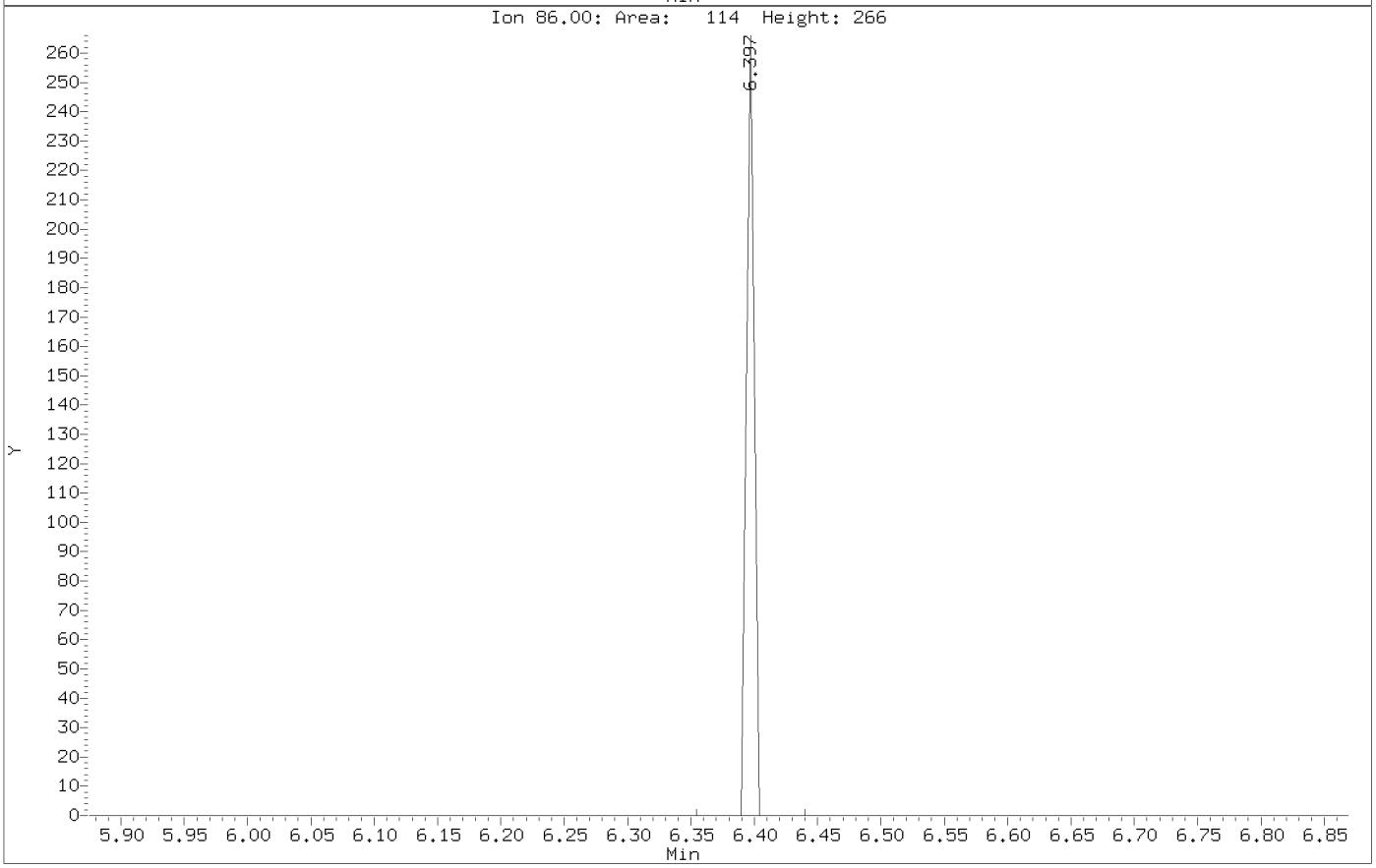


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Vinyl Acetate
CAS Number: 108-05-4

AFTER MANUAL INTEGRATION

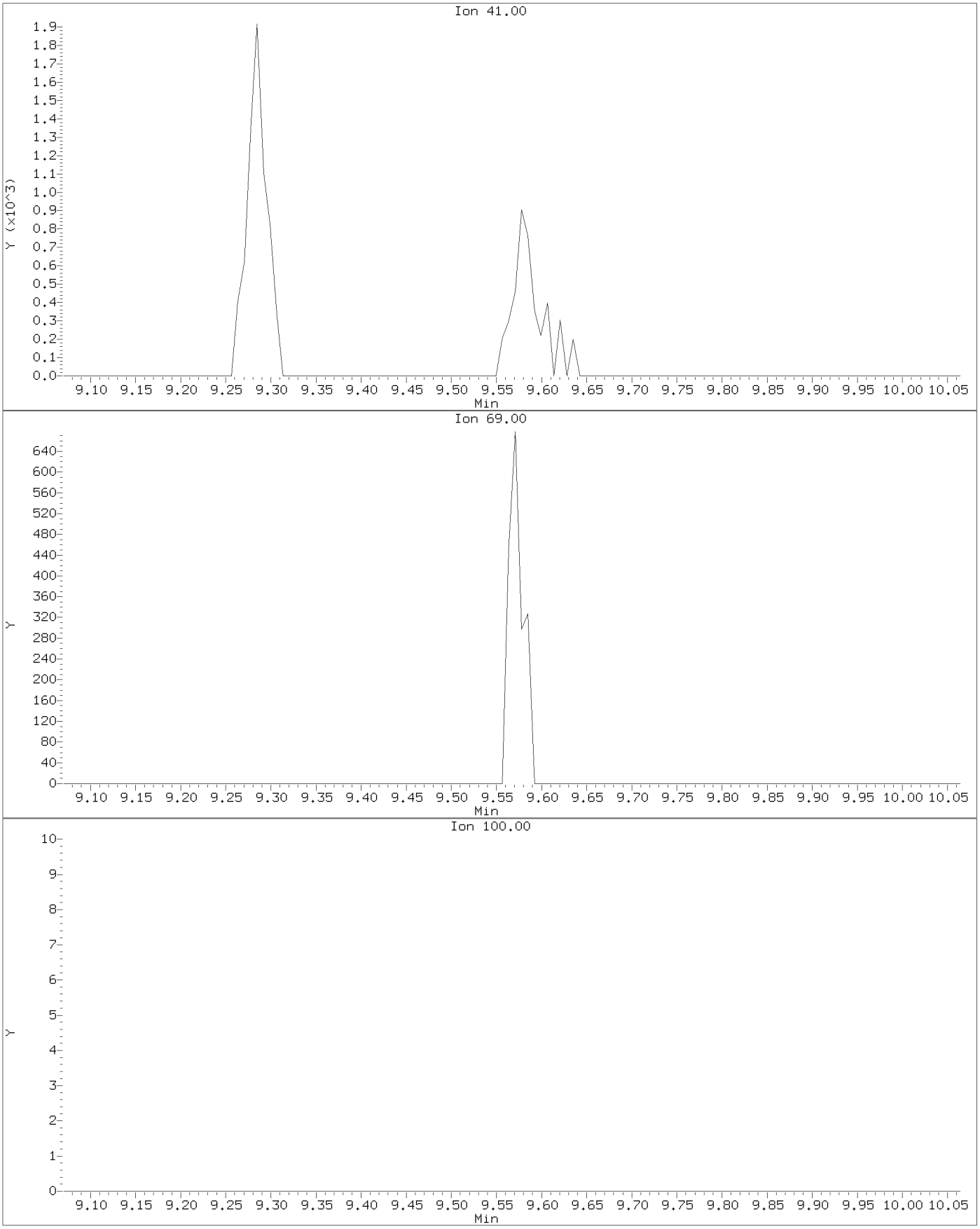




Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Methyl Methacrylate
CAS Number: 80-62-6

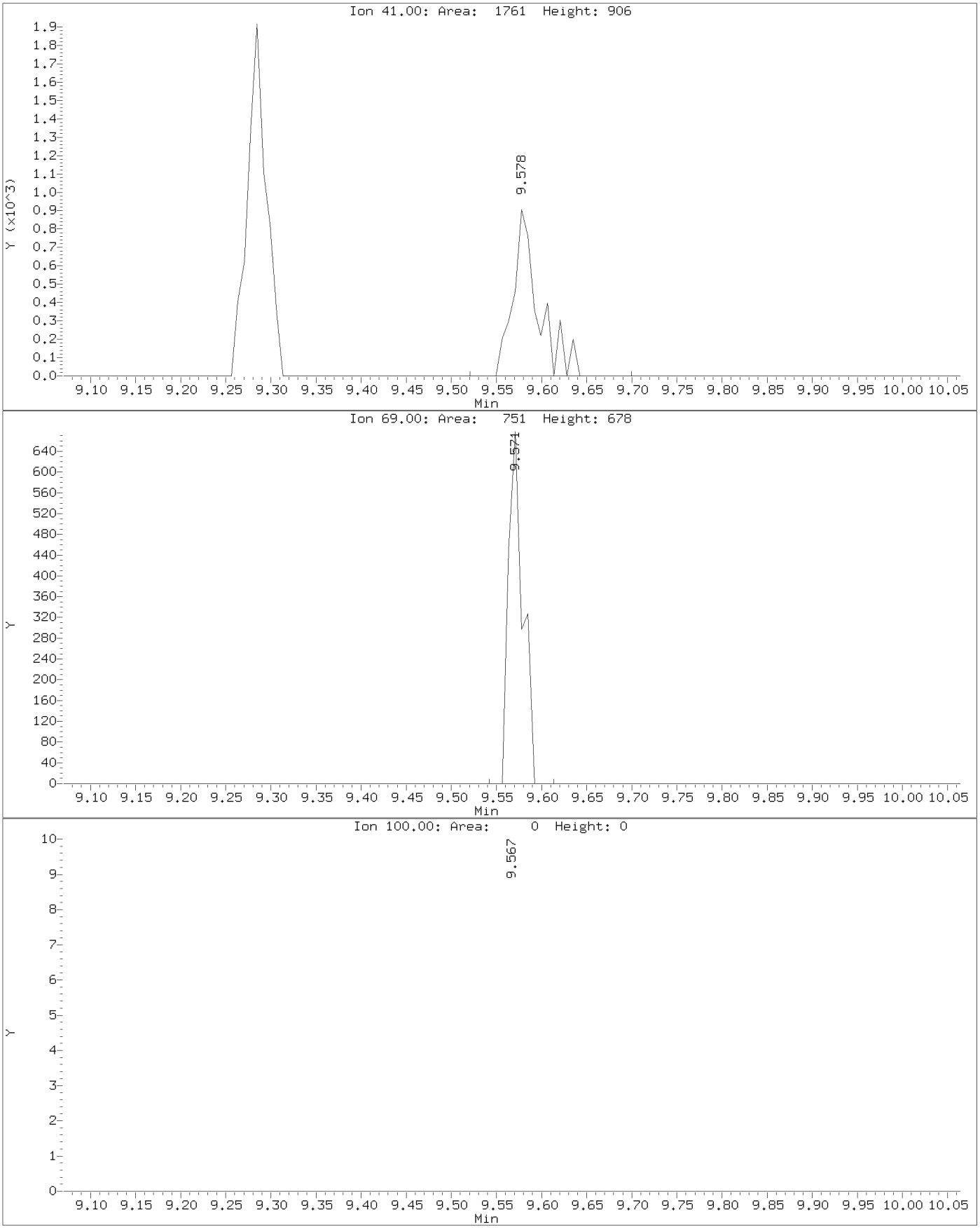
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Methyl Methacrylate
CAS Number: 80-62-6

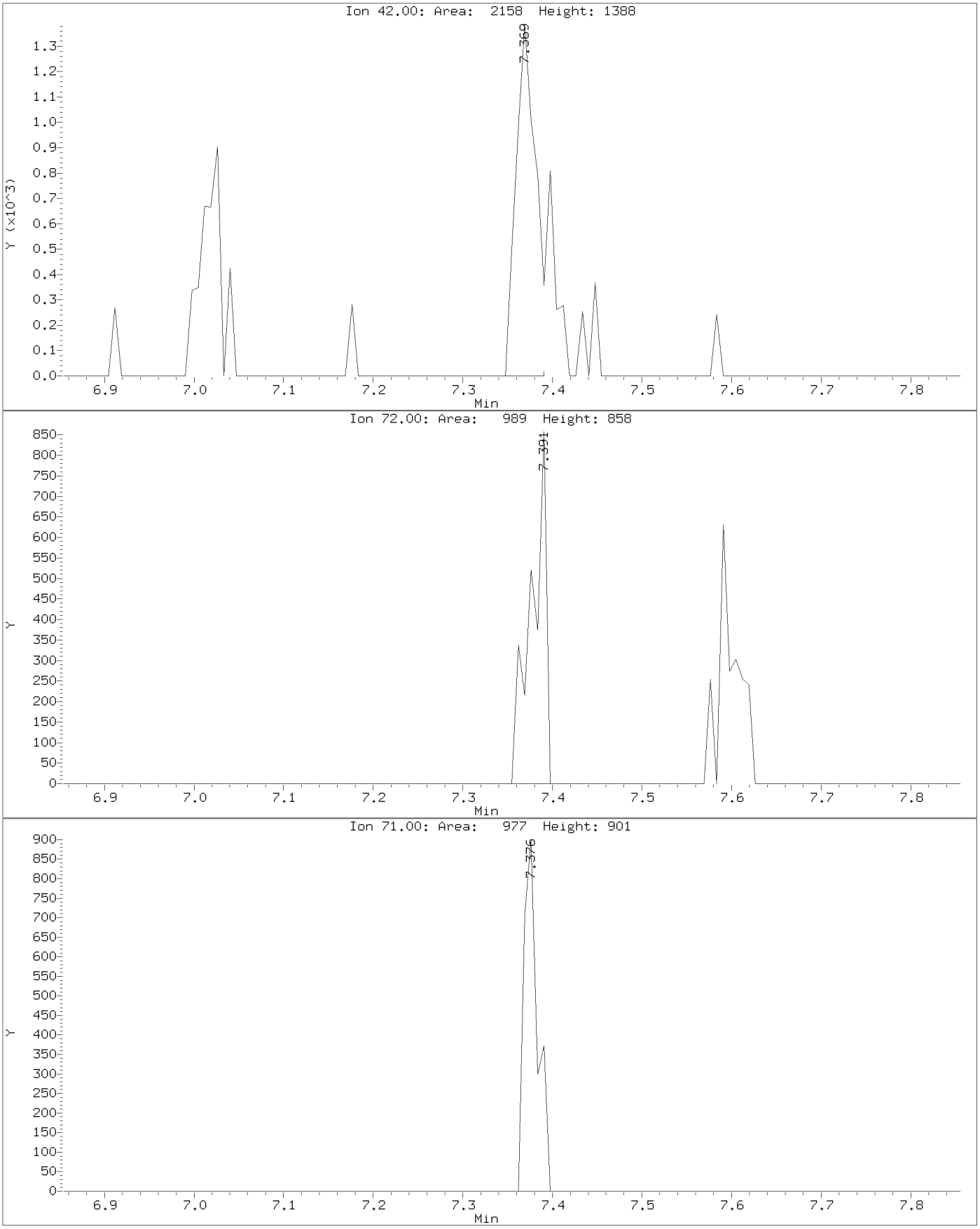
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Tetrahydrofuran
CAS Number: 109-99-9

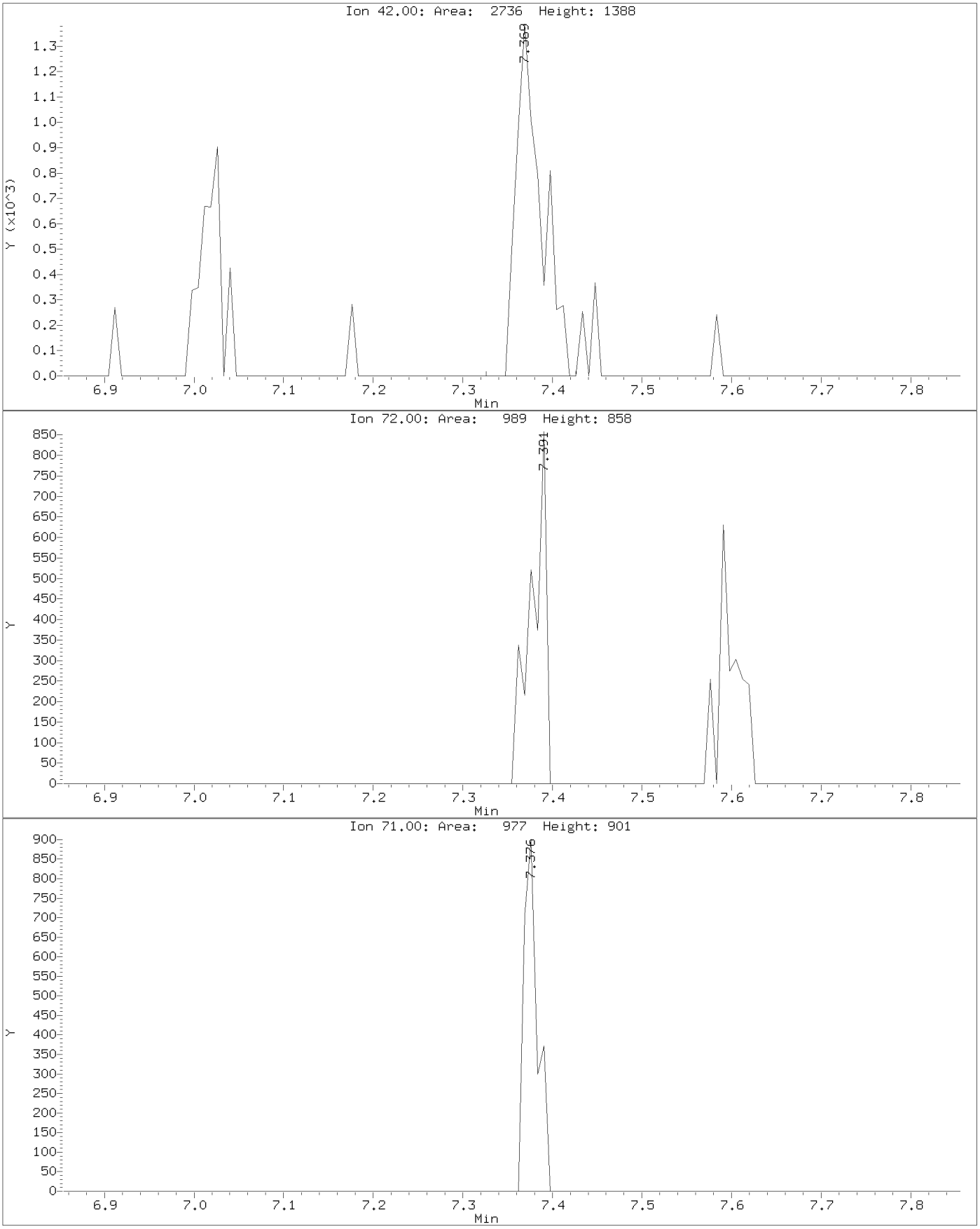
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Tetrahydrofuran
CAS Number: 109-99-9

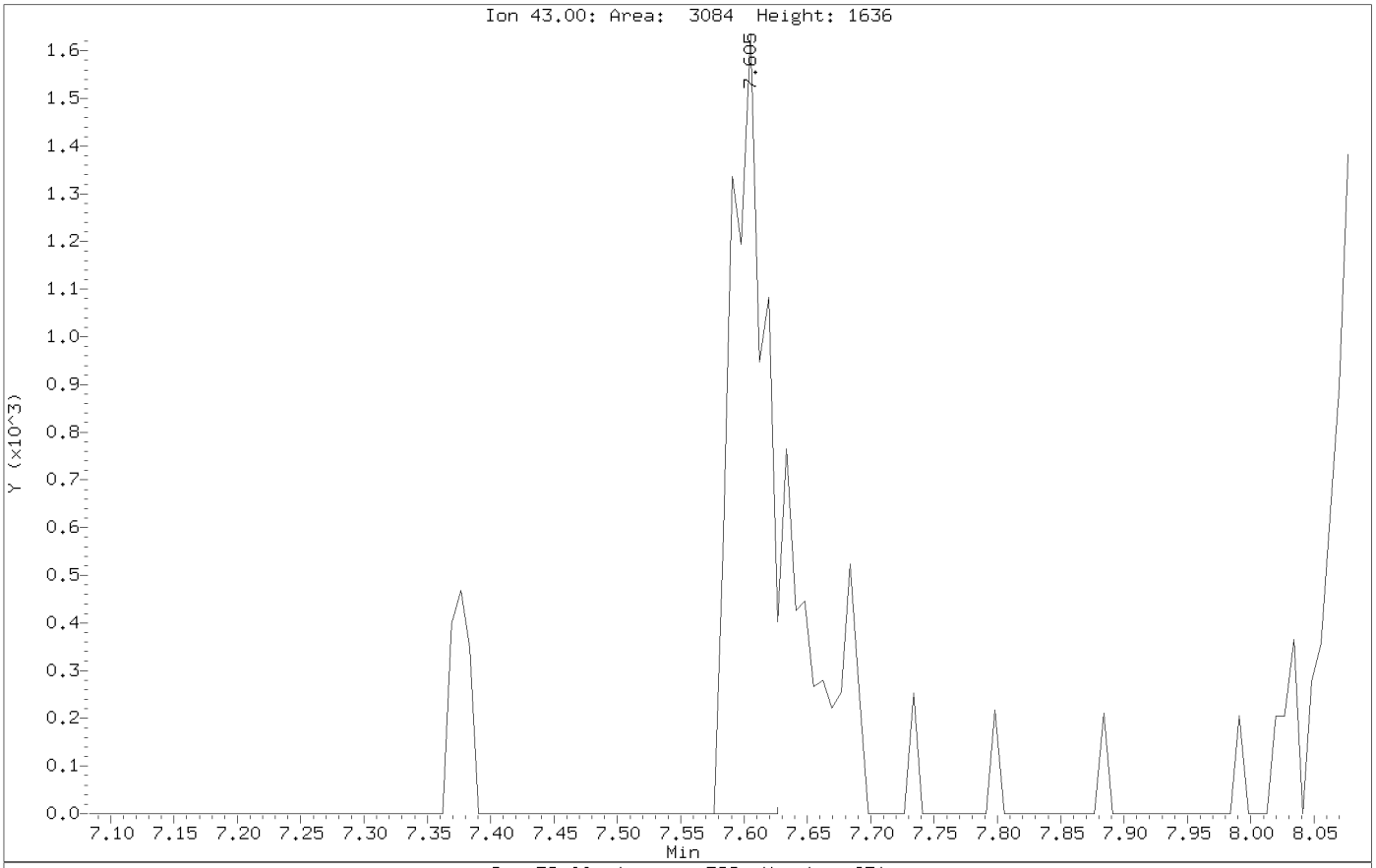
AFTER MANUAL INTEGRATION

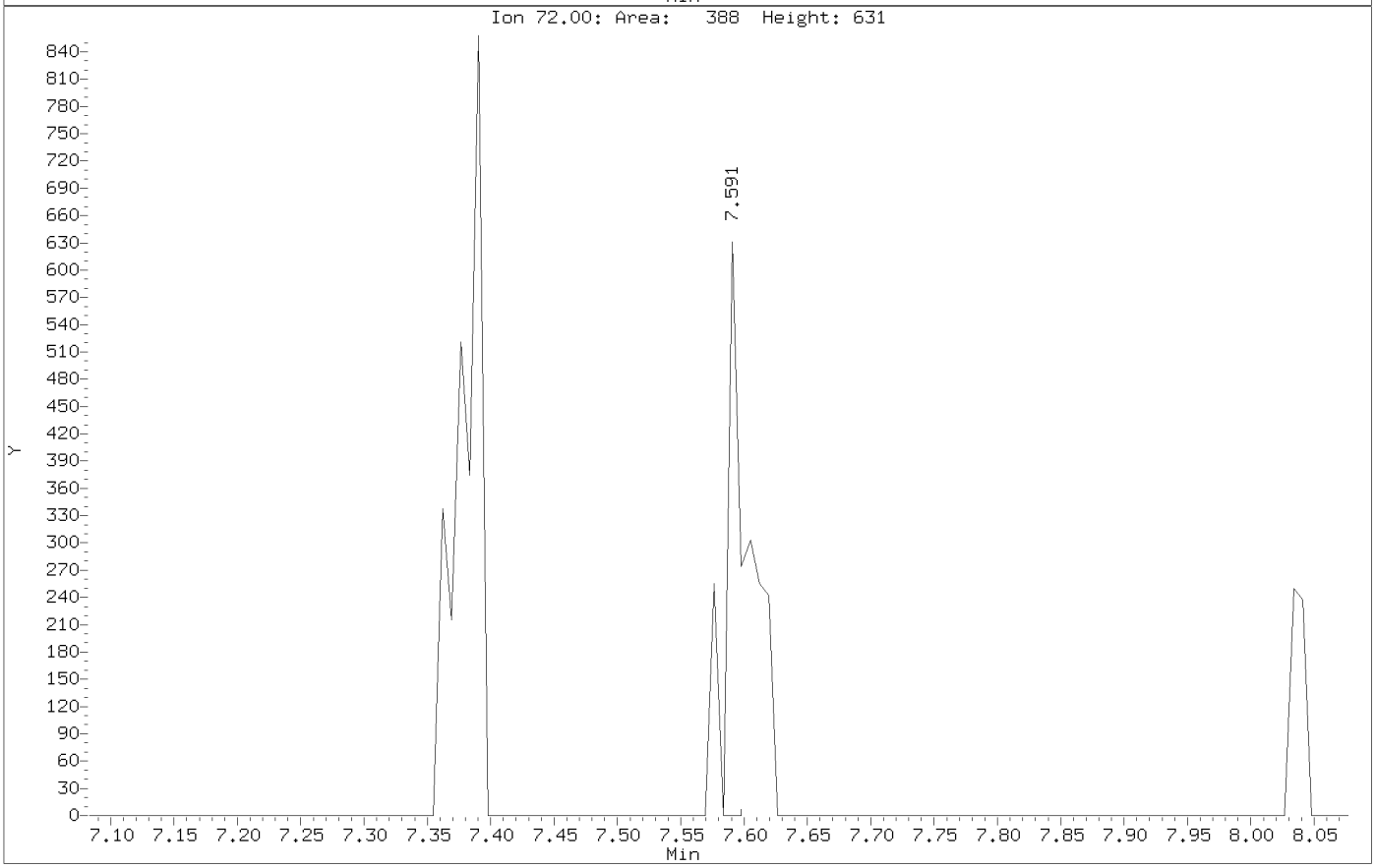


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: 2-Butanone
CAS Number: 78-93-3

BEFORE MANUAL INTEGRATION

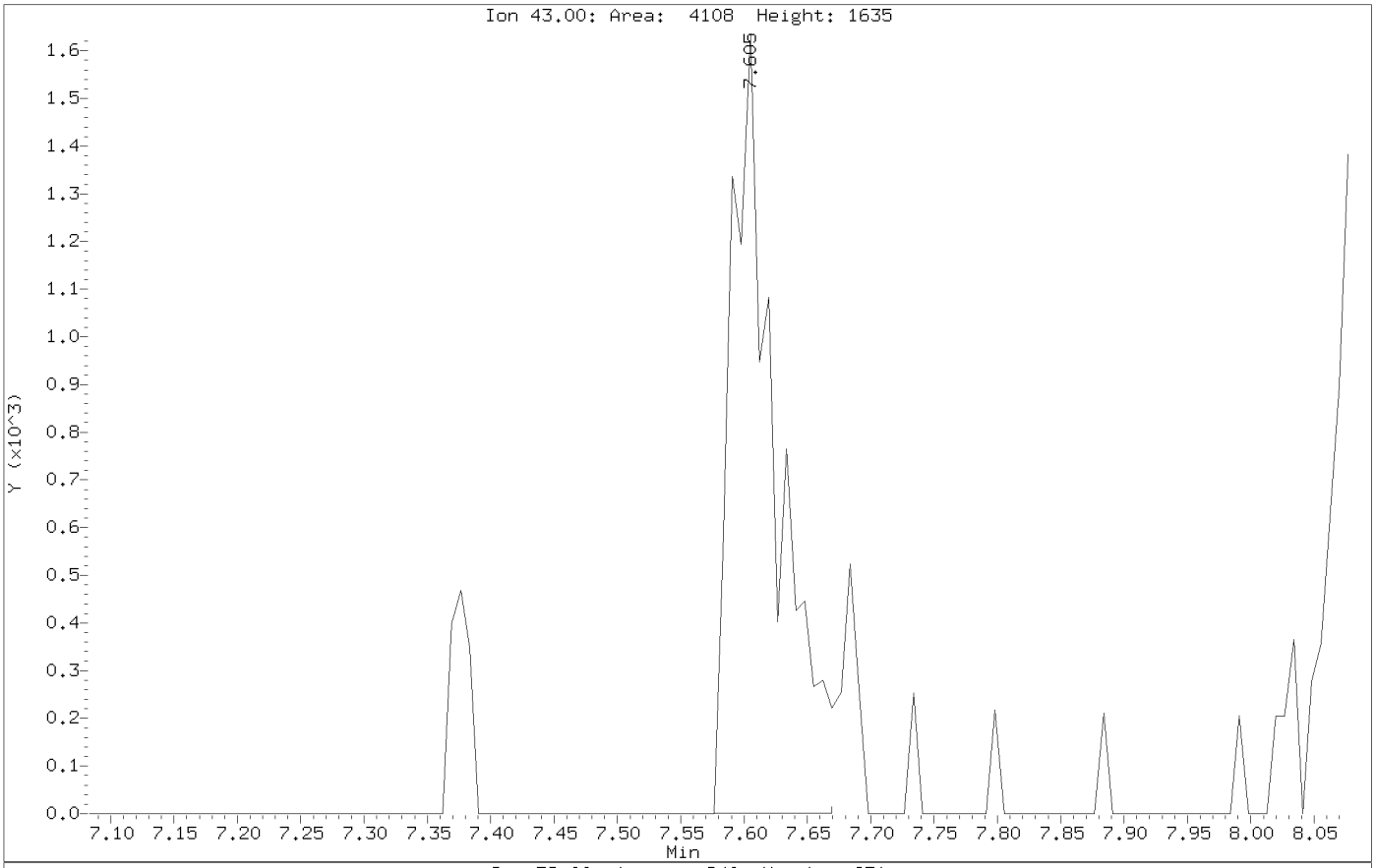


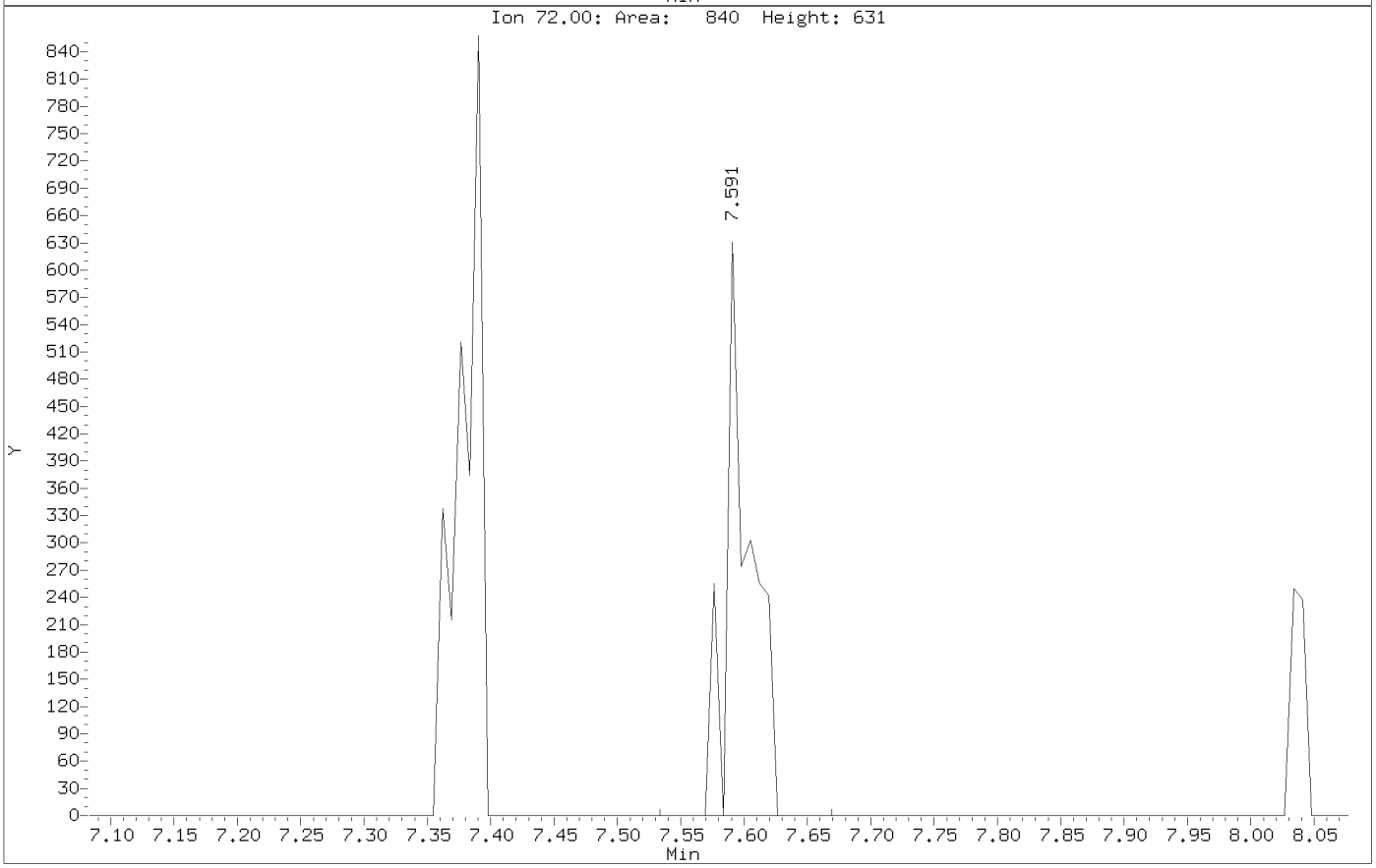


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: 2-Butanone
CAS Number: 78-93-3

AFTER MANUAL INTEGRATION

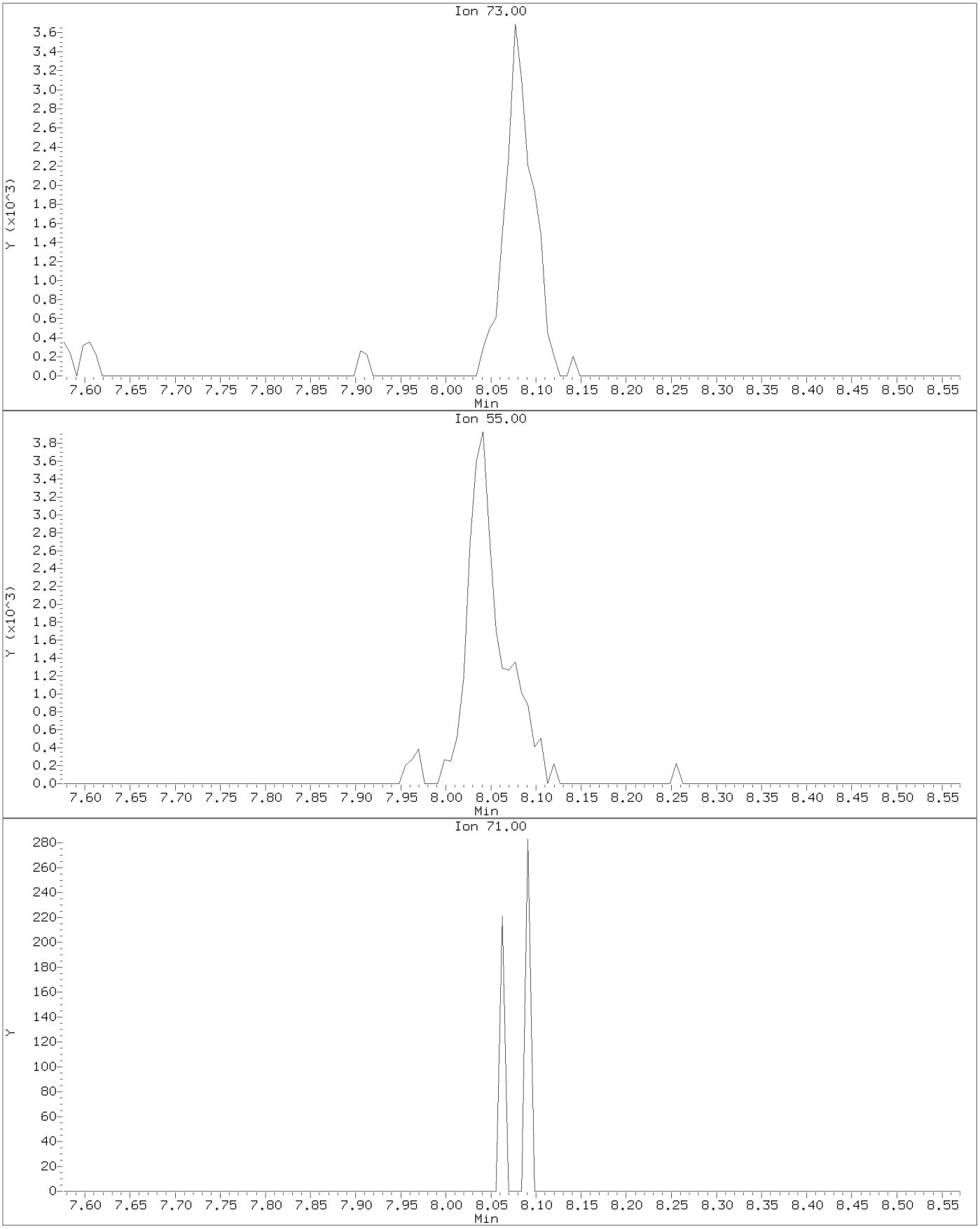




Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Tertiary-amyl methyl ether
CAS Number: 994-05-8

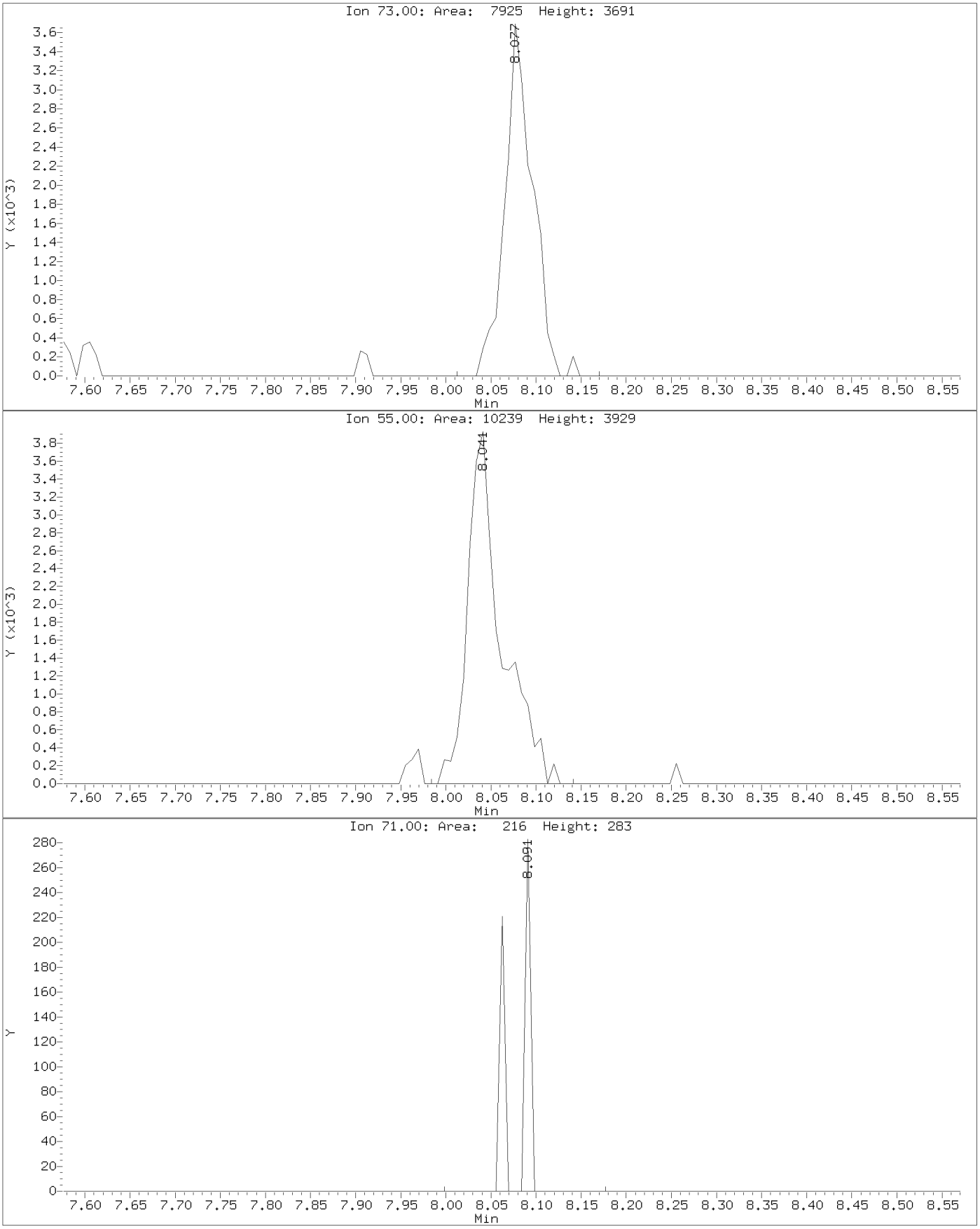
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Tertiary-amyl methyl ether
CAS Number: 994-05-8

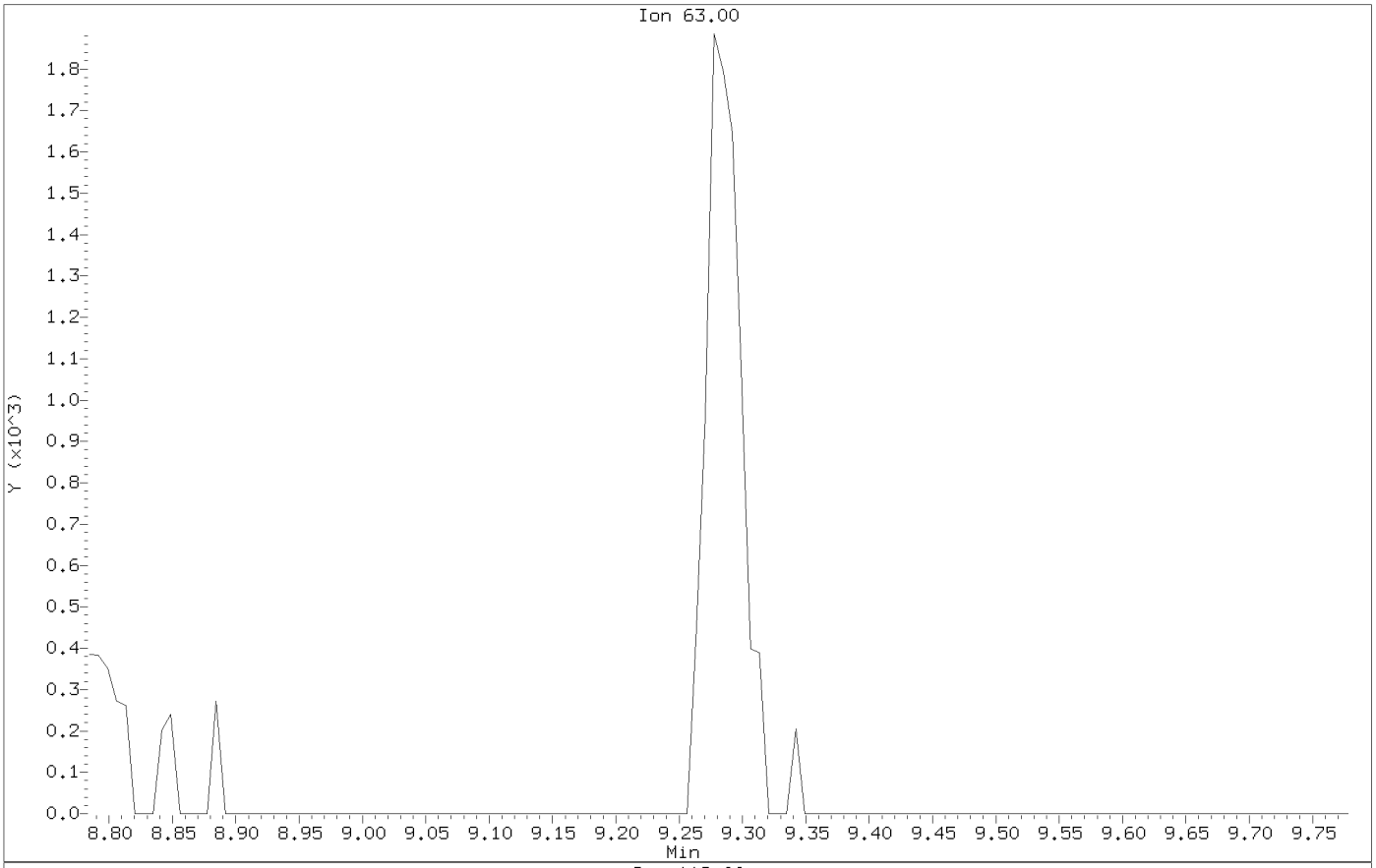
AFTER MANUAL INTEGRATION

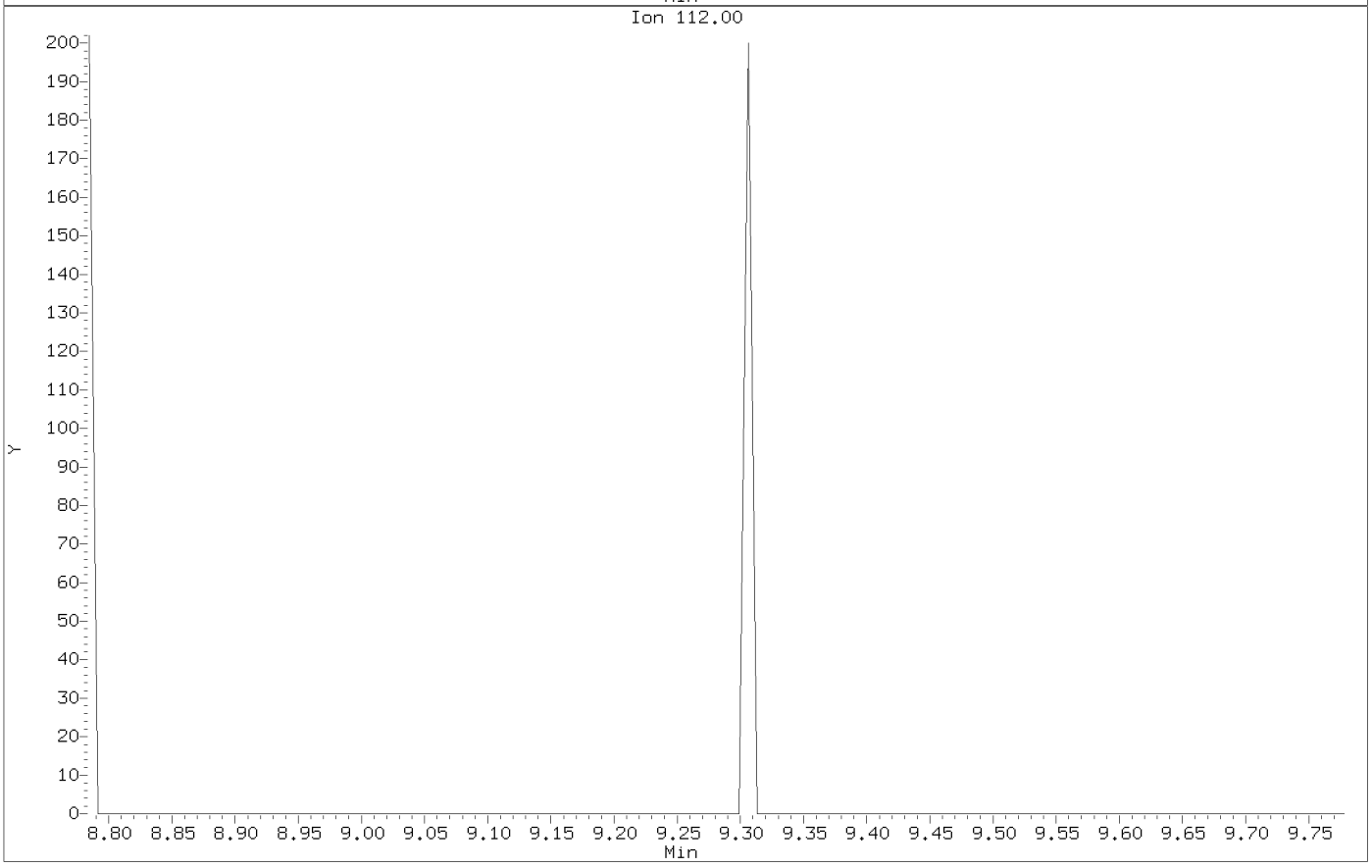


BEFORE MANUAL INTEGRATION

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dichloropropane
CAS Number: 78-87-5

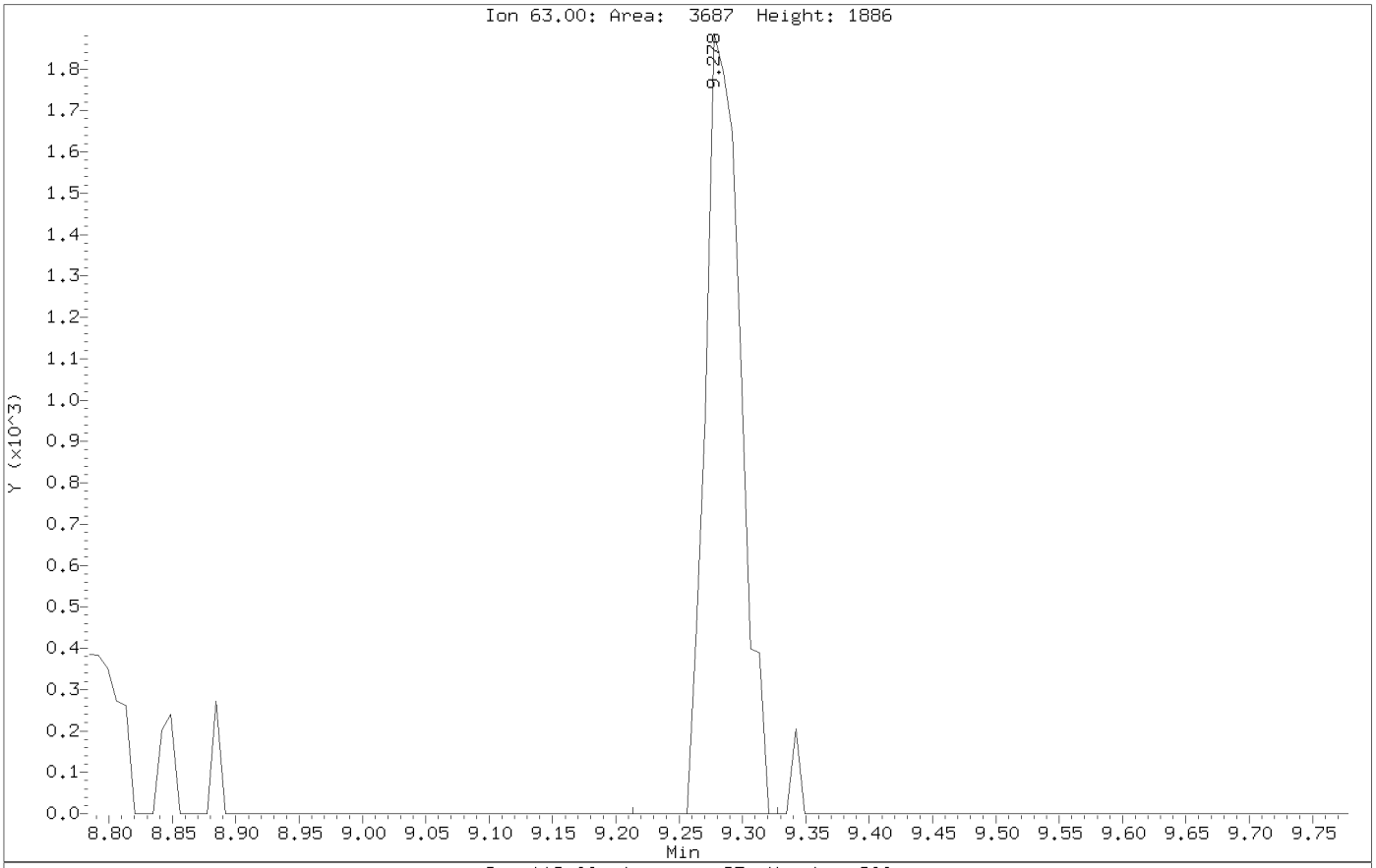


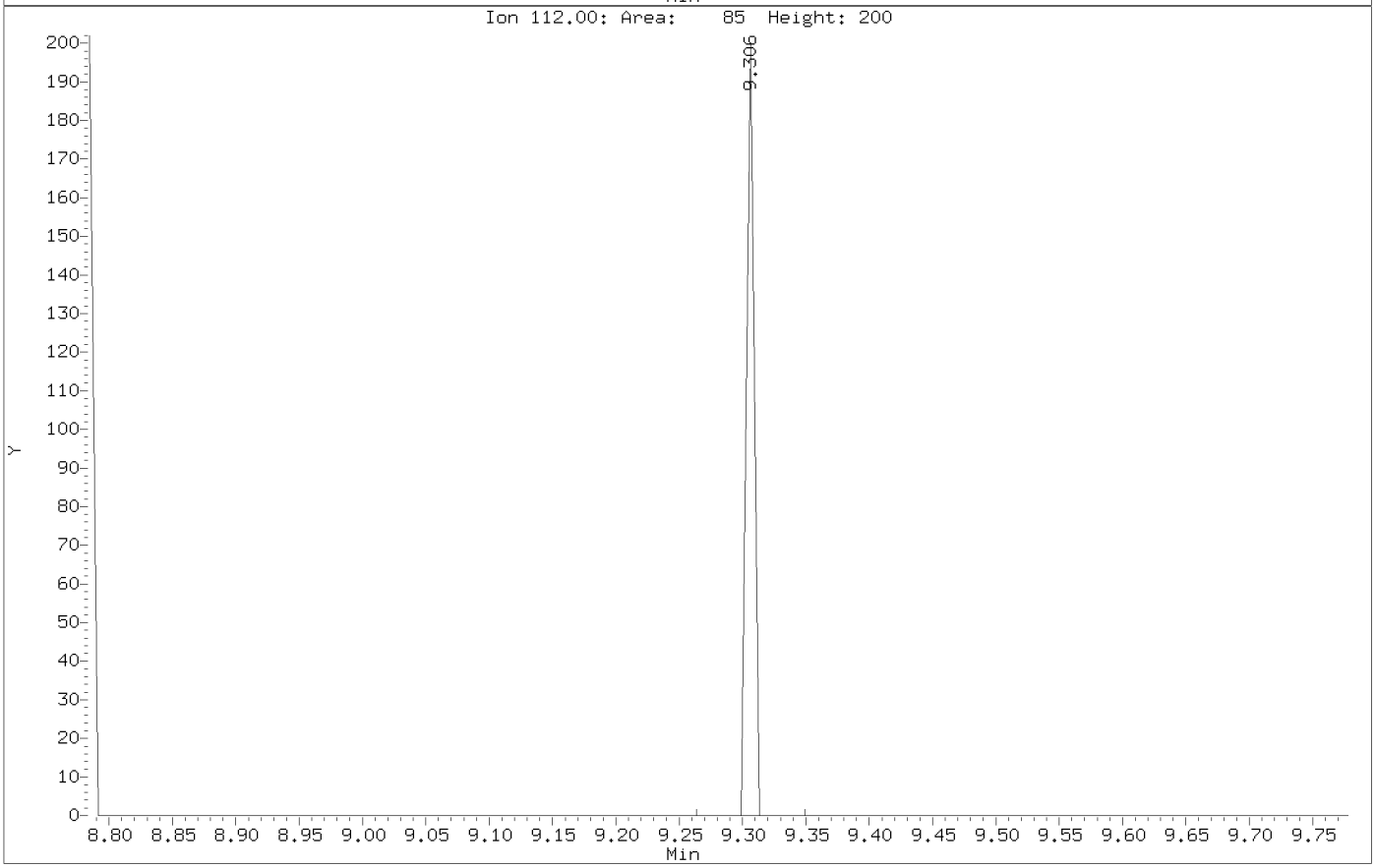


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID: Initial Calibration

AFTER MANUAL INTEGRATION

Compound: 1,2-Dichloropropane
CAS Number: 78-87-5

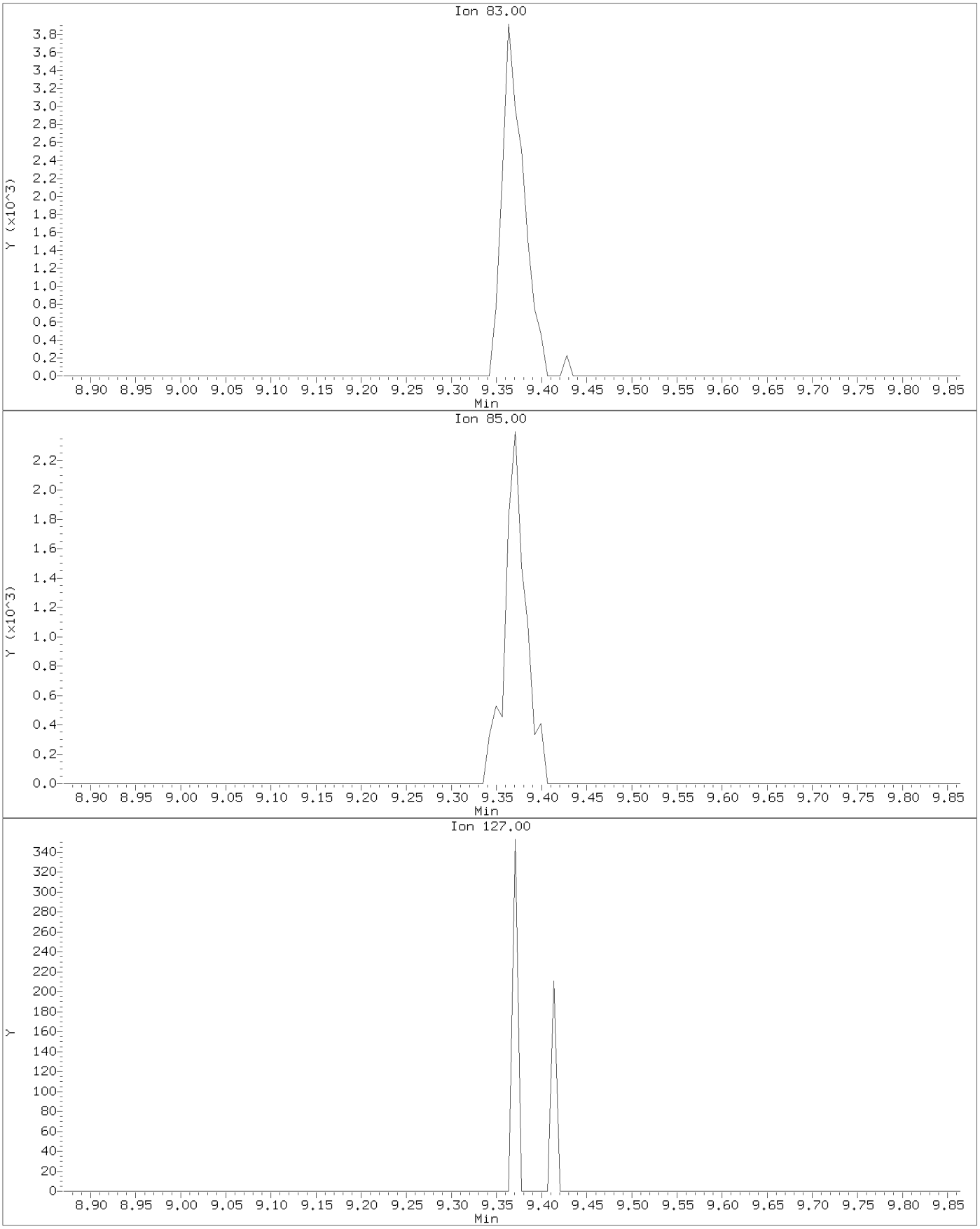




Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromodichloromethane
CAS Number: 75-27-4

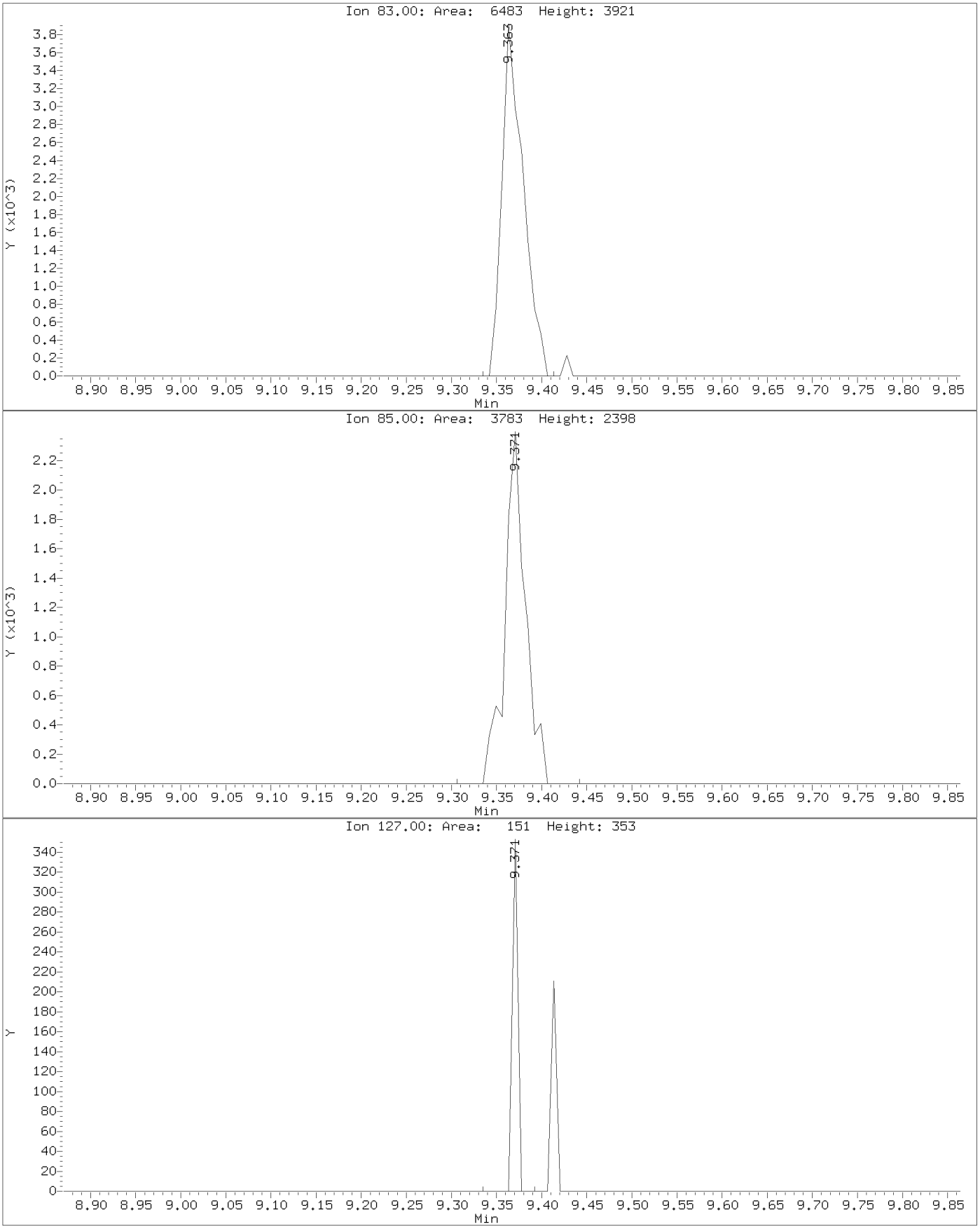
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromodichloromethane
CAS Number: 75-27-4

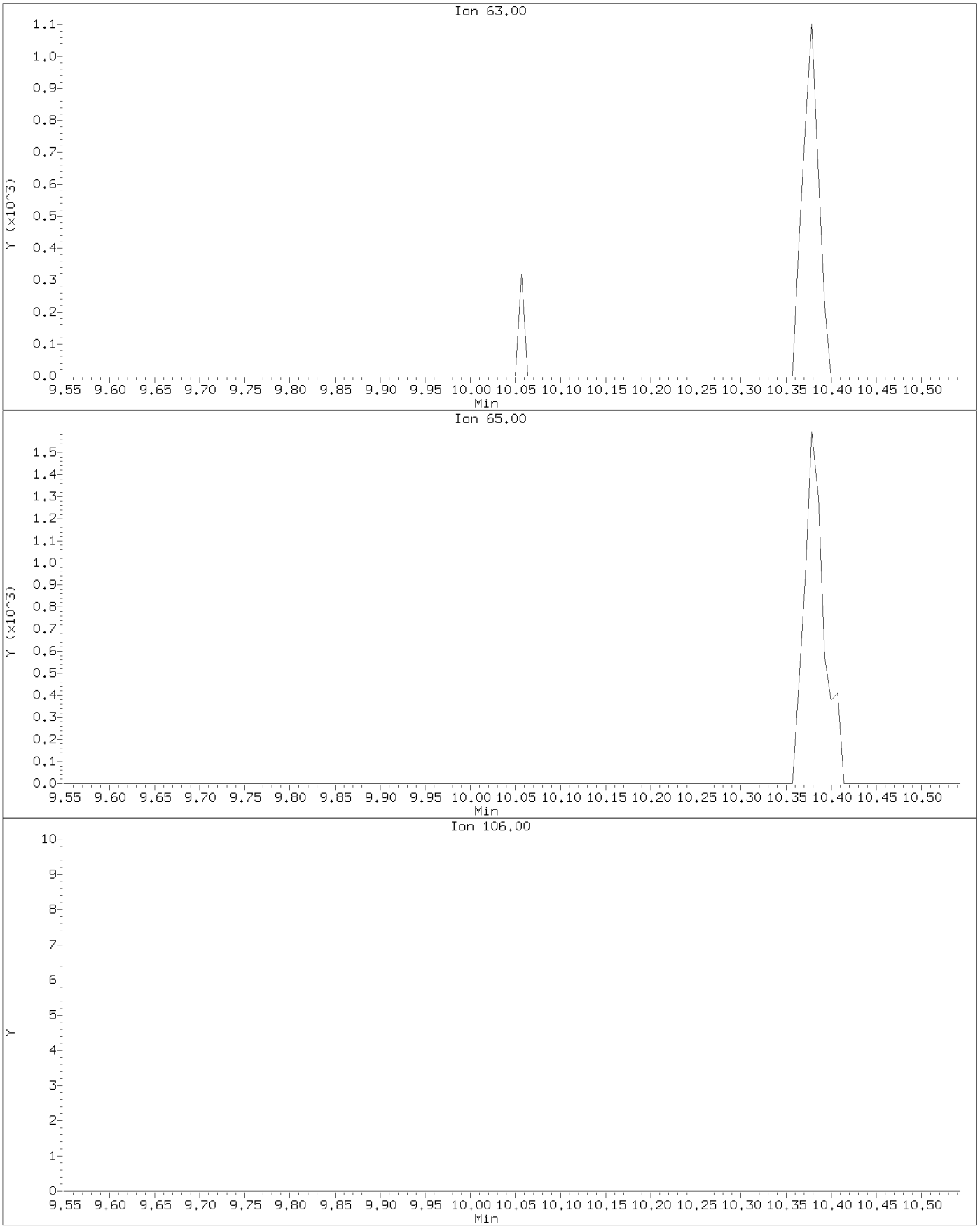
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: 2-Chloroethylvinylether
CAS Number: 110-75-8

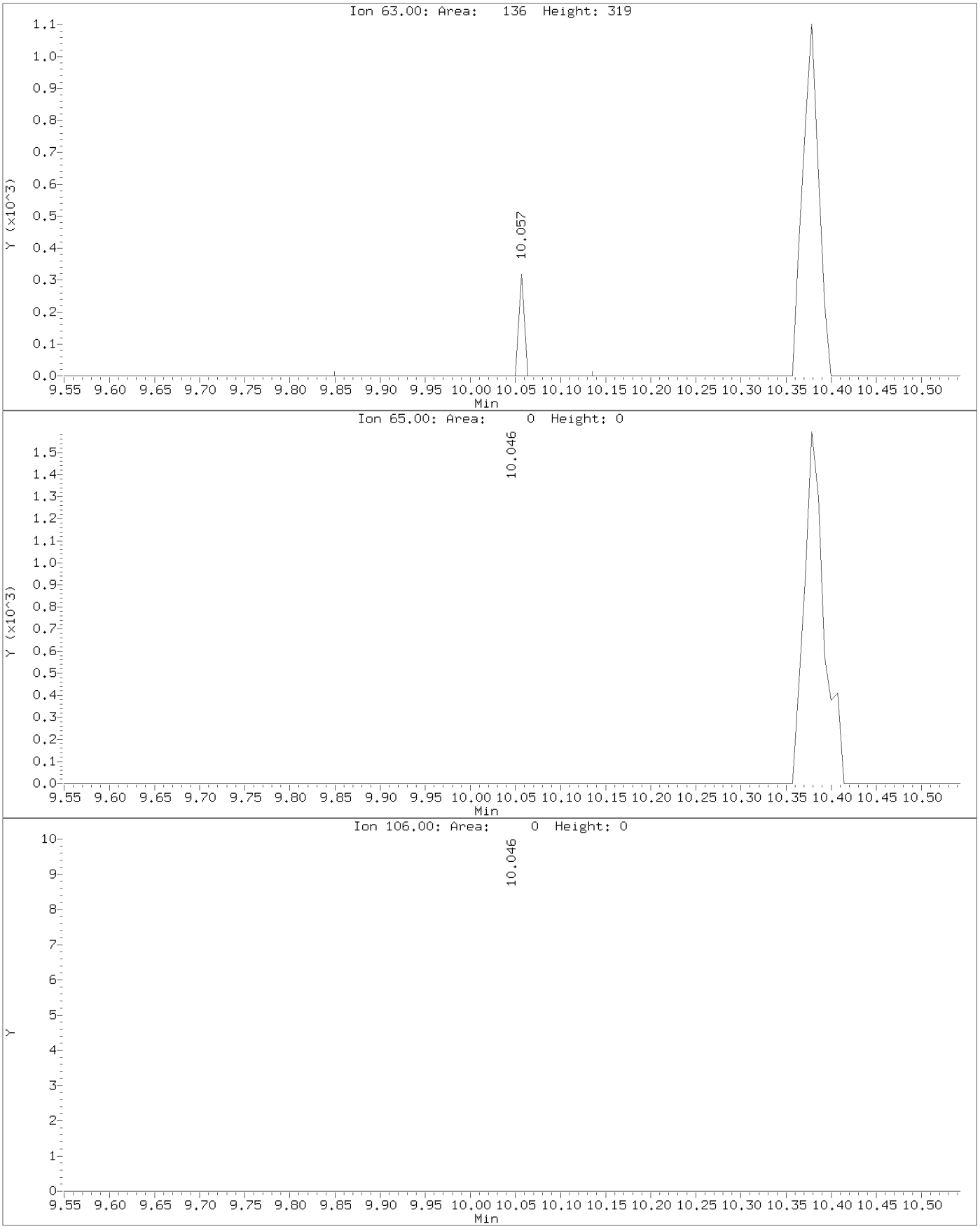
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

AFTER MANUAL INTEGRATION

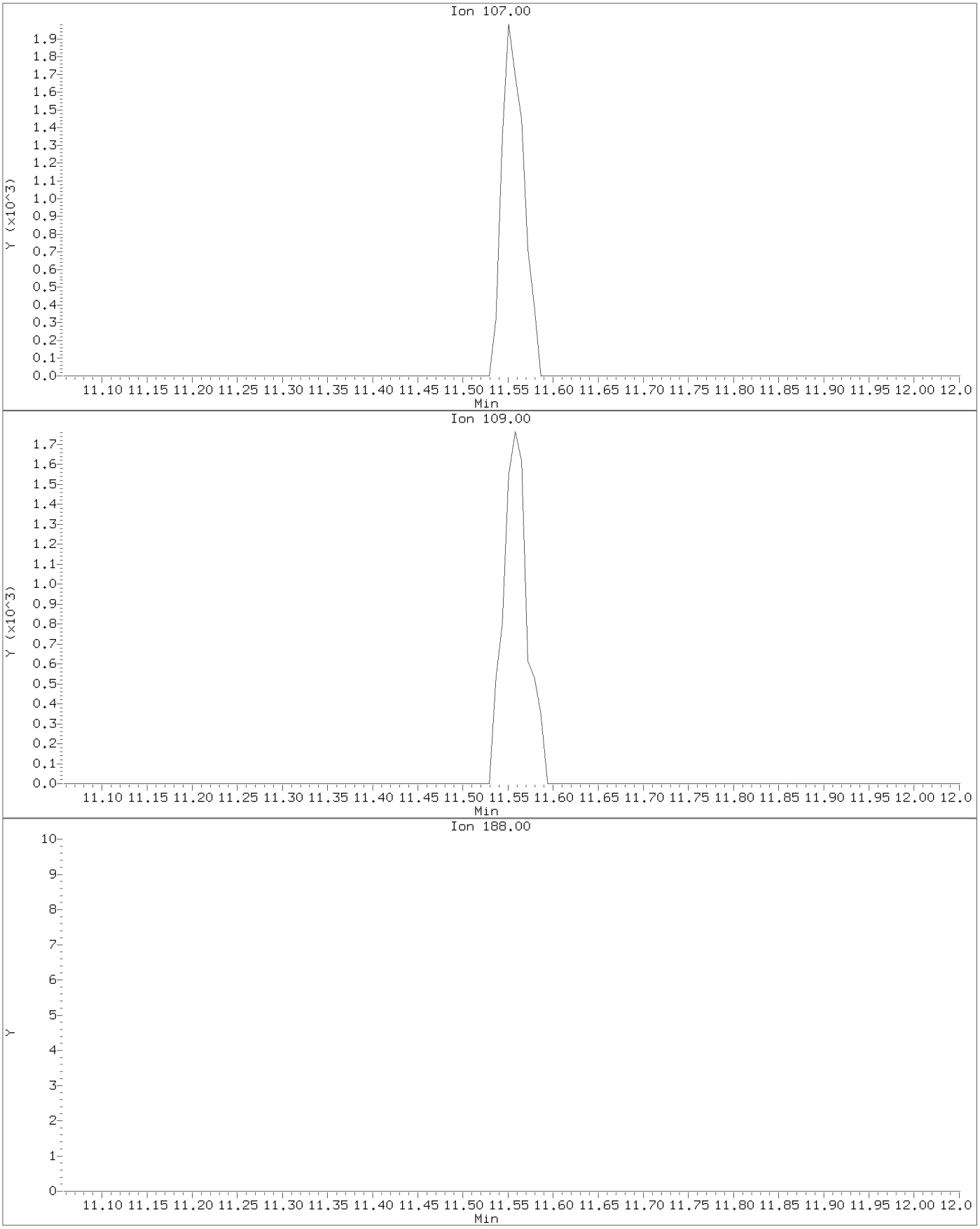
Compound: 2-Chloroethylvinylether
CAS Number: 110-75-8



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromoethane
CAS Number: 106-93-4

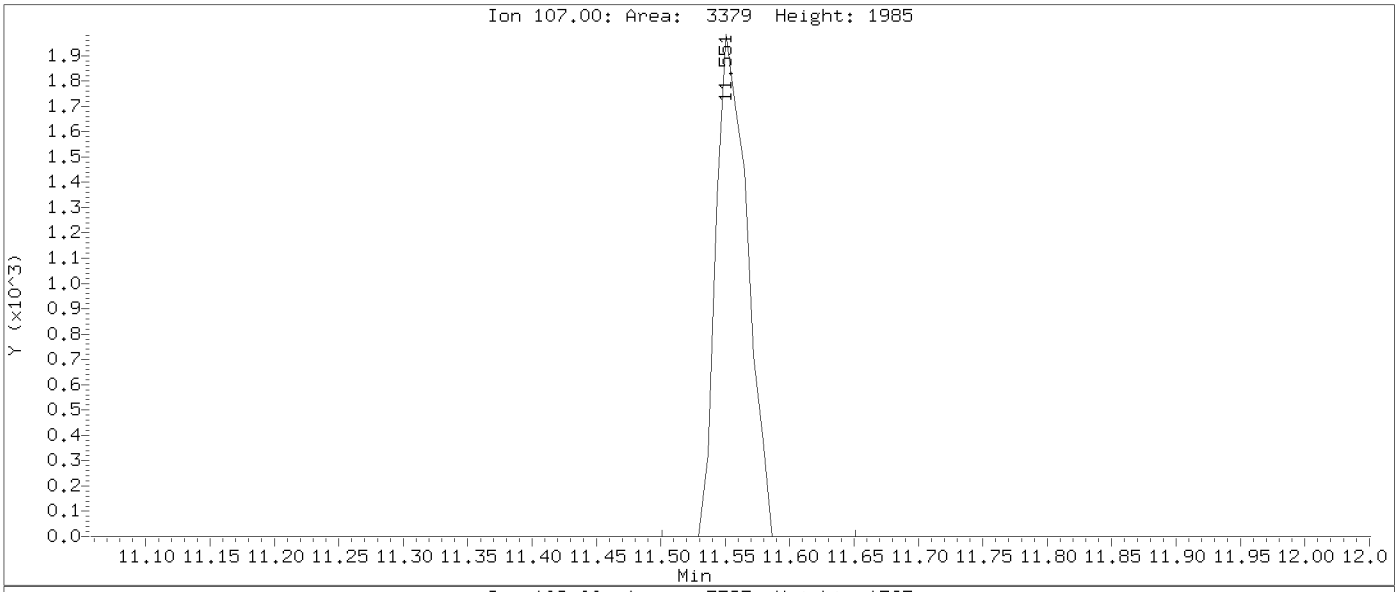
BEFORE MANUAL INTEGRATION

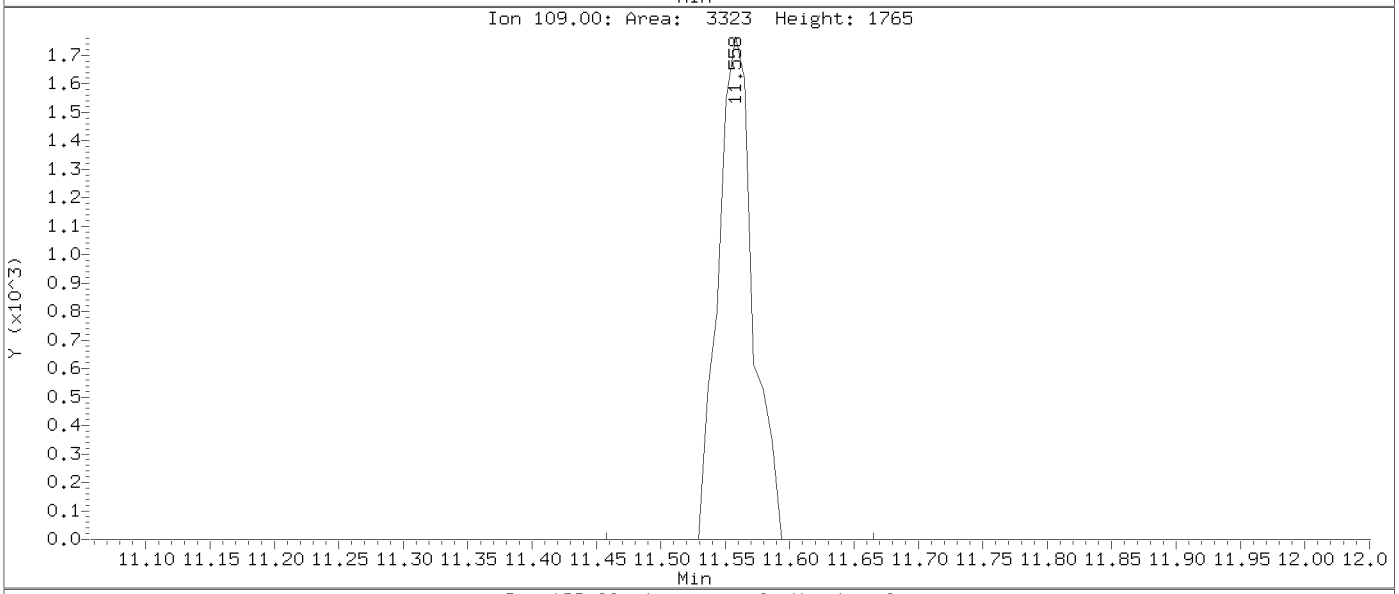


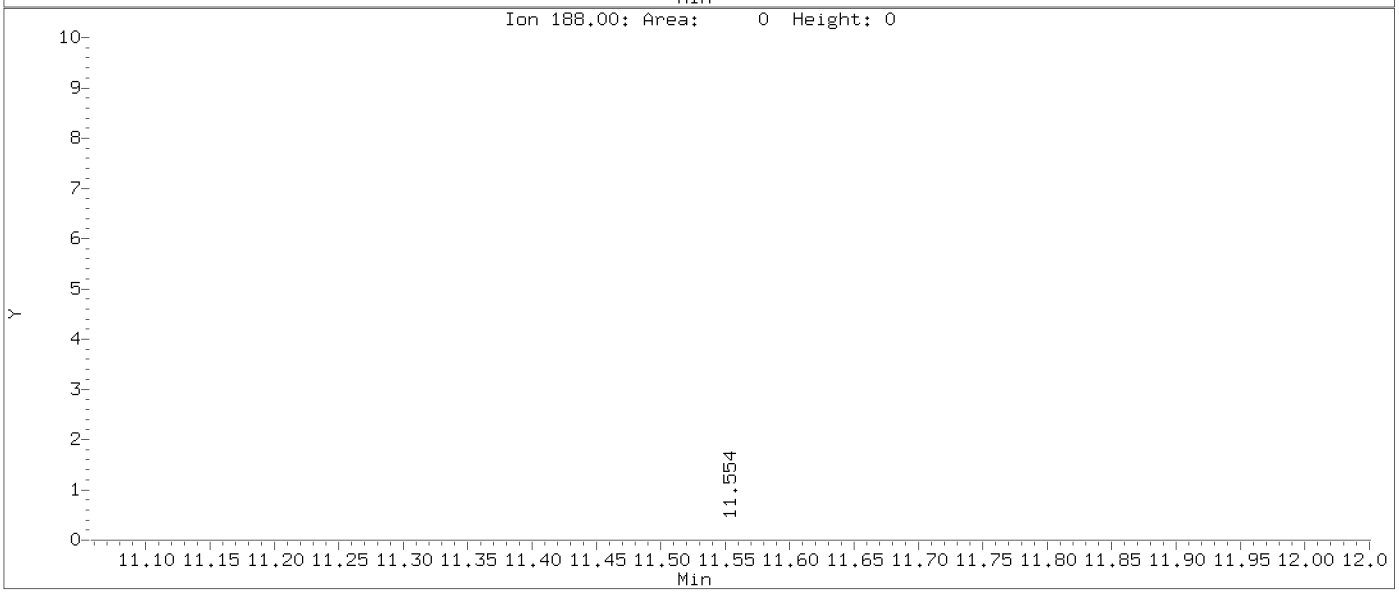
Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromoethane
CAS Number: 106-93-4

AFTER MANUAL INTEGRATION



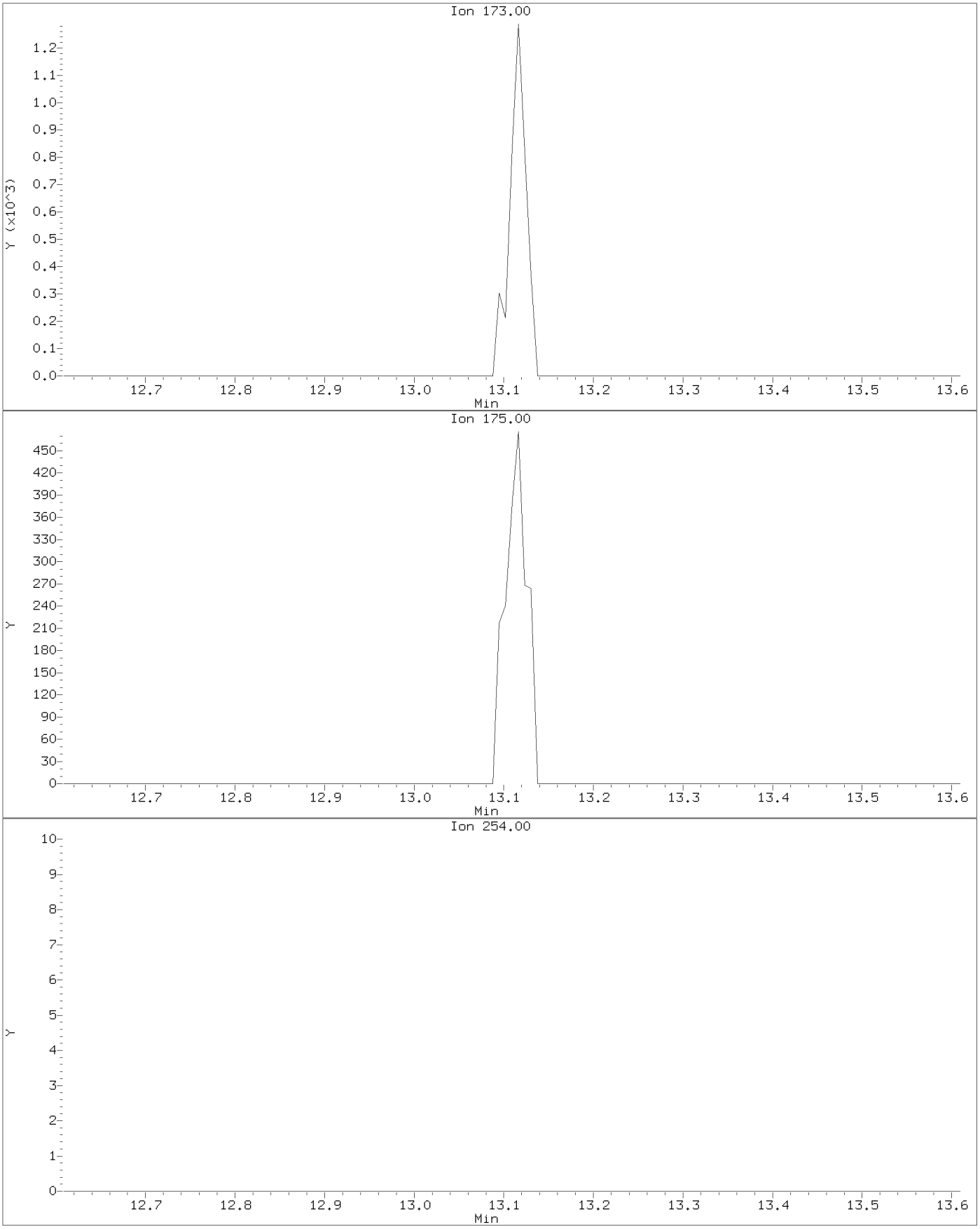




Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromoform
CAS Number: 75-25-2

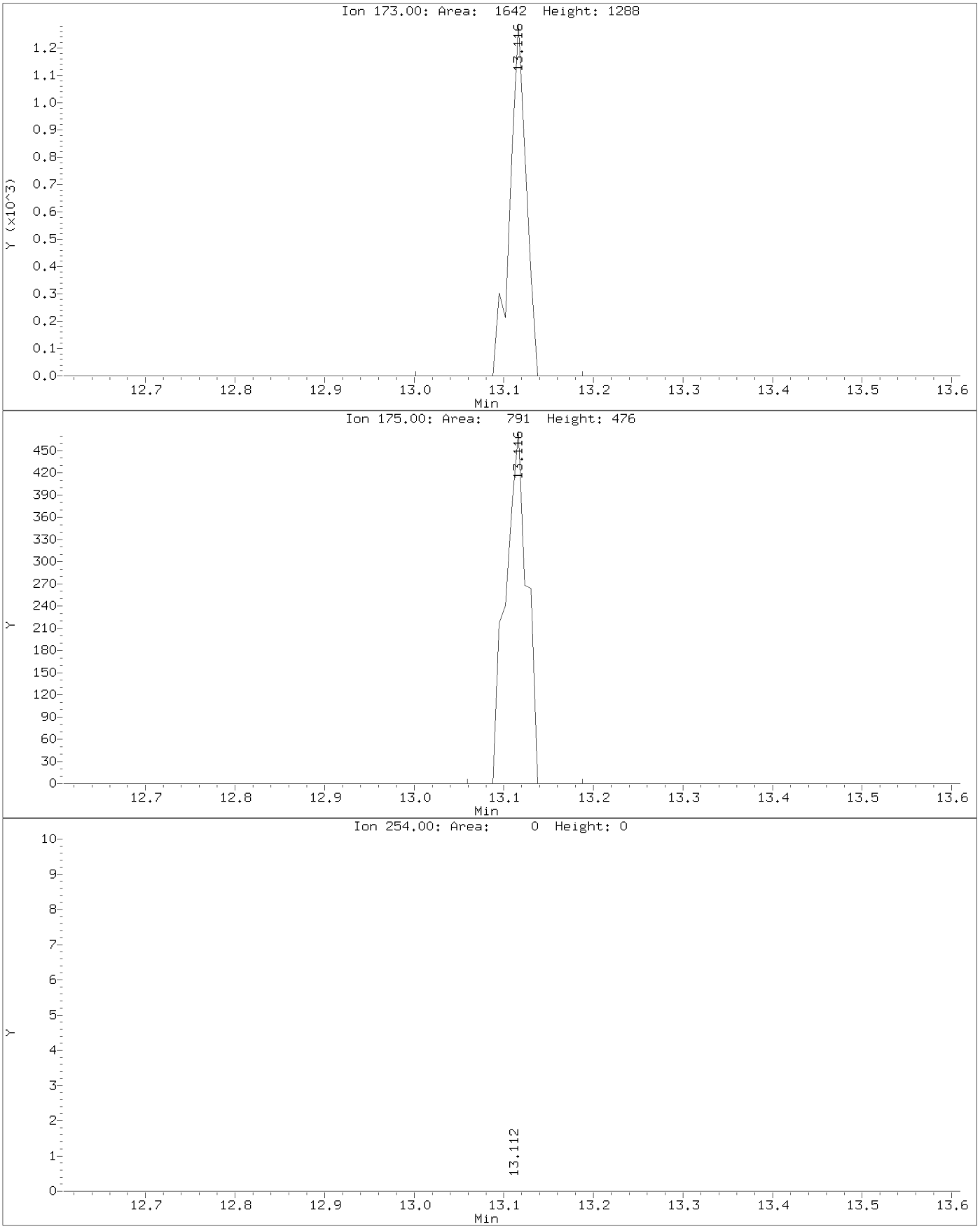
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromoform
CAS Number: 75-25-2

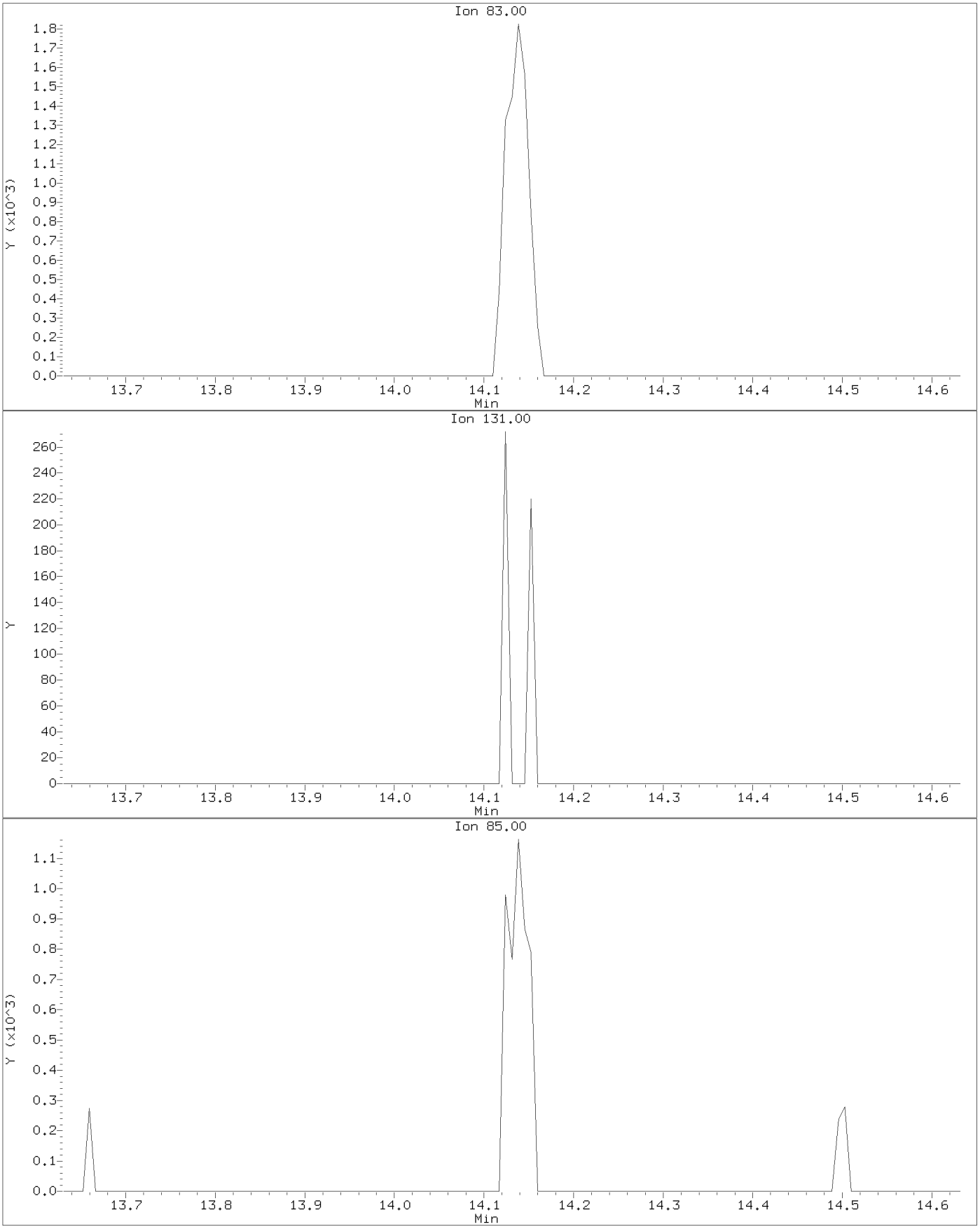
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,1,2,2-Tetrachloroethane
CAS Number: 79-34-5

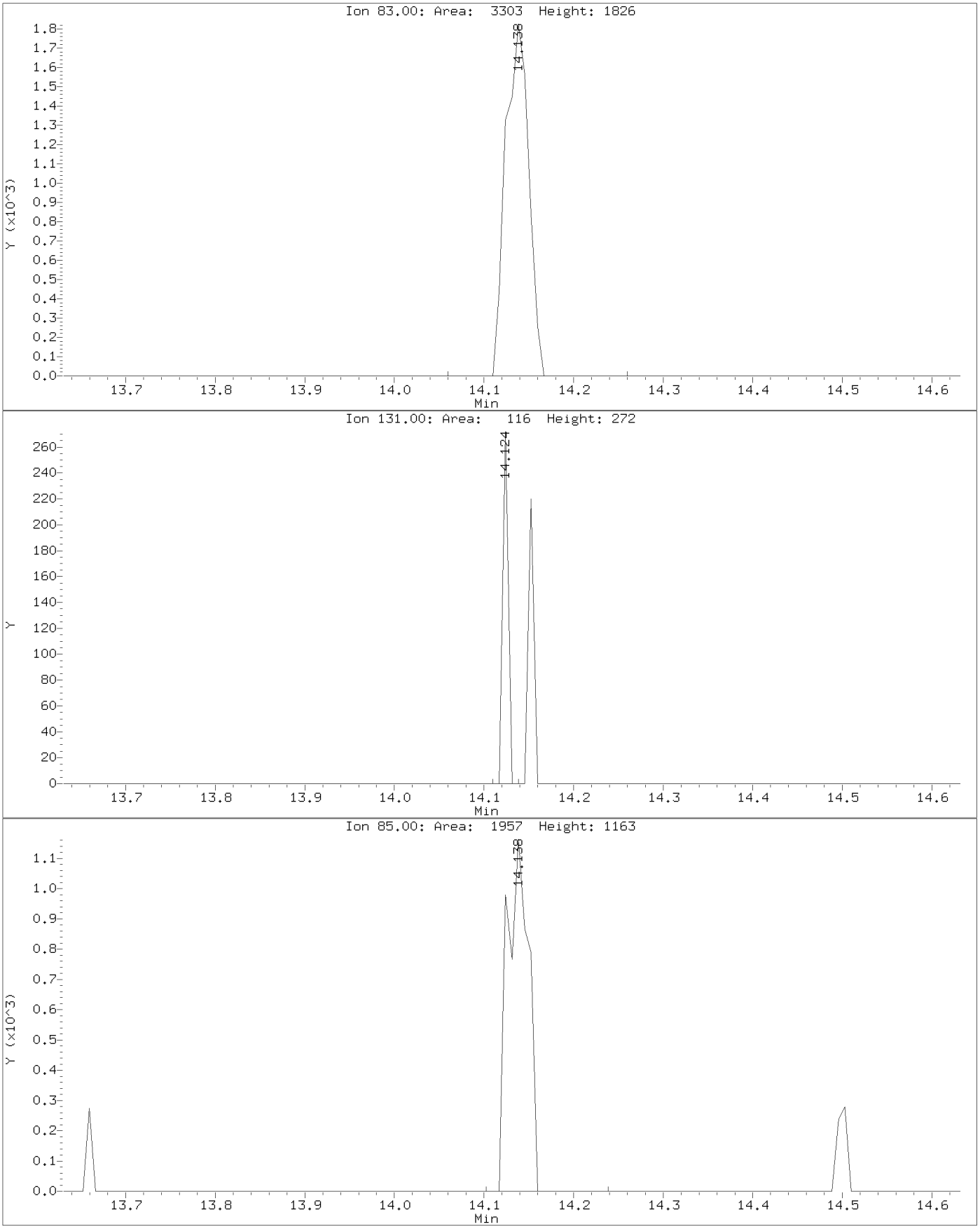
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

AFTER MANUAL INTEGRATION

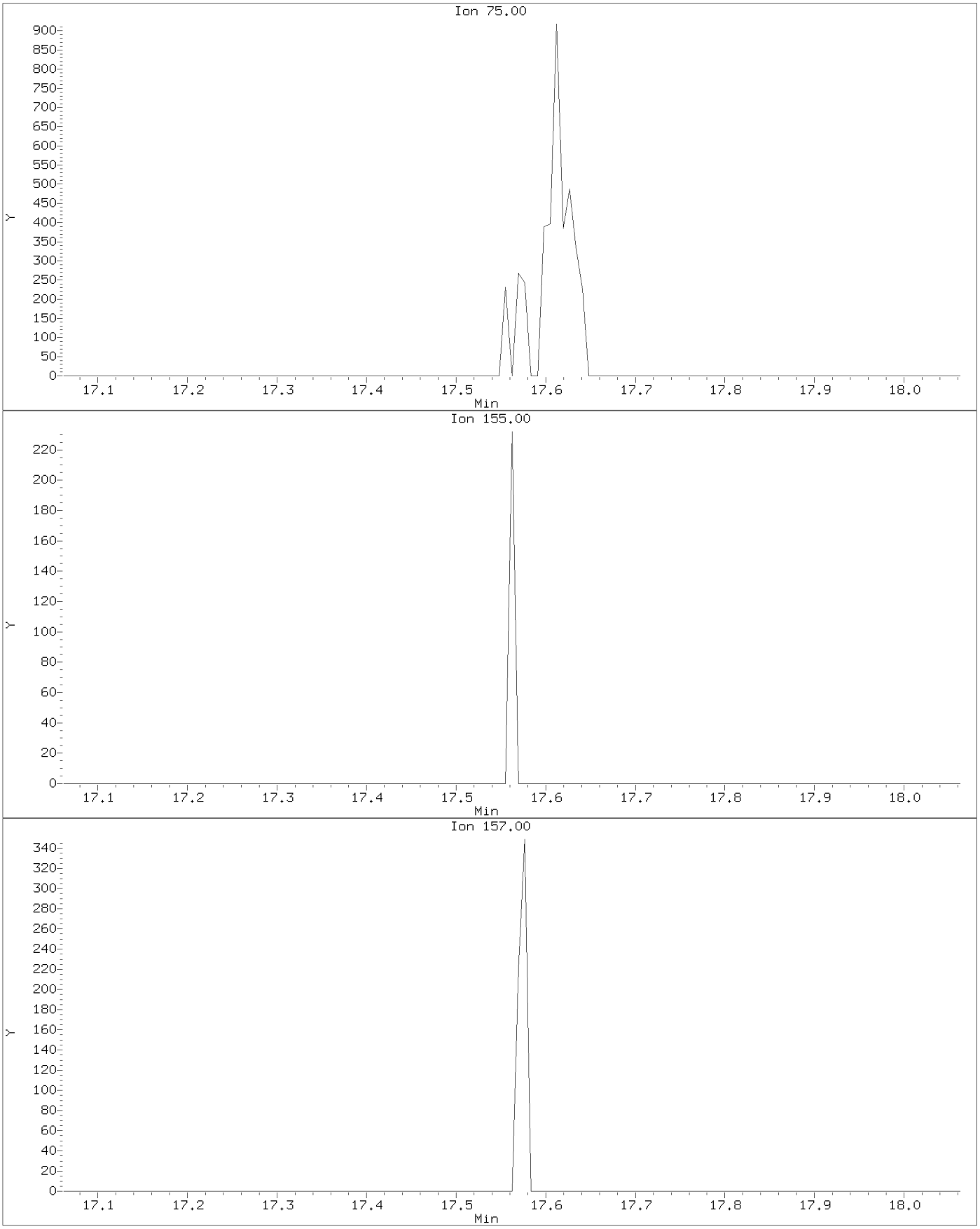
Compound: 1,1,2,2-Tetrachloroethane
CAS Number: 79-34-5



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8

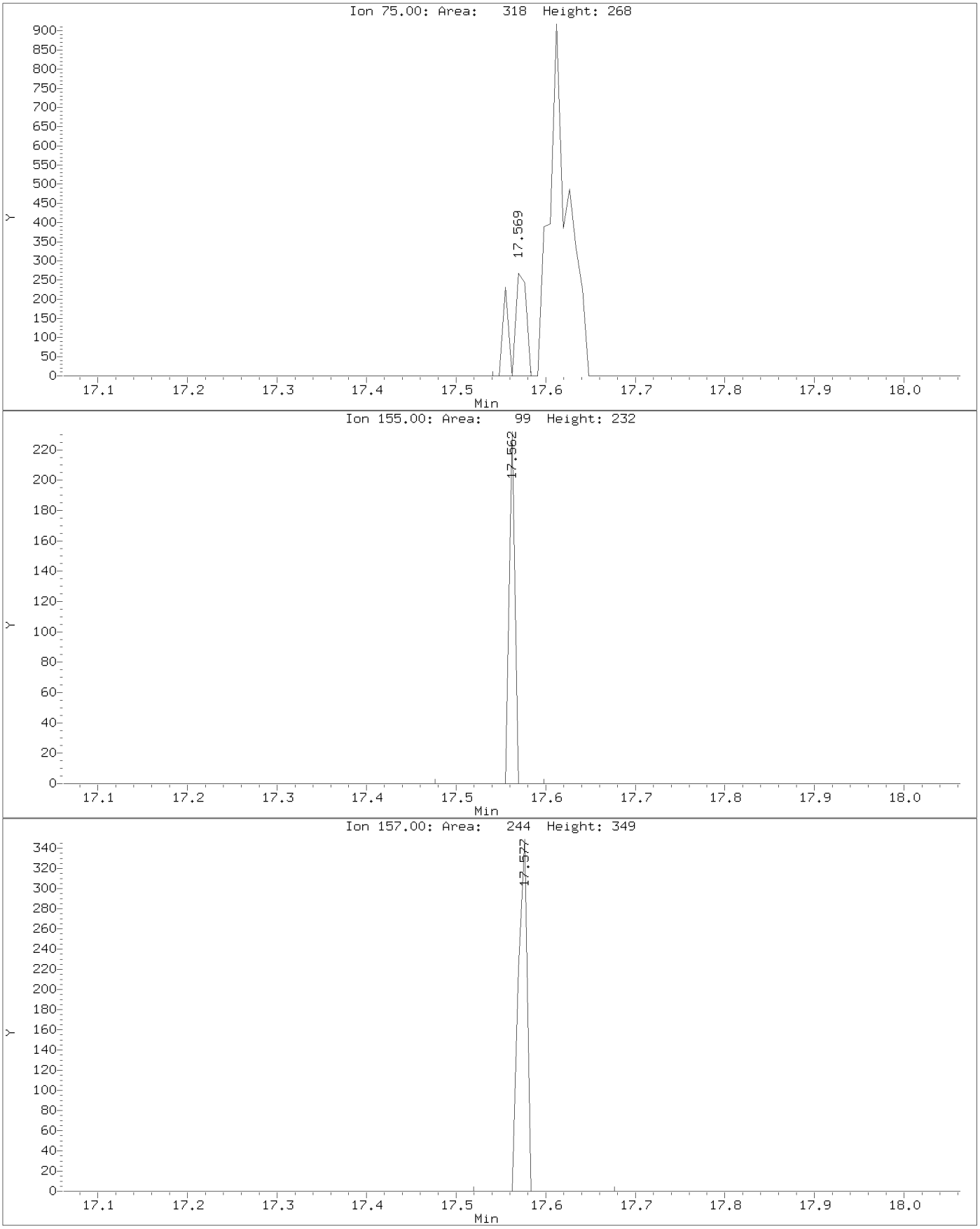
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8

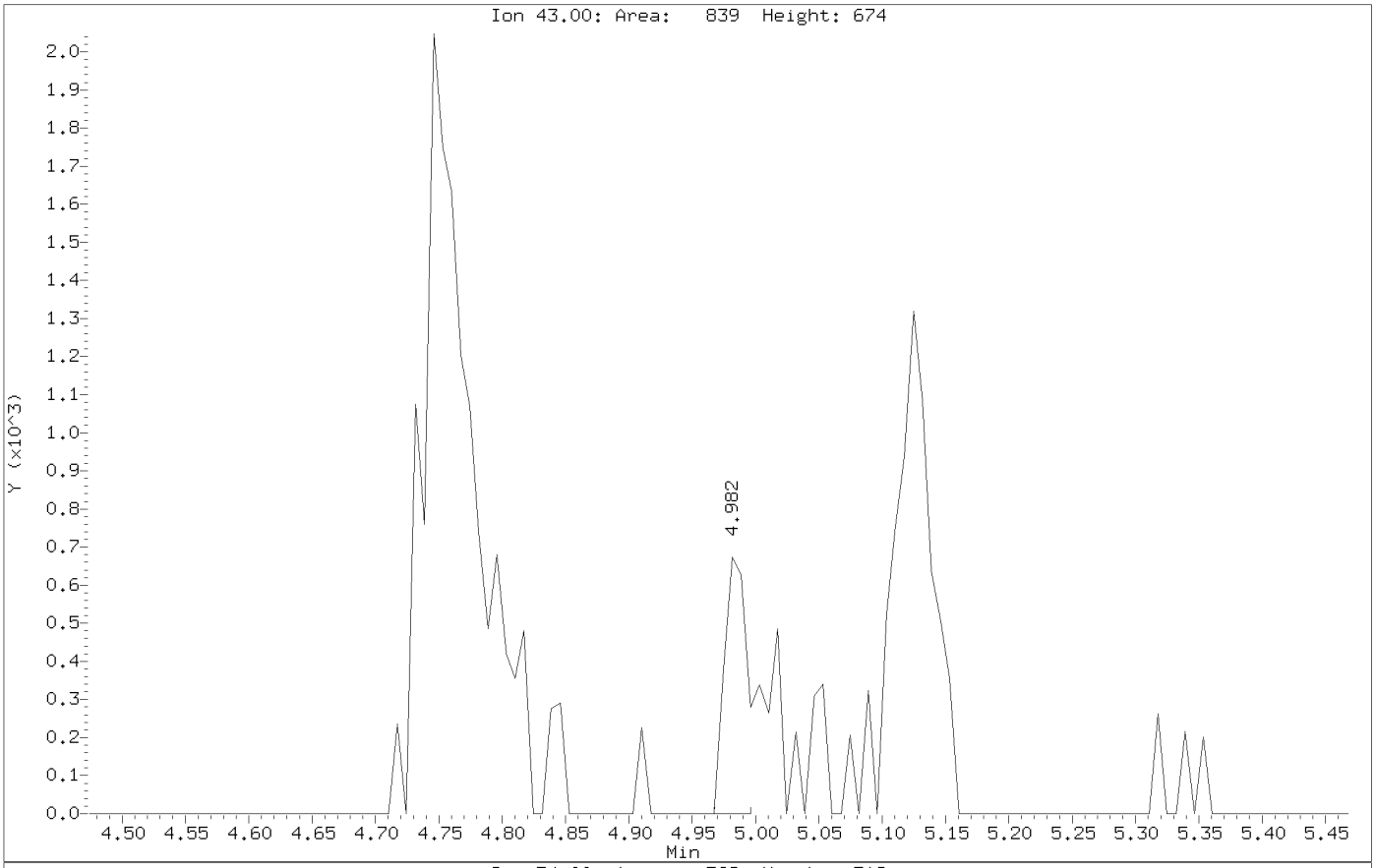
AFTER MANUAL INTEGRATION

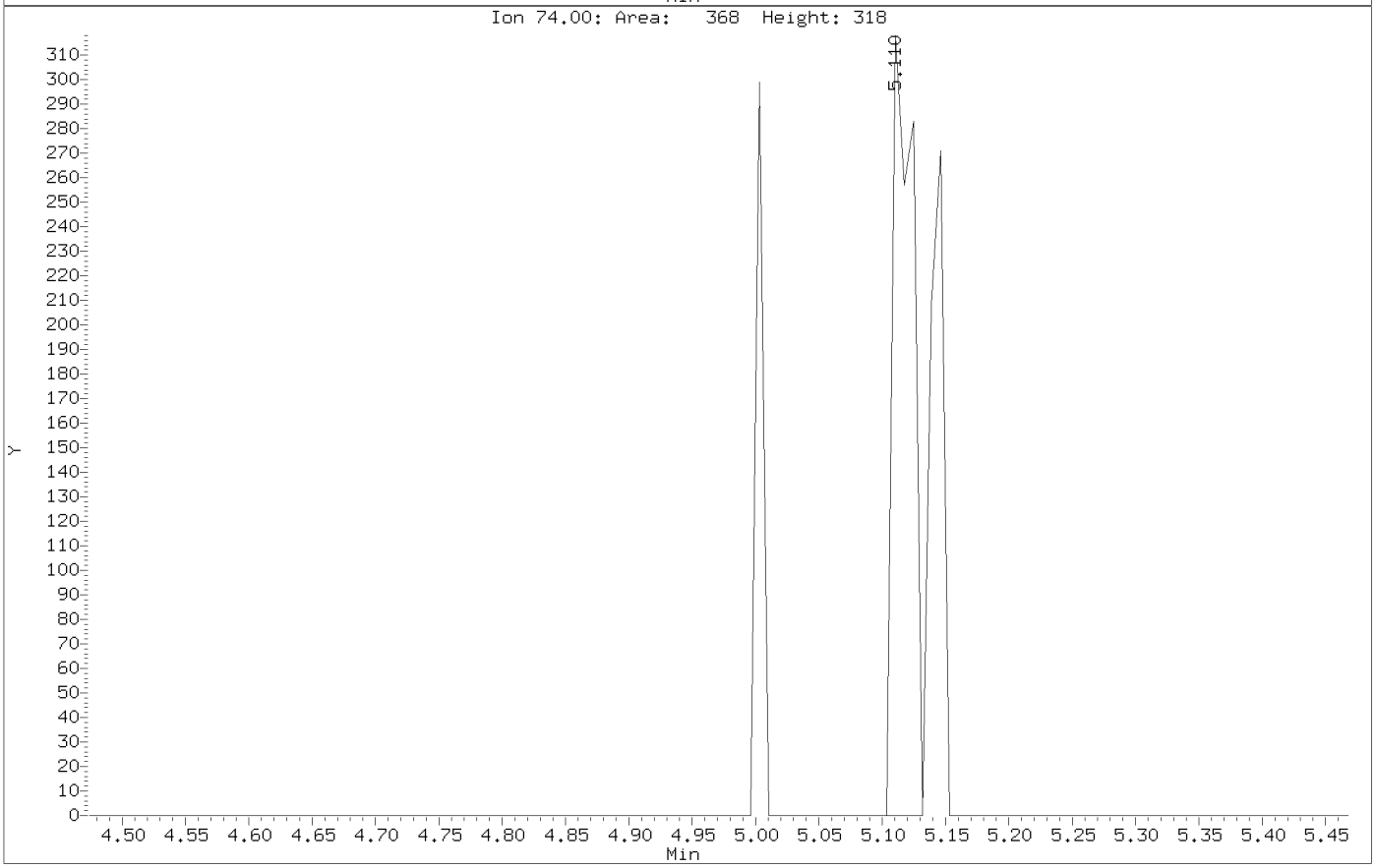


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Methyl Acetate
CAS Number: 79-20-9

BEFORE MANUAL INTEGRATION

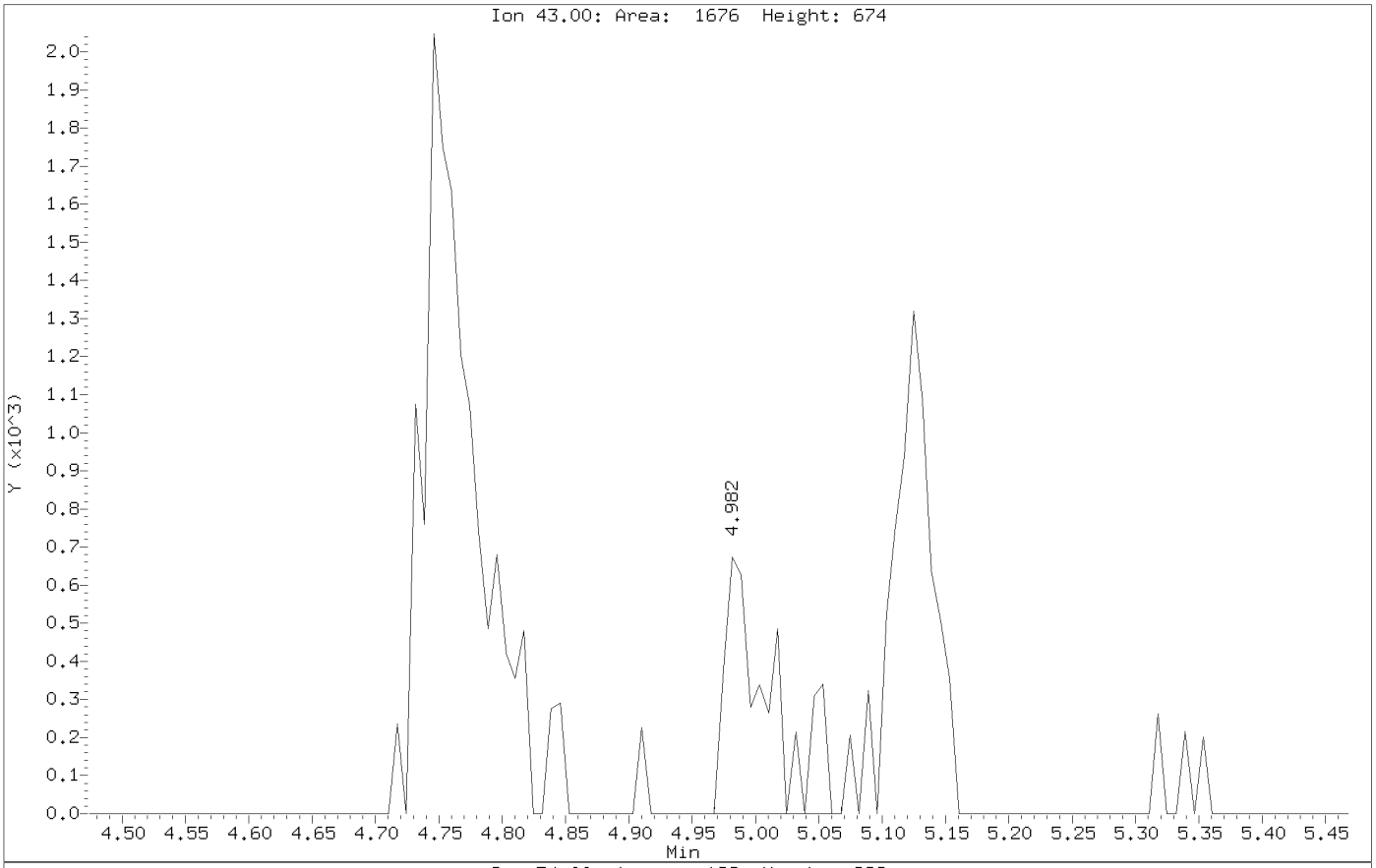


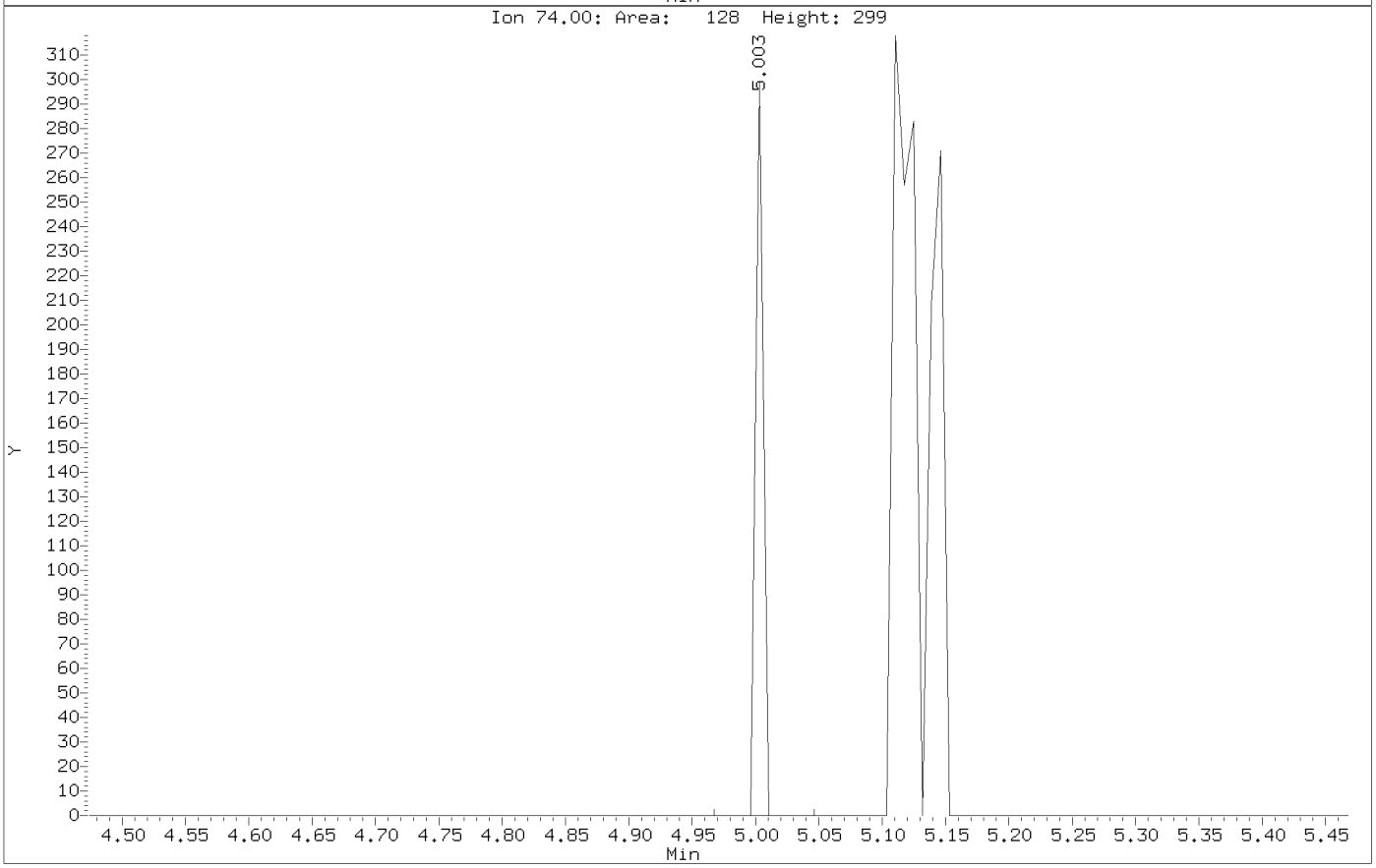


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2120.D
Injection Date: 06-APR-2015 15:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Methyl Acetate
CAS Number: 79-20-9

AFTER MANUAL INTEGRATION





Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-C
Lab File IDs : C2179.D C2178.D C2177.D C2176.D C2181.D C2180.D **Column ID:**
Calibration Date(s): 08-APR-15 10:49 08-APR-15 14:06

	Level 1 1.0000	Level 2 5.0000	Level 3 20.0000	Level 4 50.0000	Level 5 100.0000	Level 6 200.0000	Crv New	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.86317	0.82652	0.94738	0.93791	0.83515	0.80190	AVG		0.86867		6.97915	15.00000	O
Chloromethane	1.33140	1.15942	1.17421	1.11741	1.08850	0.96054	AVG		1.13858		10.65134	15.00000	O
Vinyl chloride	0.84093	0.82119	0.87955	0.86146	0.84622	0.77674	AVG		0.83768		4.26662	15.00000	O
Bromomethane	3783	13213	62272	136805	308622	573047	LNR	-0.01342	0.41450		0.99971	0.99000	O
Chloroethane	3385	14541	60427	123597	227436	432041	LNR	-0.07414	0.30879		0.99680	0.99000	O
Trichlorofluoromethane	1.17448	1.02049	1.09404	0.95250	0.87210	0.95362	AVG		1.01121		10.80769	15.00000	O
1,1-Dichloroethene	0.62310	0.59314	0.59174	0.57706	0.57084	0.57558	AVG		0.58858		3.25867	15.00000	O
Carbon Disulfide	1.74497	1.51845	1.66160	1.66953	1.75285	1.69188	AVG		1.67321		5.06712	15.00000	O
Freon-113	0.38132	0.39036	0.43939	0.42974	0.39254	0.39224	AVG		0.40426		5.94154	15.00000	O
Methylene Chloride	6842	25325	97577	231705	501477	942019	LNR	-0.01671	0.67974		0.99993	0.99000	O
Acetone	0.21228	0.18956	0.21998	0.21816	0.22000	0.21271	AVG		0.21212		5.45540	15.00000	O
trans-1,2-Dichloroethene	0.69608	0.65843	0.67542	0.65624	0.66014	0.64015	AVG		0.66441		2.88194	15.00000	O
Methyl tert-butyl ether	1.26688	1.43009	1.58982	1.57504	1.54279	1.43558	AVG		1.47337		8.29364	15.00000	O
1,1-Dichloroethane	1.11717	1.36725	1.36563	1.33391	1.29608	1.25403	AVG		1.28901		7.34433	15.00000	O
cis-1,2-Dichloroethene	0.69890	0.66384	0.71461	0.68378	0.68162	0.67058	AVG		0.68555		2.71821	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+0	15.00000	M (
Chloroform	1.38104	1.31233	1.38758	1.37496	1.30824	1.27018	AVG		1.33905		3.63009	15.00000	O
Carbon Tetrachloride	0.38173	0.40886	0.48817	0.53053	0.51181	0.52190	AVG		0.47383		13.30657	15.00000	O
1,1,1-Trichloroethane	1.26813	1.25429	1.31983	1.32217	1.22089	1.20949	AVG		1.26580		3.77589	15.00000	O
2-Butanone	5848	40972	208136	516280	1060379	1932105	LNR	-0.13270	0.28091		0.99883	0.99000	O
Benzene	1.39179	1.43895	1.51253	1.43143	1.39822	1.28065	AVG		1.40893		5.40576	15.00000	O
Cyclohexane	0.92753	1.06433	1.15957	1.16386	1.13333	1.11563	AVG		1.09404		8.15369	15.00000	O
1,2-Dichloroethane	0.75942	0.70186	0.68939	0.66393	0.60510	0.59800	AVG		0.66962		9.16169	15.00000	O
Trichloroethene	0.47221	0.43134	0.44409	0.42869	0.40364	0.39261	AVG		0.42876		6.65171	15.00000	O
1,2-Dichloropropane	0.37721	0.35635	0.37225	0.38046	0.37479	0.35669	AVG		0.36962		2.84274	15.00000	O
Bromodichloromethane	0.44805	0.53238	0.60051	0.60100	0.58892	0.56693	AVG		0.55630		10.61076	15.00000	O
cis-1,3-dichloropropene	0.43977	0.54994	0.64475	0.64614	0.66021	0.63661	AVG		0.59624		14.46491	15.00000	O
Toluene	0.88050	0.91675	0.98578	0.91516	0.91697	0.86002	AVG		0.91253		4.69868	15.00000	O
4-methyl-2-pentanone	0.26679	0.33392	0.36782	0.36397	0.30986	0.27261	AVG		0.31916		13.72179	15.00000	O
Tetrachloroethene	0.36055	0.32467	0.31582	0.31095	0.30564	0.29746	AVG		0.31918		6.97155	15.00000	O
trans-1,3-Dichloropropene	0.45238	0.52370	0.59768	0.59329	0.59757	0.58996	AVG		0.55910		10.65135	15.00000	O
1,1,2-Trichloroethane	0.27576	0.27745	0.29411	0.28525	0.27904	0.27070	AVG		0.28039		2.93101	15.00000	O
Dibromochloromethane	2879	17948	89976	228616	506126	973085	LNR	0.01712	0.43635		0.99993	0.99000	O
1,2-Dibromoethane	0.35151	+++++	0.37296	0.36804	0.37178	0.35976	AVG		0.36481		2.48190	15.00000	O
2-Hexanone	8213	57705	290451	755640	1486411	2625955	LNR	-0.20795	0.23762		0.99708	0.99000	O
Chlorobenzene	1.07682	1.03659	1.03833	1.02458	1.00438	0.95684	AVG		1.02292		3.92071	15.00000	O
Ethylbenzene	0.52839	0.58627	0.60337	0.59021	0.58875	0.58377	AVG		0.58013		4.52375	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-C
Lab File IDs : C2179.D C2178.D C2177.D C2176.D C2181.D C2180.D **Column ID:**
Calibration Date(s): 08-APR-15 10:49 08-APR-15 14:06

Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.63432	0.67308	0.72101	0.70060	0.68534	0.64483	AVG		0.67653		4.87325	15.00000	O
o-Xylene	0.49189	0.56456	0.65743	0.66264	0.68111	0.64956	AVG		0.61786		11.9564(	15.00000	O
Styrene	0.85194	1.05716	1.20593	1.20082	1.19289	1.11709	AVG		1.10431		12.38737	15.00000	O
Bromoform	1632	11421	53507	145917	321759	623540	LNR	0.02468	0.27977		0.99983	0.99000	O
Isopropylbenzene	2.54997	3.02509	3.28770	3.16480	2.92303	2.68173	AVG		2.93872		9.59790	15.00000	O
1,1,2,2-Tetrachloroethane	0.79011	0.84554	0.85630	0.84651	0.81472	0.78552	AVG		0.82312		3.73474	15.00000	O
1,3-Dichlorobenzene	1.36820	1.30481	1.36311	1.28787	1.24328	1.20560	AVG		1.29548		4.97983	15.00000	O
1,4-Dichlorobenzene	1.47239	1.49573	1.46301	1.40455	1.33263	1.28189	AVG		1.40837		6.06346	15.00000	O
1,2-Dichlorobenzene	1.12294	1.21977	1.24264	1.18868	1.14179	1.11797	AVG		1.17230		4.47945	15.00000	O
1,2-Dibromo-3-Chloropropane	328	3846	19707	53673	124589	239826	LNR	0.03120	0.17318		0.99975	0.99000	O
1,2,4-Trichlorobenzene	1106	16031	95415	230917	539676	971578	LNR	0.00014	0.70576		0.99942	0.99000	O
Methyl Acetate	0.44380	0.43897	0.51274	0.52869	0.54072	0.55354	AVG		0.50308		9.87343	15.00000	O
Methylcyclohexane	0.87444	0.98062	1.17777	1.17383	1.12626	1.10608	AVG		1.07317		11.26176	15.00000	O
Dibromofluoromethane	0.41686	0.50760	0.52463	0.56756	0.50545	0.48747	AVG		0.50159		9.89255	15.00000	
1,2-Dichloroethane-D4	0.59711	0.68801	0.69404	0.80886	0.62466	0.61398	AVG		0.67111		11.67268	15.00000	
Toluene-D8	0.74566	0.90246	0.95361	1.11844	0.92551	0.85583	AVG		0.91692		13.38419	15.00000	
P-Bromofluorobenzene	0.37326	0.48094	0.52223	0.53048	0.50896	0.47889	AVG		0.48246		11.91736	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG160924-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Misc Info: WG160924,WG160924-4

Client SDG: WG160924
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	51.3	102.62	80-120
	2 Chloromethane	50.0	47.9	95.76	80-120
	3 Vinyl chloride	50.0	48.1	96.29	80-120
	4 Bromomethane	50.0	50.5	101.05	80-120
	5 Chloroethane	50.0	46.0	92.00	80-120
	6 Trichlorofluoromet	50.0	43.7	87.45	80-120
	7 Diethyl Ether	50.0	47.5	94.99	80-120
	8 Tertiary-butyl alc	250	284	113.71	80-120
	9 1,1-Dichloroethene	50.0	50.9	101.78	80-120
	10 Carbon Disulfide	50.0	52.8	105.55	80-120
	11 Freon-113	50.0	52.4	104.70	80-120
	12 Iodomethane	50.0	51.5	103.04	80-120
	13 Acrolein	250	274	109.64	80-120
	14 Methylene Chloride	50.0	49.3	98.66	80-120
	15 Acetone	50.0	64.6	129.17*	80-120
	16 Isobutyl Alcohol	1000	147	14.69*	80-120
	17 trans-1,2-Dichloro	50.0	48.4	96.86	80-120
	18 Allyl Chloride	50.0	53.0	105.93	80-120
	19 Methyl tert-butyl	100	112	112.40	80-120
	20 Acetonitrile	500	480	95.98	80-120
	21 Di-isopropyl ether	50.0	54.5	109.10	80-120
	22 Chloroprene	50.0	53.0	106.04	80-120
	23 Propionitrile	500	518	103.55	80-120
	24 Methacrylonitrile	500	499	99.83	80-120
	25 1,1-Dichloroethane	50.0	51.6	103.16	80-120
	26 Acrylonitrile	250	268	107.11	80-120
	27 Ethyl tertiary-but	50.0	55.0	110.04	80-120
	28 Vinyl Acetate	50.0	56.3	112.65	80-120
	29 cis-1,2-Dichloroet	50.0	49.0	98.11	80-120
M	30 1,2-Dichloroethyle	100	97.5	97.48	80-120
	31 Methyl Methacrylat	50.0	50.8	101.71	80-120
	32 2,2-Dichloropropan	50.0	50.0	100.07	80-120
	33 Bromochloromethane	50.0	52.1	104.19	80-120
	34 Chloroform	50.0	49.5	98.98	80-120
	35 Carbon Tetrachlori	50.0	52.7	105.38	80-120
	36 Tetrahydrofuran	50.0	54.5	108.97	80-120
	38 1,1,1-Trichloroeth	50.0	48.4	96.86	80-120
	39 1,1-Dichloropropen	50.0	53.1	106.18	80-120
	40 2-Butanone	50.0	53.9	107.80	80-120
	41 Benzene	50.0	51.4	102.90	80-120

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
43 Cyclohexane	50.0	50.6	101.29	80-120
44 Ethyl Methacrylate	50.0	56.2	112.44	80-120
46 Tertiary-amyl meth	50.0	54.5	109.07	80-120
47 1,2-Dichloroethane	50.0	47.4	94.77	80-120
48 Trichloroethene	50.0	49.2	98.32	80-120
50 Dibromomethane	50.0	48.8	97.55	80-120
51 1,2-Dichloropropan	50.0	53.1	106.29	80-120
52 Bromodichlorometha	50.0	54.8	109.62	80-120
53 cis-1,3-dichloropr	50.0	54.0	107.91	80-120
54 1,4-Dioxane	1000	1090	109.03	80-120
56 2-Chloroethylvinyl	50.0	77.3	154.61*	80-120
57 Toluene	50.0	50.8	101.56	80-120
58 4-methyl-2-pentano	50.0	60.9	121.87*	80-120
59 Tetrachloroethene	50.0	49.2	98.38	80-120
60 trans-1,3-Dichloro	50.0	54.7	109.47	80-120
61 1,1,2-Trichloroeth	50.0	50.7	101.34	80-120
62 Dibromochlorometha	50.0	49.6	99.16	80-120
63 1,3-Dichloropropan	50.0	52.0	104.02	80-120
64 1,2-Dibromoethane	50.0	52.4	104.72	80-120
65 2-Hexanone	50.0	54.8	109.57	80-120
67 Chlorobenzene	50.0	53.6	107.10	80-120
152 1-Chlorohexane	50.0	52.7	105.39	80-120
68 Ethylbenzene	50.0	50.5	101.01	80-120
69 1,1,1,2-Tetrachlor	50.0	53.4	106.78	80-120
M 70 Xylenes (total)	150	166	110.47	80-120
71 m+p-Xylenes	100	107	106.99	80-120
72 o-Xylene	50.0	58.7	117.42	80-120
73 Styrene	50.0	54.5	109.07	80-120
74 Bromoform	50.0	48.4	96.90	80-120
75 Isopropylbenzene	50.0	56.7	113.46	80-120
77 cis-1,4-Dichloro-2	50.0	48.9	97.89	80-120
78 trans-1,4-Dichloro	50.0	47.8	95.62	80-120
79 Bromobenzene	50.0	52.7	105.46	80-120
80 N-Propylbenzene	50.0	57.0	113.91	80-120
81 1,1,2,2-Tetrachlor	50.0	51.8	103.70	80-120
82 1,3,5-Trimethylben	50.0	50.6	101.10	80-120
83 2-Chlorotoluene	50.0	54.0	108.06	80-120
84 1,2,3-Trichloropro	50.0	50.4	100.75	80-120
85 4-Chlorotoluene	50.0	56.1	112.18	80-120
86 tert-Butylbenzene	50.0	56.4	112.91	80-120
87 Pentachloroethane	50.0	54.2	108.49	80-120
88 1,2,4-Trimethylben	50.0	52.6	105.25	80-120
89 P-Isopropyltoluene	50.0	56.3	112.58	80-120
90 1,3-Dichlorobenzen	50.0	54.1	108.19	80-120
92 1,4-Dichlorobenzen	50.0	49.5	99.06	80-120
93 N-Butylbenzene	50.0	54.1	108.22	80-120
94 sec-Butylbenzene	50.0	55.1	110.15	80-120
95 1,2-Dichlorobenzen	50.0	54.4	108.79	80-120
96 1,2-Dibromo-3-Chlo	50.0	49.2	98.51	80-120
97 1,3,5-Trichloroben	50.0	53.2	106.31	80-120
98 Hexachlorobutadien	50.0	51.9	103.75	80-120
99 1,2,4-Trichloroben	50.0	52.4	104.73	80-120
100 1,2,3-Trimethylben	50.0	51.6	103.13	80-120
101 Naphthalene	50.0	51.6	103.15	80-120

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	52.0	104.06	80-120
103 Methyl Acetate	50.0	53.6	107.22	80-120
104 Methylcyclohexane	50.0	55.2	110.44	80-120
M 153 Total Alkylbenzene	350	382	109.16	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	52.3	104.53	68-128
$ 45 1,2-Dichloroethane	50.0	52.9	105.83	67-135
$ 55 Toluene-D8	50.0	59.7	119.39	65-128
$ 76 P-Bromofluorobenze	50.0	52.3	104.63	56-133

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Lab Smp Id: WG160924-4 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 10:49 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-4
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 10:49 Cal File: C2176.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

WAS

2:50 pm, Apr 13, 2015

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	311493	50.0000	50.0	
2 Chloromethane	50	2.229	2.229	(0.277)	371109	50.0000	50.0	
3 Vinyl chloride	62	2.322	2.322	(0.289)	286103	50.0000	50.0	
4 Bromomethane	94	2.729	2.730	(0.339)	136805	50.0000	50.0	
5 Chloroethane	64	2.879	2.880	(0.358)	123597	50.0000	50.0	
6 Trichlorofluoromethane	101	3.051	3.051	(0.379)	316341	50.0000	50.0	
7 Diethyl Ether	59	3.487	3.487	(0.434)	193649	50.0000	50.0	
8 Tertiary-butyl alcohol	59	5.353	5.353	(0.666)	103768	250.000	250	
9 1,1-Dichloroethene	96	3.744	3.745	(0.466)	191649	50.0000	50.0	
10 Carbon Disulfide	76	3.780	3.780	(0.470)	554475	50.0000	50.0	
11 Freon-113	151	3.809	3.809	(0.474)	142722	50.0000	50.0	
12 Iodomethane	142	3.952	3.952	(0.492)	217279	50.0000	50.0	
13 Acrolein	56	4.266	4.267	(0.531)	162849	250.000	250	
14 Methylene Chloride	84	4.645	4.645	(0.578)	231705	50.0000	50.0	
15 Acetone	43	4.752	4.753	(0.591)	362266	250.000	250	
16 Isobutyl Alcohol	43	8.255	8.255	(1.027)	166476	1000.00	1000	
17 trans-1,2-Dichloroethene	96	4.917	4.917	(0.612)	217946	50.0000	50.0	
18 Allyl Chloride	41	4.473	4.474	(0.556)	220358	50.0000	50.0	
19 Methyl tert-butyl ether	73	5.124	5.124	(0.637)	1046191	100.000	100	
20 Acetonitrile	39	5.546	5.546	(0.690)	57644	500.000	500(M)	M9
21 Di-isopropyl ether	45	5.781	5.782	(0.719)	662682	50.0000	50.0	
22 Chloroprene	53	5.910	5.911	(0.735)	360015	50.0000	50.0	
23 Propionitrile	54	7.962	7.962	(0.990)	348264	500.000	500	
24 Methacrylonitrile	41	7.983	7.984	(0.993)	1286970	500.000	500	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.946	5.946	(0.740)	443013	50.0000	50.0	
	26 Acrylonitrile	52	6.039	6.039	(0.751)	390460	250.000	250	
	27 Ethyl tertiary-butyl ether	59	6.346	6.347	(0.789)	608442	50.0000	50.0	
	28 Vinyl Acetate	43	6.368	6.368	(0.732)	518122	50.0000	50.0	
	29 cis-1,2-Dichloroethene	96	6.761	6.761	(0.841)	227094	50.0000	50.0	
	31 Methyl Methacrylate	41	9.563	9.563	(1.099)	173584	50.0000	50.0	
	32 2,2-Dichloropropane	77	6.904	6.904	(0.859)	384672	50.0000	50.0	
	33 Bromochloromethane	128	7.032	7.033	(0.875)	91427	50.0000	50.0	
	34 Chloroform	83	7.154	7.154	(0.890)	456644	50.0000	50.0	
	35 Carbon Tetrachloride	117	7.311	7.312	(0.841)	297047	50.0000	50.0	
	36 Tetrahydrofuran	42	7.361	7.362	(0.916)	324849	250.000	250	
$	37 Dibromofluoromethane	113	7.404	7.405	(0.921)	188494	50.0000	50.0	
	38 1,1,1-Trichloroethane	97	7.411	7.412	(0.922)	439111	50.0000	50.0	
	39 1,1-Dichloropropene	75	7.583	7.583	(0.872)	332932	50.0000	50.0	
	40 2-Butanone	43	7.583	7.583	(0.943)	516280	250.000	250	
	41 Benzene	78	7.904	7.905	(0.909)	801472	50.0000	50.0	
*	42 Pentafluorobenzene	168	8.040	8.041	(1.000)	332115	50.0000		
	43 Cyclohexane	56	7.018	7.019	(0.873)	386534	50.0000	50.0	
	44 Ethyl Methacrylate	69	11.057	11.057	(1.271)	235638	50.0000	50.0	
$	45 1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	268633	50.0000	50.0	
	46 Tertiary-amyl methyl ether	73	8.076	8.076	(1.004)	462068	50.0000	50.0	
	47 1,2-Dichloroethane	62	8.176	8.177	(0.940)	371741	50.0000	50.0	
	48 Trichloroethene	95	8.648	8.648	(0.994)	240030	50.0000	50.0	
*	49 1,4-Difluorobenzene	114	8.698	8.698	(1.000)	559910	50.0000		
	50 Dibromomethane	93	9.162	9.163	(1.053)	135140	50.0000	50.0	
	51 1,2-Dichloropropane	63	9.284	9.284	(1.067)	213023	50.0000	50.0	
	52 Bromodichloromethane	83	9.370	9.370	(1.077)	336507	50.0000	50.0	
	53 cis-1,3-dichloropropene	75	10.106	10.106	(1.162)	361781	50.0000	50.0	
	54 1,4-Dioxane	88	9.606	9.606	(1.104)	40699	1000.00	1000	
$	55 Toluene-D8	98	10.320	10.321	(1.187)	626226	50.0000	50.0	
	56 2-Chloroethylvinylether	63	10.049	10.049	(1.155)	6506	50.0000	50.0	
	57 Toluene	92	10.378	10.378	(1.193)	512407	50.0000	50.0	
	58 4-methyl-2-pentanone	43	10.828	10.828	(1.245)	1018965	250.000	250	
	59 Tetrachloroethene	164	10.821	10.821	(0.888)	168733	50.0000	50.0	
	60 trans-1,3-Dichloropropene	75	10.871	10.871	(1.250)	332187	50.0000	50.0	
	61 1,1,2-Trichloroethane	83	11.057	11.057	(1.271)	159716	50.0000	50.0	
	62 Dibromochloromethane	129	11.264	11.264	(0.924)	228616	50.0000	50.0	
	63 1,3-Dichloropropane	76	11.378	11.379	(0.934)	350622	50.0000	50.0	
	64 1,2-Dibromoethane	107	11.550	11.550	(1.328)	206070	50.0000	50.0	
	65 2-Hexanone	43	11.836	11.836	(0.971)	755640	250.000	250	
*	66 Chlorobenzene-D5	117	12.186	12.187	(1.000)	542634	50.0000		
	67 Chlorobenzene	112	12.207	12.208	(1.002)	555973	50.0000	50.0	
	152 1-Chlorohexane	91	12.179	12.179	(0.999)	317979	50.0000	50.0	
	68 Ethylbenzene	106	12.243	12.244	(1.005)	320266	50.0000	50.0	
	69 1,1,1,2-Tetrachloroethane	131	12.293	12.294	(1.009)	223375	50.0000	50.0	
	71 m+p-Xylenes	106	12.436	12.437	(1.021)	760343	100.000	100	
	72 o-Xylene	106	13.001	13.001	(1.067)	359572	50.0000	50.0	
	73 Styrene	104	13.080	13.080	(1.073)	651608	50.0000	50.0	
	74 Bromoform	173	13.115	13.116	(1.076)	145917	50.0000	50.0	
	75 Isopropylbenzene	105	13.437	13.437	(0.866)	1043712	50.0000	50.0	
$	76 P-Bromofluorobenzene	95	13.837	13.838	(1.591)	297020	50.0000	50.0	
	77 cis-1,4-Dichloro-2-Butene	53	13.937	13.938	(0.898)	106801	50.0000	50.0	
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.395	(0.928)	88044	50.0000	50.0	
	79 Bromobenzene	156	13.980	13.981	(0.901)	243899	50.0000	50.0	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Report Date: 10-Apr-2015 09:24

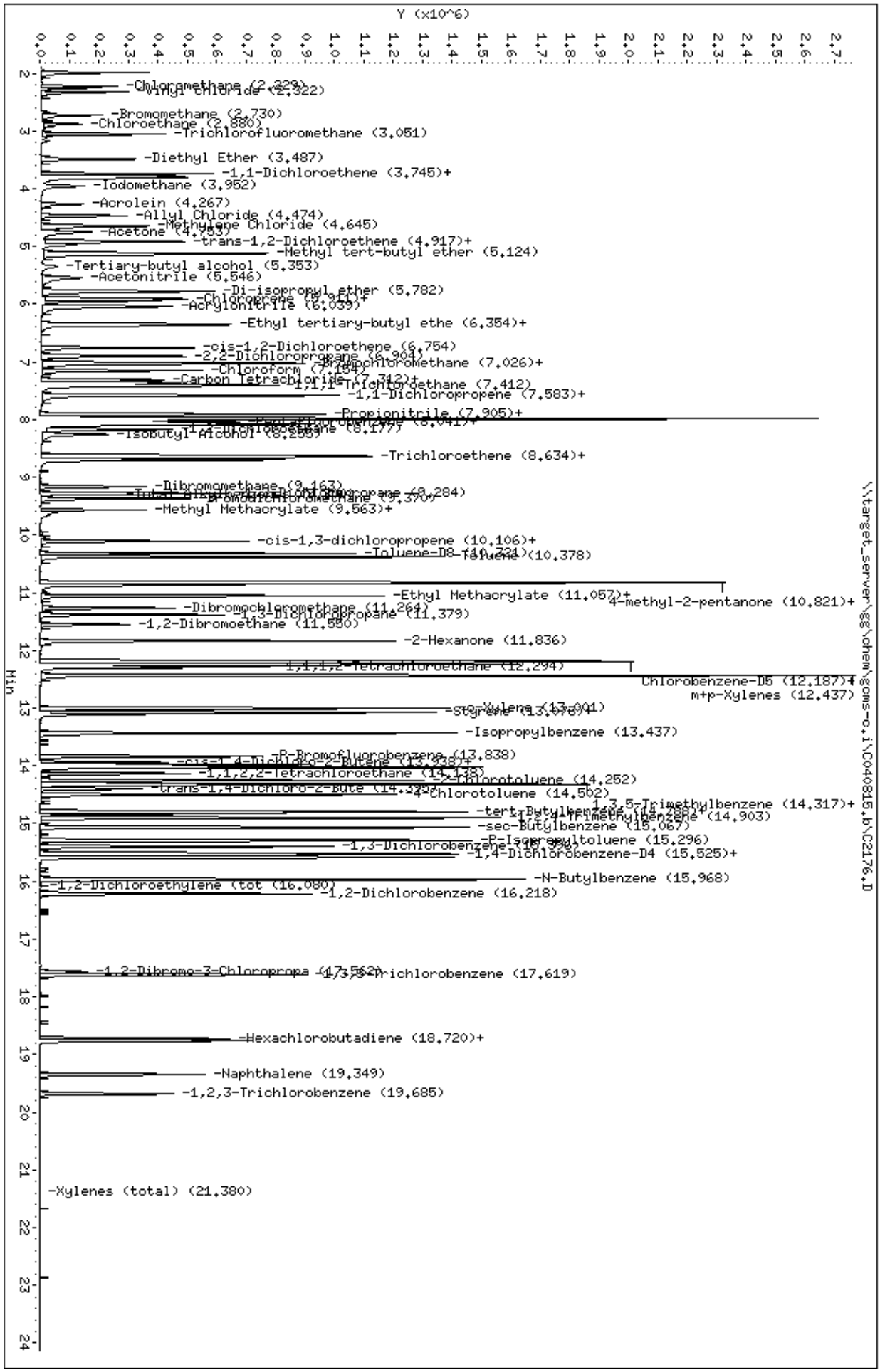
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	80 N-Propylbenzene	91	14.023	14.024	(0.904)	1269963	50.0000	50.0	
	81 1,1,2,2-Tetrachloroethane	83	14.130	14.131	(0.911)	279170	50.0000	50.0	
	82 1,3,5-Trimethylbenzene	105	14.316	14.317	(0.923)	977741	50.0000	50.0	
	83 2-Chlorotoluene	91	14.252	14.252	(0.918)	808828	50.0000	50.0	
	84 1,2,3-Trichloropropane	75	14.330	14.331	(0.924)	243579	50.0000	50.0	
	85 4-Chlorotoluene	91	14.502	14.502	(0.935)	820699	50.0000	50.0	
	86 tert-Butylbenzene	119	14.788	14.788	(0.953)	863992	50.0000	50.0	
	87 Pentachloroethane	117	14.824	14.824	(0.955)	184085	50.0000	50.0	
	88 1,2,4-Trimethylbenzene	105	14.902	14.903	(0.960)	960928	50.0000	50.0	
	89 P-Isopropyltoluene	119	15.295	15.296	(0.986)	933633	50.0000	50.0	
	90 1,3-Dichlorobenzene	146	15.395	15.396	(0.992)	424725	50.0000	50.0	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	329788	50.0000		
	92 1,4-Dichlorobenzene	146	15.538	15.539	(1.001)	463204	50.0000	50.0	
	93 N-Butylbenzene	91	15.967	15.968	(1.029)	1022881	50.0000	50.0	
	94 sec-Butylbenzene	105	15.067	15.067	(0.971)	1126105	50.0000	50.0	
	95 1,2-Dichlorobenzene	146	16.218	16.218	(1.045)	392012	50.0000	50.0	
	96 1,2-Dibromo-3-Chloropropane	75	17.561	17.562	(1.132)	53673	50.0000	50.0	
	97 1,3,5-Trichlorobenzene	180	17.619	17.619	(1.135)	302175	50.0000	50.0	
	98 Hexachlorobutadiene	225	18.719	18.720	(1.206)	141567	50.0000	50.0	
	99 1,2,4-Trichlorobenzene	180	18.762	18.763	(1.209)	230917	50.0000	50.0	
	100 1,2,3-Trimethylbenzene	105	15.581	15.582	(1.004)	872747	50.0000	50.0	
	101 Naphthalene	128	19.348	19.349	(1.247)	467717	50.0000	50.0	
	102 1,2,3-Trichlorobenzene	180	19.684	19.685	(1.269)	147572	50.0000	50.0	
	103 Methyl Acetate	43	4.967	4.967	(0.618)	175586	50.0000	50.0	
	104 Methylcyclohexane	83	8.626	8.627	(1.073)	389847	50.0000	50.0	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Date : 08-APR-2015 10:49
Client ID: Initial Calibration
Sample Info: WG160924-4
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2177.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2177.D
Lab Smp Id: WG160924-3 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 11:59
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-3
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 11:59 Cal File: C2177.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	127256	20.0000	21.2	
2 Chloromethane	50	2.230	2.229	(0.277)	157725	20.0000	19.6	
3 Vinyl chloride	62	2.330	2.322	(0.290)	118145	20.0000	20.7	
4 Bromomethane	94	2.730	2.730	(0.340)	62272	20.0000	19.8	
5 Chloroethane	64	2.880	2.880	(0.358)	60427	20.0000	20.0	
6 Trichlorofluoromethane	101	3.059	3.051	(0.380)	146956	20.0000	20.6	
7 Diethyl Ether	59	3.488	3.487	(0.434)	80996	20.0000	20.4	
8 Tertiary-butyl alcohol	59	5.339	5.353	(0.664)	45068	100.000	100	
9 1,1-Dichloroethene	96	3.752	3.745	(0.467)	79485	20.0000	19.8	
10 Carbon Disulfide	76	3.788	3.780	(0.471)	223193	20.0000	20.0	
11 Freon-113	151	3.809	3.809	(0.474)	59021	20.0000	21.4	
12 Iodomethane	142	3.959	3.952	(0.492)	93243	20.0000	20.9	
13 Acrolein	56	4.267	4.267	(0.531)	59221	100.000	101	
14 Methylene Chloride	84	4.653	4.645	(0.579)	97577	20.0000	20.5	
15 Acetone	43	4.746	4.753	(0.590)	147746	100.000	105	
16 Isobutyl Alcohol	43	8.255	8.255	(1.027)	69193	400.000	446	
17 trans-1,2-Dichloroethene	96	4.917	4.917	(0.612)	90725	20.0000	20.1	
18 Allyl Chloride	41	4.474	4.474	(0.556)	92930	20.0000	21.4	
19 Methyl tert-butyl ether	73	5.124	5.124	(0.637)	427104	40.0000	43.4	
20 Acetonitrile	39	5.539	5.546	(0.689)	20340	200.000	185	
21 Di-isopropyl ether	45	5.782	5.782	(0.719)	267262	20.0000	21.5	
22 Chloroprene	53	5.911	5.911	(0.735)	138906	20.0000	21.4	
23 Propionitrile	54	7.962	7.962	(0.990)	145108	200.000	209	
24 Methacrylonitrile	41	7.984	7.984	(0.993)	553539	200.000	211	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2177.D
Report Date: 10-Apr-2015 09:24

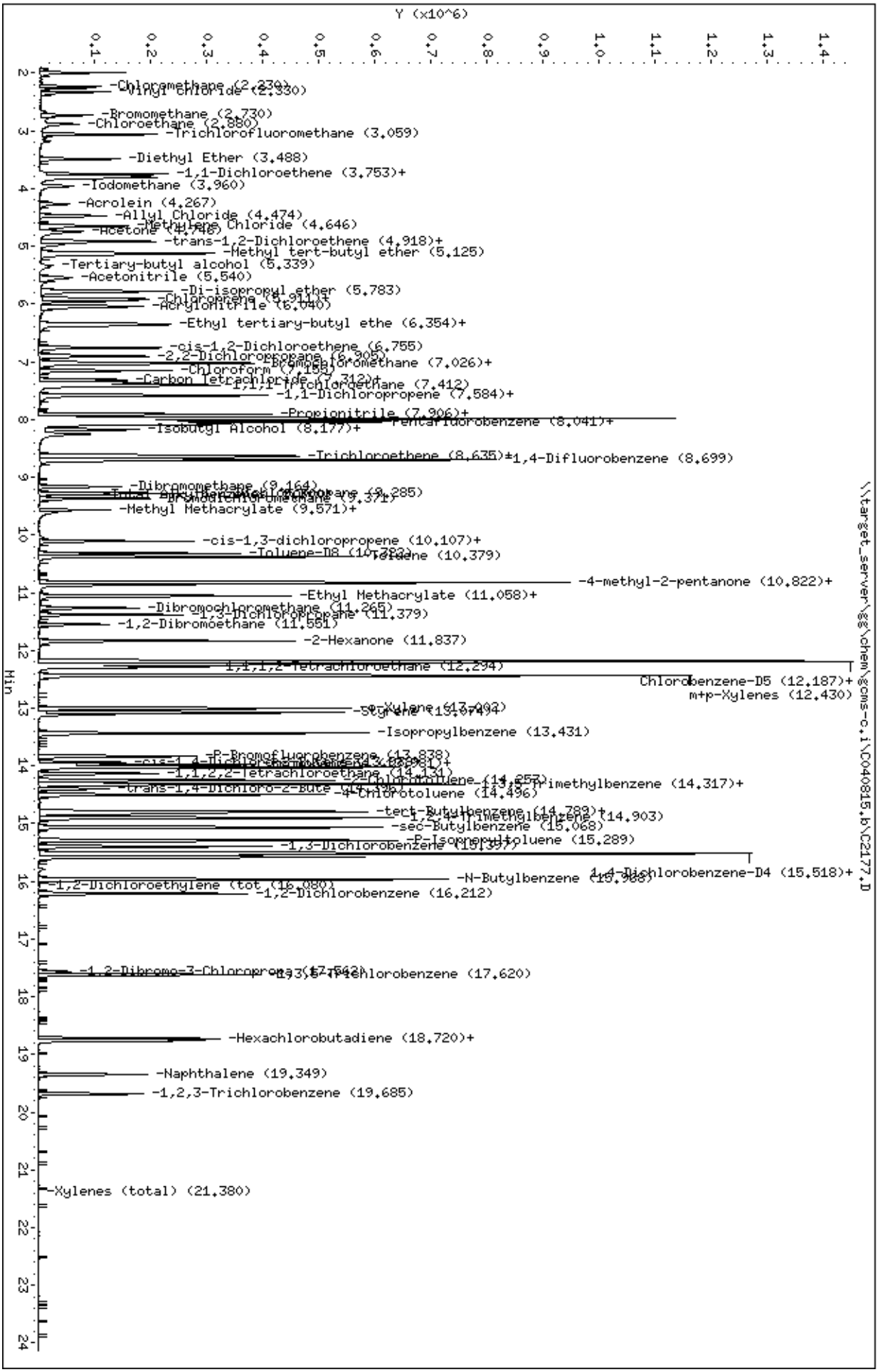
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.946	5.946	(0.740)	183438	20.0000	21.1	
	26 Acrylonitrile	52	6.039	6.039	(0.751)	155554	100.000	102	
	27 Ethyl tertiary-butyl ether	59	6.347	6.347	(0.789)	237290	20.0000	21.5	
	28 Vinyl Acetate	43	6.368	6.368	(0.732)	197002	20.0000	19.6	
	29 cis-1,2-Dichloroethene	96	6.754	6.761	(0.840)	95989	20.0000	20.7	
	31 Methyl Methacrylate	41	9.563	9.563	(1.099)	62438	20.0000	23.1	
	32 2,2-Dichloropropane	77	6.904	6.904	(0.859)	150486	20.0000	21.3	
	33 Bromochloromethane	128	7.033	7.033	(0.875)	39056	20.0000	20.8	
	34 Chloroform	83	7.155	7.154	(0.890)	186386	20.0000	20.3	
	35 Carbon Tetrachloride	117	7.319	7.312	(0.841)	107910	20.0000	21.6	
	36 Tetrahydrofuran	42	7.362	7.362	(0.916)	134323	100.000	112	
$	37 Dibromofluoromethane	113	7.398	7.405	(0.920)	70470	20.0000	20.8	
	38 1,1,1-Trichloroethane	97	7.412	7.412	(0.922)	177286	20.0000	20.4	
	39 1,1-Dichloropropene	75	7.583	7.583	(0.872)	133501	20.0000	21.5	
	40 2-Butanone	43	7.576	7.583	(0.942)	208136	100.000	118	
	41 Benzene	78	7.905	7.905	(0.909)	334346	20.0000	21.0	
*	42 Pentafluorobenzene	168	8.041	8.041	(1.000)	335811	50.0000		
	43 Cyclohexane	56	7.019	7.019	(0.873)	155759	20.0000	21.5	
	44 Ethyl Methacrylate	69	11.057	11.057	(1.271)	88908	20.0000	19.5	
$	45 1,2-Dichloroethane-D4	65	8.091	8.090	(1.006)	93226	20.0000	19.9	
	46 Tertiary-amyl methyl ether	73	8.077	8.076	(1.004)	178864	20.0000	21.4	
	47 1,2-Dichloroethane	62	8.177	8.177	(0.940)	152389	20.0000	19.6	
	48 Trichloroethene	95	8.648	8.648	(0.994)	98167	20.0000	20.0	
*	49 1,4-Difluorobenzene	114	8.698	8.698	(1.000)	552626	50.0000		
	50 Dibromomethane	93	9.163	9.163	(1.053)	56399	20.0000	20.7	
	51 1,2-Dichloropropane	63	9.285	9.284	(1.067)	82287	20.0000	20.0	
	52 Bromodichloromethane	83	9.363	9.370	(1.076)	132744	20.0000	22.0	
	53 cis-1,3-dichloropropene	75	10.107	10.106	(1.162)	142522	20.0000	22.6	
	54 1,4-Dioxane	88	9.606	9.606	(1.104)	20403	400.000	274	
$	55 Toluene-D8	98	10.321	10.321	(1.187)	210795	20.0000	20.5	
	56 2-Chloroethylvinylether	63	10.049	10.049	(1.155)	3394	20.0000	17.2	
	57 Toluene	92	10.378	10.378	(1.193)	217906	20.0000	21.3	
	58 4-methyl-2-pentanone	43	10.821	10.828	(1.244)	406533	100.000	110	
	59 Tetrachloroethene	164	10.821	10.821	(0.888)	68941	20.0000	19.2	
	60 trans-1,3-Dichloropropene	75	10.864	10.871	(1.249)	132117	20.0000	22.1	
	61 1,1,2-Trichloroethane	83	11.057	11.057	(1.271)	65013	20.0000	20.8	
	62 Dibromochloromethane	129	11.265	11.264	(0.924)	89976	20.0000	22.6	
	63 1,3-Dichloropropane	76	11.379	11.379	(0.934)	146065	20.0000	20.8	
	64 1,2-Dibromoethane	107	11.551	11.550	(1.328)	82443	20.0000	20.5	
	65 2-Hexanone	43	11.836	11.836	(0.971)	290451	100.000	115	
*	66 Chlorobenzene-D5	117	12.187	12.187	(1.000)	545724	50.0000		
	67 Chlorobenzene	112	12.208	12.208	(1.002)	226657	20.0000	19.9	
	152 1-Chlorohexane	91	12.180	12.179	(0.999)	127591	20.0000	20.0	
	68 Ethylbenzene	106	12.244	12.244	(1.005)	131710	20.0000	20.9	
	69 1,1,1,2-Tetrachloroethane	131	12.294	12.294	(1.009)	90239	20.0000	22.2	
	71 m+p-Xylenes	106	12.430	12.437	(1.020)	314780	40.0000	42.3	
	72 o-Xylene	106	13.002	13.001	(1.067)	143510	20.0000	22.1	
	73 Styrene	104	13.073	13.080	(1.073)	263242	20.0000	22.4	
	74 Bromoform	173	13.116	13.116	(1.076)	53507	20.0000	22.0	
	75 Isopropylbenzene	105	13.430	13.437	(0.865)	428370	20.0000	21.9	
$	76 P-Bromofluorobenzene	95	13.838	13.838	(1.591)	115439	20.0000	21.9	
	77 cis-1,4-Dichloro-2-Butene	53	13.938	13.938	(0.898)	38632	20.0000	18.9	
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.395	(0.928)	32806	20.0000	19.3	
	79 Bromobenzene	156	13.981	13.981	(0.901)	97772	20.0000	20.8	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2177.D
Report Date: 10-Apr-2015 09:24

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.024	14.024	(0.904)	530787	20.0000	21.9	
81 1,1,2,2-Tetrachloroethane	83	14.131	14.131	(0.911)	111572	20.0000	20.5	
82 1,3,5-Trimethylbenzene	105	14.317	14.317	(0.923)	411445	20.0000	21.8	
83 2-Chlorotoluene	91	14.252	14.252	(0.918)	336110	20.0000	21.2	
84 1,2,3-Trichloropropane	75	14.331	14.331	(0.924)	100758	20.0000	20.3	
85 4-Chlorotoluene	91	14.496	14.502	(0.934)	342261	20.0000	21.3	
86 tert-Butylbenzene	119	14.789	14.788	(0.953)	349716	20.0000	21.7	
87 Pentachloroethane	117	14.824	14.824	(0.955)	72234	20.0000	22.7	
88 1,2,4-Trimethylbenzene	105	14.903	14.903	(0.960)	396995	20.0000	21.7	
89 P-Isopropyltoluene	119	15.289	15.296	(0.985)	398779	20.0000	22.6	
90 1,3-Dichlorobenzene	146	15.396	15.396	(0.992)	177606	20.0000	20.5	
* 91 1,4-Dichlorobenzene-D4	152	15.518	15.518	(1.000)	325737	50.0000		
92 1,4-Dichlorobenzene	146	15.539	15.539	(1.001)	190623	20.0000	20.0	
93 N-Butylbenzene	91	15.968	15.968	(1.029)	451300	20.0000	23.9	
94 sec-Butylbenzene	105	15.067	15.067	(0.971)	482087	20.0000	21.8	
95 1,2-Dichlorobenzene	146	16.211	16.218	(1.045)	161909	20.0000	20.8	
96 1,2-Dibromo-3-Chloropropane	75	17.562	17.562	(1.132)	19707	20.0000	19.2	
97 1,3,5-Trichlorobenzene	180	17.619	17.619	(1.135)	132250	20.0000	21.7	
98 Hexachlorobutadiene	225	18.720	18.720	(1.206)	71447	20.0000	23.9	
99 1,2,4-Trichlorobenzene	180	18.763	18.763	(1.209)	95415	20.0000	21.0	
100 1,2,3-Trimethylbenzene	105	15.582	15.582	(1.004)	361886	20.0000	20.7	
101 Naphthalene	128	19.349	19.349	(1.247)	154810	20.0000	18.2	
102 1,2,3-Trichlorobenzene	180	19.685	19.685	(1.269)	62795	20.0000	20.3	
103 Methyl Acetate	43	4.967	4.967	(0.618)	68874	20.0000	21.3	
104 Methylcyclohexane	83	8.627	8.627	(1.073)	158203	20.0000	22.4	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2177.D
Date : 08-APR-2015 11:59
Client ID: Initial Calibration
Sample Info: WG160924-3
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Lab Smp Id: WG160924-2 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 12:31
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-2
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 12:31 Cal File: C2178.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

WAS

2:50 pm, Apr 13, 2015

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.988	1.986	(0.247)	27015	5.00000	4.6	
2 Chloromethane	50	2.231	2.229	(0.278)	37896	5.00000	4.8	
3 Vinyl chloride	62	2.324	2.322	(0.289)	26841	5.00000	4.8	
4 Bromomethane	94	2.724	2.730	(0.339)	13213	5.00000	4.3	
5 Chloroethane	64	2.889	2.880	(0.360)	14541	5.00000	5.0	
6 Trichlorofluoromethane	101	3.060	3.051	(0.381)	33355	5.00000	4.8	
7 Diethyl Ether	59	3.489	3.487	(0.434)	18420	5.00000	4.8	
8 Tertiary-butyl alcohol	59	5.333	5.353	(0.664)	11494	25.0000	26.3(M)	M9
9 1,1-Dichloroethene	96	3.747	3.745	(0.466)	19387	5.00000	5.0	
10 Carbon Disulfide	76	3.782	3.780	(0.471)	49631	5.00000	4.7	
11 Freon-113	151	3.811	3.809	(0.474)	12759	5.00000	4.8	
12 Iodomethane	142	3.954	3.952	(0.492)	21569	5.00000	4.8	
13 Acrolein	56	4.268	4.267	(0.531)	11772	25.0000	20.7	
14 Methylene Chloride	84	4.654	4.645	(0.579)	25325	5.00000	5.1	
15 Acetone	43	4.747	4.753	(0.591)	30980	25.0000	22.6	
16 Isobutyl Alcohol	43	8.264	8.255	(1.028)	14777	100.000	97.9	
17 trans-1,2-Dichloroethene	96	4.919	4.917	(0.612)	21521	5.00000	4.9	
18 Allyl Chloride	41	4.476	4.474	(0.557)	20268	5.00000	4.8	
19 Methyl tert-butyl ether	73	5.126	5.124	(0.638)	93486	10.0000	9.8	
20 Acetonitrile	39	5.555	5.546	(0.691)	5950	50.0000	55.5(M)	M9
21 Di-isopropyl ether	45	5.784	5.782	(0.720)	59013	5.00000	4.9	
22 Chloroprene	53	5.905	5.911	(0.735)	30633	5.00000	4.8	
23 Propionitrile	54	7.964	7.962	(0.991)	34737	50.0000	51.4	
24 Methacrylonitrile	41	7.985	7.984	(0.994)	126506	50.0000	49.6	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.948	5.946	(0.740)	44689	5.00000	5.3	
	26 Acrylonitrile	52	6.048	6.039	(0.753)	37067	25.0000	25.0	
	27 Ethyl tertiary-butyl ether	59	6.348	6.347	(0.790)	51377	5.00000	4.8	
	28 Vinyl Acetate	43	6.377	6.368	(0.733)	39245	5.00000	4.5	
	29 cis-1,2-Dichloroethene	96	6.763	6.761	(0.842)	21698	5.00000	4.8	
	31 Methyl Methacrylate	41	9.572	9.563	(1.100)	11941	5.00000	4.6	
	32 2,2-Dichloropropane	77	6.906	6.904	(0.859)	33123	5.00000	4.8	
	33 Bromochloromethane	128	7.035	7.033	(0.875)	8383	5.00000	4.6	
	34 Chloroform	83	7.156	7.154	(0.891)	42894	5.00000	4.8	
	35 Carbon Tetrachloride	117	7.321	7.312	(0.841)	21770	5.00000	4.5	
	36 Tetrahydrofuran	42	7.363	7.362	(0.916)	30025	25.0000	25.7	
$	37 Dibromofluoromethane	113	7.399	7.405	(0.921)	16591	5.00000	5.0	
	38 1,1,1-Trichloroethane	97	7.406	7.412	(0.922)	40997	5.00000	4.8	
	39 1,1-Dichloropropene	75	7.585	7.583	(0.872)	29438	5.00000	4.9	
	40 2-Butanone	43	7.585	7.583	(0.944)	40972	25.0000	23.8	
	41 Benzene	78	7.907	7.905	(0.909)	76618	5.00000	5.0	
*	42 Pentafluorobenzene	168	8.035	8.041	(1.000)	326854	50.0000		
	43 Cyclohexane	56	7.020	7.019	(0.874)	34788	5.00000	4.9	
	44 Ethyl Methacrylate	69	11.059	11.057	(1.271)	17964	5.00000	4.5	
$	45 1,2-Dichloroethane-D4	65	8.093	8.090	(1.007)	22488	5.00000	4.9	
	46 Tertiary-amyl methyl ether	73	8.078	8.076	(1.005)	38812	5.00000	4.8	
	47 1,2-Dichloroethane	62	8.178	8.177	(0.940)	37371	5.00000	5.0	
	48 Trichloroethene	95	8.650	8.648	(0.994)	22967	5.00000	4.8	
*	49 1,4-Difluorobenzene	114	8.700	8.698	(1.000)	532458	50.0000		
	50 Dibromomethane	93	9.165	9.163	(1.053)	15072	5.00000	5.4	
	51 1,2-Dichloropropane	63	9.286	9.284	(1.067)	18974	5.00000	4.8	
	52 Bromodichloromethane	83	9.365	9.370	(1.076)	28347	5.00000	4.9	
	53 cis-1,3-dichloropropene	75	10.108	10.106	(1.162)	29282	5.00000	4.8	
	54 1,4-Dioxane	88	9.615	9.606	(1.105)	8358	100.000	116	
$	55 Toluene-D8	98	10.316	10.321	(1.186)	48052	5.00000	4.8	
	56 2-Chloroethylvinylether	63	10.044	10.049	(1.154)	1060	5.00000	5.6(M)	M6
	57 Toluene	92	10.380	10.378	(1.193)	48813	5.00000	5.0	
	58 4-methyl-2-pentanone	43	10.823	10.828	(1.244)	88900	25.0000	25.0	
	59 Tetrachloroethene	164	10.823	10.821	(0.888)	17110	5.00000	4.9	
	60 trans-1,3-Dichloropropene	75	10.866	10.871	(1.249)	27885	5.00000	4.8	
	61 1,1,2-Trichloroethane	83	11.052	11.057	(1.270)	14773	5.00000	4.9	
	62 Dibromochloromethane	129	11.266	11.264	(0.924)	17948	5.00000	4.7	
	63 1,3-Dichloropropane	76	11.381	11.379	(0.934)	34025	5.00000	5.0	
	65 2-Hexanone	43	11.838	11.836	(0.971)	57705	25.0000	23.6	
*	66 Chlorobenzene-D5	117	12.188	12.187	(1.000)	526997	50.0000		
	67 Chlorobenzene	112	12.210	12.208	(1.002)	54628	5.00000	5.0	
	152 1-Chlorohexane	91	12.181	12.179	(0.999)	29336	5.00000	4.8	
	68 Ethylbenzene	106	12.238	12.244	(1.004)	30896	5.00000	5.1	
	69 1,1,1,2-Tetrachloroethane	131	12.288	12.294	(1.008)	17726	5.00000	4.5	
	71 m+p-Xylenes	106	12.431	12.437	(1.020)	70942	10.0000	9.9	
	72 o-Xylene	106	13.003	13.001	(1.067)	29752	5.00000	4.8	
	73 Styrene	104	13.082	13.080	(1.073)	55712	5.00000	4.9	
	74 Bromoform	173	13.118	13.116	(1.076)	11421	5.00000	4.9	
	75 Isopropylbenzene	105	13.432	13.437	(0.866)	95152	5.00000	5.0	
$	76 P-Bromofluorobenzene	95	13.832	13.838	(1.590)	25608	5.00000	5.0	
	77 cis-1,4-Dichloro-2-Butene	53	13.933	13.938	(0.898)	8026	5.00000	4.6	
	78 trans-1,4-Dichloro-2-Butene	53	14.397	14.395	(0.928)	6985	5.00000	4.7	
	79 Bromobenzene	156	13.983	13.981	(0.901)	24090	5.00000	5.3	
	80 N-Propylbenzene	91	14.025	14.024	(0.904)	121037	5.00000	5.2	

WAS

2:50 pm, Apr 13, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Report Date: 10-Apr-2015 09:24

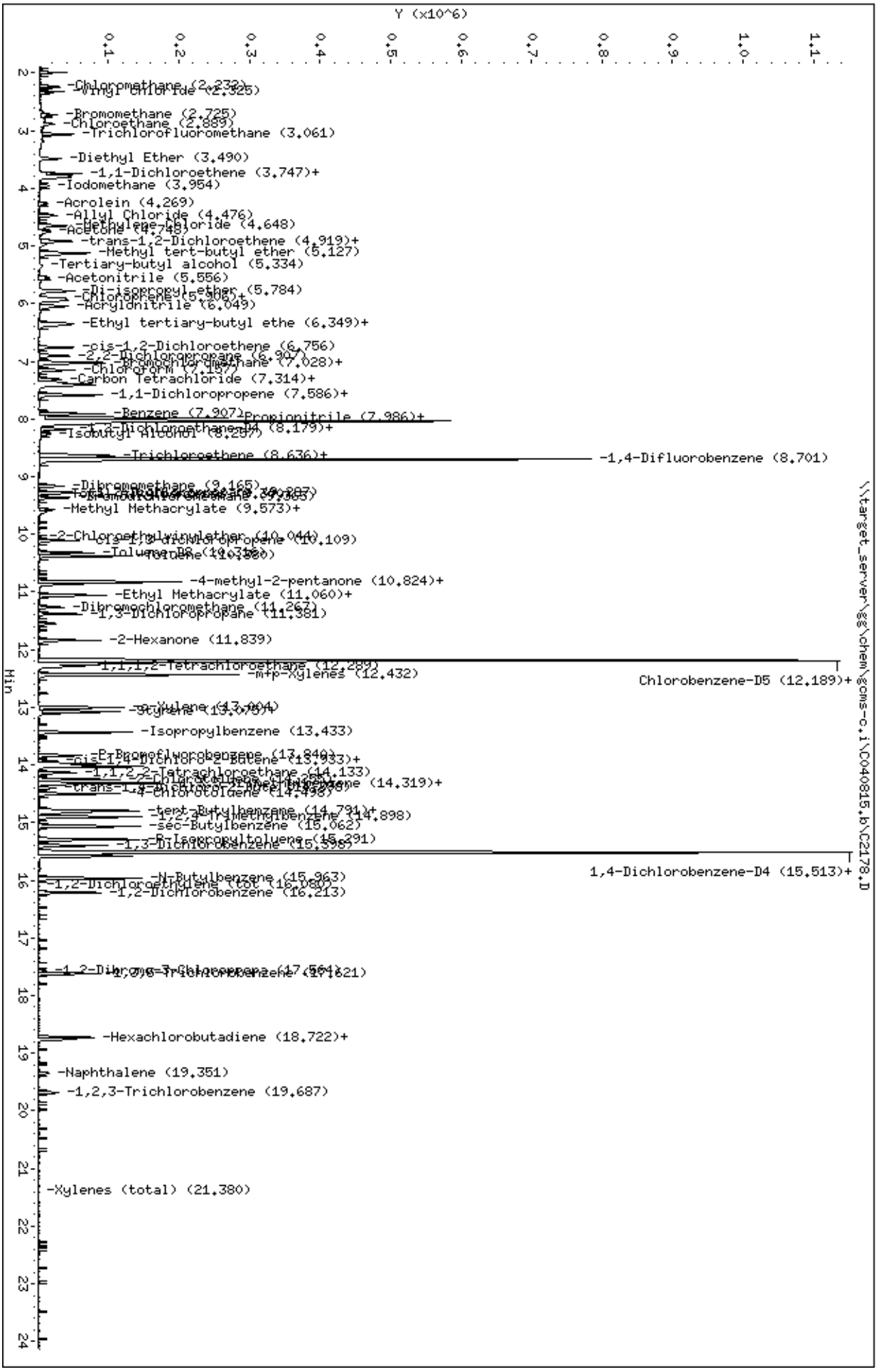
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	81 1,1,2,2-Tetrachloroethane	83	14.133	14.131	(0.911)	26596	5.00000	5.1	
	82 1,3,5-Trimethylbenzene	105	14.318	14.317	(0.923)	94957	5.00000	5.2	
	83 2-Chlorotoluene	91	14.254	14.252	(0.919)	75789	5.00000	5.0	
	84 1,2,3-Trichloropropane	75	14.333	14.331	(0.924)	25132	5.00000	5.2	
	85 4-Chlorotoluene	91	14.497	14.502	(0.935)	79154	5.00000	5.1	
	86 tert-Butylbenzene	119	14.790	14.788	(0.953)	80517	5.00000	5.2	
	87 Pentachloroethane	117	14.819	14.824	(0.955)	15309	5.00000	5.0	
	88 1,2,4-Trimethylbenzene	105	14.897	14.903	(0.960)	90632	5.00000	5.1	
	89 P-Isopropyltoluene	119	15.291	15.296	(0.986)	83324	5.00000	4.9	
	90 1,3-Dichlorobenzene	146	15.398	15.396	(0.993)	41042	5.00000	4.9	
*	91 1,4-Dichlorobenzene-D4	152	15.512	15.518	(1.000)	314543	50.0000		
	92 1,4-Dichlorobenzene	146	15.541	15.539	(1.002)	47047	5.00000	5.1	
	93 N-Butylbenzene	91	15.963	15.968	(1.029)	90962	5.00000	5.0	
	94 sec-Butylbenzene	105	15.062	15.067	(0.971)	109364	5.00000	5.1	
	95 1,2-Dichlorobenzene	146	16.213	16.218	(1.045)	38367	5.00000	5.1	
	96 1,2-Dibromo-3-Chloropropane	75	17.564	17.562	(1.132)	3846	5.00000	4.5	
	97 1,3,5-Trichlorobenzene	180	17.621	17.619	(1.136)	28960	5.00000	4.7	
	98 Hexachlorobutadiene	225	18.722	18.720	(1.207)	16843	5.00000	4.9	
	99 1,2,4-Trichlorobenzene	180	18.757	18.763	(1.209)	16031	5.00000	4.1	
	100 1,2,3-Trimethylbenzene	105	15.584	15.582	(1.005)	87210	5.00000	5.2	
	101 Naphthalene	128	19.351	19.349	(1.247)	14461	5.00000	3.4	
	102 1,2,3-Trichlorobenzene	180	19.687	19.685	(1.269)	10316	5.00000	3.9	
	103 Methyl Acetate	43	4.976	4.967	(0.619)	14348	5.00000	4.6	
	104 Methylcyclohexane	83	8.629	8.627	(1.074)	32052	5.00000	4.7	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Date : 08-APR-2015 12:31
Client ID: Initial Calibration
Sample Info: WG160924-2
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Lab Smp Id: WG160924-1 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 13:02
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-1
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 13:02 Cal File: C2179.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

WAS
2:50 pm, Apr 13, 2015

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.988	1.986	(0.247)	5512	1.00000	0.96(a)	
2 Chloromethane	50	2.231	2.229	(0.278)	8502	1.00000	1.1	
3 Vinyl chloride	62	2.324	2.322	(0.289)	5370	1.00000	0.99(a)	
4 Bromomethane	94	2.731	2.730	(0.340)	3783	1.00000	1.3	
5 Chloroethane	64	2.889	2.880	(0.360)	3385	1.00000	1.2(M)	M9
6 Trichlorofluoromethane	101	3.060	3.051	(0.381)	7500	1.00000	1.1	
7 Diethyl Ether	59	3.489	3.487	(0.434)	3942	1.00000	1.0	
8 Tertiary-butyl alcohol	59	5.355	5.353	(0.666)	2164	5.00000	5.1(M)	M9
9 1,1-Dichloroethene	96	3.746	3.745	(0.466)	3979	1.00000	1.0	
10 Carbon Disulfide	76	3.789	3.780	(0.472)	11143	1.00000	1.2	
11 Freon-113	151	3.825	3.809	(0.476)	2435	1.00000	0.93(aM)	M9
12 Iodomethane	142	3.961	3.952	(0.493)	4354	1.00000	0.83(aM)	M6
13 Acrolein	56	4.268	4.267	(0.531)	2867	5.00000	5.2(M)	M9
15 Acetone	43	4.754	4.753	(0.592)	6778	5.00000	5.0(M)	M9
16 Isobutyl Alcohol	43	8.257	8.255	(1.028)	2423	20.0000	16.4(aM)	M9
17 trans-1,2-Dichloroethene	96	4.926	4.917	(0.613)	4445	1.00000	1.0	
18 Allyl Chloride	41	4.468	4.474	(0.556)	3876	1.00000	0.94(a)	
19 Methyl tert-butyl ether	73	5.133	5.124	(0.639)	16180	2.00000	1.7	
20 Acetonitrile	39	5.569	5.546	(0.693)	948	10.0000	9.0(aM)	M9
21 Di-isopropyl ether	45	5.777	5.782	(0.719)	10229	1.00000	0.87(a)	
22 Chloroprene	53	5.919	5.911	(0.737)	5174	1.00000	0.84(a)	
23 Propionitrile	54	7.971	7.962	(0.992)	6027	10.0000	9.1(a)	
24 Methacrylonitrile	41	7.992	7.984	(0.995)	23810	10.0000	9.6(a)	
25 1,1-Dichloroethane	63	5.948	5.946	(0.740)	7134	1.00000	0.86(a)	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	26 Acrylonitrile	52	6.055	6.039	(0.754)	6809	5.00000	4.7(aM)	M9
	27 Ethyl tertiary-butyl ether	59	6.348	6.347	(0.790)	8957	1.00000	0.85(a)	
	28 Vinyl Acetate	43	6.391	6.368	(0.735)	6270	1.00000	1.2(M)	M6
	29 cis-1,2-Dichloroethene	96	6.756	6.761	(0.841)	4463	1.00000	1.0	
	31 Methyl Methacrylate	41	9.572	9.563	(1.100)	1679	1.00000	0.66(aM)	M9
	32 2,2-Dichloropropane	77	6.899	6.904	(0.859)	5822	1.00000	0.87(a)	
	33 Bromochloromethane	128	7.027	7.033	(0.875)	1902	1.00000	1.1	
	34 Chloroform	83	7.156	7.154	(0.891)	8819	1.00000	1.0	
	35 Carbon Tetrachloride	117	7.313	7.312	(0.841)	3966	1.00000	0.84(a)	
	36 Tetrahydrofuran	42	7.371	7.362	(0.917)	4337	5.00000	3.8(a)	
$	37 Dibromofluoromethane	113	7.406	7.405	(0.922)	2662	1.00000	0.83(a)	
	38 1,1,1-Trichloroethane	97	7.413	7.412	(0.923)	8098	1.00000	0.98(a)	
	39 1,1-Dichloropropene	75	7.592	7.583	(0.873)	5120	1.00000	0.88(a)	
	40 2-Butanone	43	7.592	7.583	(0.945)	5848	5.00000	3.5(a)	
	41 Benzene	78	7.914	7.905	(0.910)	14460	1.00000	0.96(a)	
*	42 Pentafluorobenzene	168	8.035	8.041	(1.000)	319289	50.0000		
	43 Cyclohexane	56	7.020	7.019	(0.874)	5923	1.00000	0.86(a)	
	44 Ethyl Methacrylate	69	11.059	11.057	(1.271)	3249	1.00000	1.2	
$	45 1,2-Dichloroethane-D4	65	8.092	8.090	(1.007)	3813	1.00000	0.86(aM)	M6
	46 Tertiary-amyl methyl ether	73	8.078	8.076	(1.005)	6844	1.00000	0.86(a)	
	47 1,2-Dichloroethane	62	8.178	8.177	(0.940)	7890	1.00000	1.1	
	48 Trichloroethene	95	8.650	8.648	(0.994)	4906	1.00000	1.1	
*	49 1,4-Difluorobenzene	114	8.700	8.698	(1.000)	519476	50.0000		
	50 Dibromomethane	93	9.165	9.163	(1.053)	2591	1.00000	0.60(a)	
	51 1,2-Dichloropropane	63	9.293	9.284	(1.068)	3919	1.00000	1.0(M)	M6
	52 Bromodichloromethane	83	9.365	9.370	(1.076)	4655	1.00000	0.82(aM)	M6
	53 cis-1,3-dichloropropene	75	10.108	10.106	(1.162)	4569	1.00000	0.77(a)	
	54 1,4-Dioxane	88	9.615	9.606	(1.105)	2264	20.0000	32.3(M)	M9
$	55 Toluene-D8	98	10.323	10.321	(1.186)	7747	1.00000	0.80(a)	
	56 2-Chloroethylvinylether	63	10.051	10.049	(1.155)	253	1.00000	1.4(M)	M6
	57 Toluene	92	10.380	10.378	(1.193)	9148	1.00000	0.95(a)	
	58 4-methyl-2-pentanone	43	10.830	10.828	(1.245)	13859	5.00000	4.0(a)	
	59 Tetrachloroethene	164	10.830	10.821	(0.889)	3654	1.00000	1.1	
	60 trans-1,3-Dichloropropene	75	10.873	10.871	(1.250)	4700	1.00000	0.84(a)	
	61 1,1,2-Trichloroethane	83	11.059	11.057	(1.271)	2865	1.00000	0.97(a)	
	62 Dibromochloromethane	129	11.266	11.264	(0.924)	2879	1.00000	0.78(a)	
	63 1,3-Dichloropropane	76	11.388	11.379	(0.934)	6137	1.00000	0.94(a)	
	64 1,2-Dibromoethane	107	11.552	11.550	(1.328)	3652	1.00000	0.96(aM)	M6
	65 2-Hexanone	43	11.845	11.836	(0.972)	8213	5.00000	3.5(aM)	M9
*	66 Chlorobenzene-D5	117	12.188	12.187	(1.000)	506724	50.0000		
	67 Chlorobenzene	112	12.210	12.208	(1.002)	10913	1.00000	1.0	
	152 1-Chlorohexane	91	12.181	12.179	(0.999)	6150	1.00000	1.0	
	68 Ethylbenzene	106	12.245	12.244	(1.005)	5355	1.00000	0.92(a)	
	69 1,1,1,2-Tetrachloroethane	131	12.295	12.294	(1.009)	3308	1.00000	0.88(a)	
	71 m+p-Xylenes	106	12.431	12.437	(1.020)	12857	2.00000	1.8(a)	
	72 o-Xylene	106	13.003	13.001	(1.067)	4985	1.00000	0.83(a)	
	73 Styrene	104	13.082	13.080	(1.073)	8634	1.00000	0.79(a)	
	74 Bromoform	173	13.125	13.116	(1.077)	1632	1.00000	0.72(aM)	M6
	75 Isopropylbenzene	105	13.439	13.437	(0.866)	15346	1.00000	0.85(a)	
$	76 P-Bromofluorobenzene	95	13.839	13.838	(1.591)	3878	1.00000	0.78(a)	
	77 cis-1,4-Dichloro-2-Butene	53	13.947	13.938	(0.899)	1222	1.00000	1.3	
	78 trans-1,4-Dichloro-2-Butene	53	14.404	14.395	(0.929)	870	1.00000	1.1	
	79 Bromobenzene	156	13.982	13.981	(0.901)	3816	1.00000	0.88(a)	
	80 N-Propylbenzene	91	14.025	14.024	(0.904)	18717	1.00000	0.84(a)	

WAS

2:50 pm, Apr 13, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
81	1,1,2,2-Tetrachloroethane	83	14.140	14.131	(0.912)	4755	1.00000	0.95(a)	
82	1,3,5-Trimethylbenzene	105	14.311	14.317	(0.923)	14781	1.00000	0.85(a)	
83	2-Chlorotoluene	91	14.254	14.252	(0.919)	13733	1.00000	0.94(a)	
84	1,2,3-Trichloropropane	75	14.333	14.331	(0.924)	4447	1.00000	0.97(a)	
85	4-Chlorotoluene	91	14.497	14.502	(0.935)	13380	1.00000	0.90(a)	
86	tert-Butylbenzene	119	14.783	14.788	(0.953)	12103	1.00000	0.81(a)	
88	1,2,4-Trimethylbenzene	105	14.897	14.903	(0.960)	14364	1.00000	0.85(a)	
89	P-Isopropyltoluene	119	15.298	15.296	(0.986)	13881	1.00000	0.85(a)	
90	1,3-Dichlorobenzene	146	15.398	15.396	(0.993)	8234	1.00000	1.0	
* 91	1,4-Dichlorobenzene-D4	152	15.512	15.518	(1.000)	300906	50.0000		
92	1,4-Dichlorobenzene	146	15.541	15.539	(1.002)	8861	1.00000	1.0	
93	N-Butylbenzene	91	15.977	15.968	(1.030)	12876	1.00000	0.74(a)	
94	sec-Butylbenzene	105	15.069	15.067	(0.971)	17774	1.00000	0.87(a)	
95	1,2-Dichlorobenzene	146	16.213	16.218	(1.045)	6758	1.00000	0.94(a)	
96	1,2-Dibromo-3-Chloropropane	75	17.564	17.562	(1.132)	328	1.00000	1.1(M)	M6
97	1,3,5-Trichlorobenzene	180	17.621	17.619	(1.136)	4234	1.00000	0.52(a)	
99	1,2,4-Trichlorobenzene	180	18.757	18.763	(1.209)	1106	1.00000	0.75(a)	
100	1,2,3-Trimethylbenzene	105	15.584	15.582	(1.005)	15214	1.00000	0.94(a)	
101	Naphthalene	128	19.351	19.349	(1.247)	155	1.00000	1.9(M)	M6
102	1,2,3-Trichlorobenzene	180	19.672	19.685	(1.268)	587	1.00000	1.00(M)	M6
103	Methyl Acetate	43	4.983	4.967	(0.620)	2834	1.00000	0.92(aM)	M9
104	Methylcyclohexane	83	8.636	8.627	(1.075)	5584	1.00000	0.83(a)	

QC Flag Legend

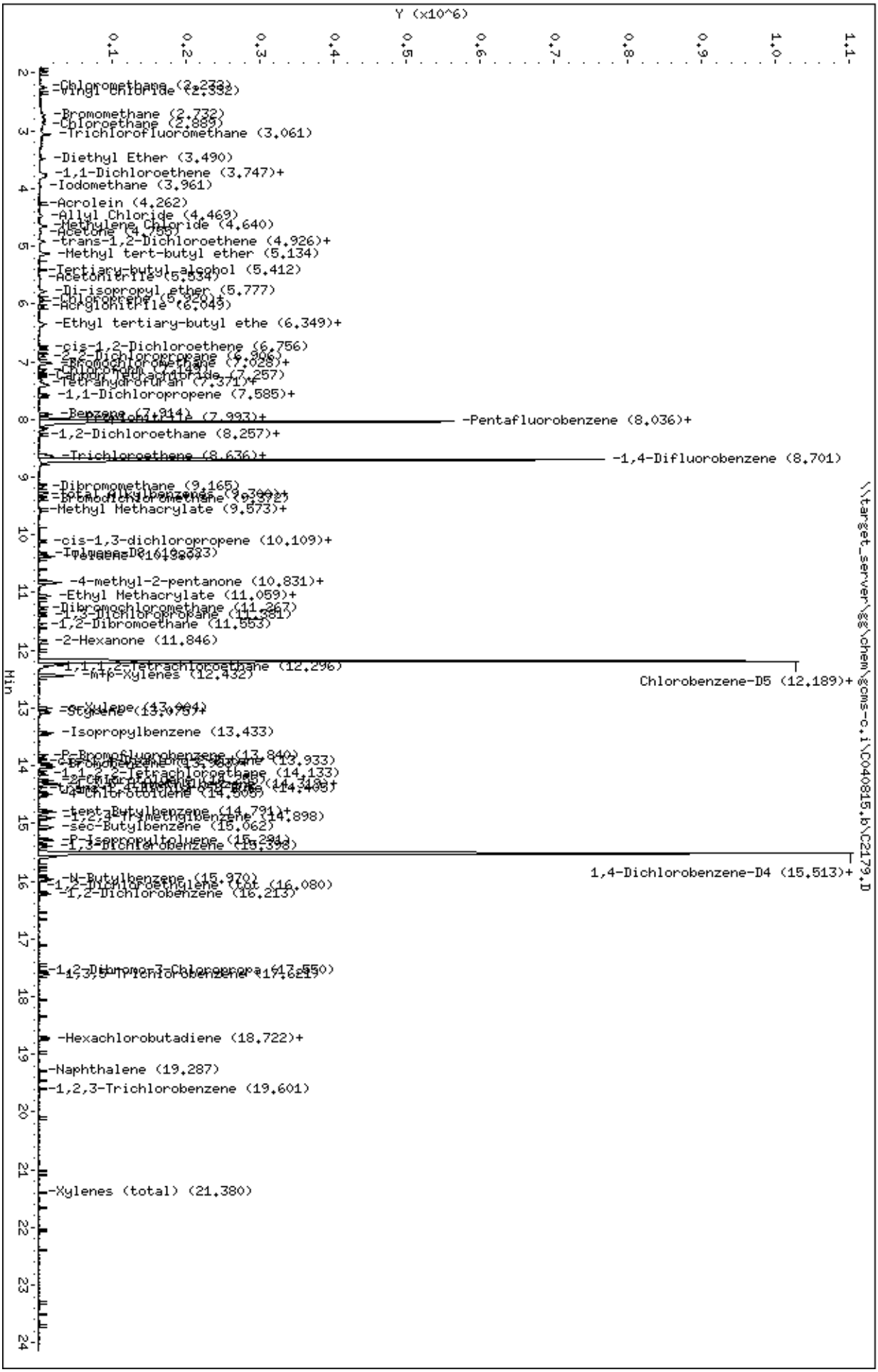
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

WKS

2:50 pm, Apr 13, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Date : 08-APR-2015 13:02
Client ID: Initial Calibration
Sample Info: WG160924-1
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2180.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2180.D
Lab Smp Id: WG160924-6 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 13:34 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-6
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 13:34 Cal File: C2180.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	1109855	200.000	183	
2 Chloromethane	50	2.229	2.229	(0.277)	1329409	200.000	167	
3 Vinyl chloride	62	2.329	2.322	(0.290)	1075033	200.000	186	
4 Bromomethane	94	2.729	2.730	(0.339)	573047	200.000	181	
5 Chloroethane	64	2.879	2.880	(0.358)	432041	200.000	148	
6 Trichlorofluoromethane	101	3.051	3.051	(0.379)	1319834	200.000	184	
7 Diethyl Ether	59	3.494	3.487	(0.435)	730548	200.000	182	
8 Tertiary-butyl alcohol	59	5.352	5.353	(0.666)	417241	1000.00	919	
9 1,1-Dichloroethene	96	3.751	3.745	(0.467)	796611	200.000	194	
10 Carbon Disulfide	76	3.780	3.780	(0.470)	2341608	200.000	200(A)	
11 Freon-113	151	3.808	3.809	(0.474)	542875	200.000	193	
12 Iodomethane	142	3.951	3.952	(0.491)	893653	200.000	200	
13 Acrolein	56	4.273	4.267	(0.531)	634882	1000.00	1040(A)	
14 Methylene Chloride	84	4.652	4.645	(0.579)	942019	200.000	200	
15 Acetone	43	4.752	4.753	(0.591)	1472001	1000.00	1010(A)	
16 Isobutyl Alcohol	43	8.254	8.255	(1.027)	677576	4000.00	4190(A)	
17 trans-1,2-Dichloroethene	96	4.916	4.917	(0.612)	885987	200.000	192	
18 Allyl Chloride	41	4.473	4.474	(0.556)	782593	200.000	180	
19 Methyl tert-butyl ether	73	5.131	5.124	(0.638)	3973746	400.000	393	
20 Acetonitrile	39	5.545	5.546	(0.690)	228678	2000.00	2010(A)	
21 Di-isopropyl ether	45	5.781	5.782	(0.719)	2586781	200.000	202(A)	
22 Chloroprene	53	5.910	5.911	(0.735)	1386373	200.000	206(A)	
23 Propionitrile	54	7.976	7.962	(0.992)	1281536	2000.00	1830	
24 Methacrylonitrile	41	7.997	7.984	(0.995)	3975030	2000.00	1560	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2180.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.946	5.946	(0.740)	1735605	200.000	195	
	26 Acrylonitrile	52	6.046	6.039	(0.752)	1539388	1000.00	985	
	27 Ethyl tertiary-butyl ether	59	6.346	6.347	(0.789)	2434002	200.000	211(A)	
	28 Vinyl Acetate	43	6.367	6.368	(0.732)	1978734	200.000	199	
	29 cis-1,2-Dichloroethene	96	6.761	6.761	(0.841)	928097	200.000	195	
	31 Methyl Methacrylate	41	9.563	9.563	(1.099)	695006	200.000	231(A)	
	32 2,2-Dichloropropane	77	6.903	6.904	(0.859)	1551417	200.000	210(A)	
	33 Bromochloromethane	128	7.039	7.033	(0.876)	361091	200.000	189	
	34 Chloroform	83	7.154	7.154	(0.890)	1757960	200.000	189	
	35 Carbon Tetrachloride	117	7.318	7.312	(0.841)	1231753	200.000	224(A)	
	36 Tetrahydrofuran	42	7.361	7.362	(0.916)	1274683	1000.00	1020(A)	
$	37 Dibromofluoromethane	113	7.404	7.405	(0.921)	674677	200.000	195	
	38 1,1,1-Trichloroethane	97	7.418	7.412	(0.923)	1673970	200.000	190	
	39 1,1-Dichloropropene	75	7.583	7.583	(0.872)	1306913	200.000	198	
	40 2-Butanone	43	7.583	7.583	(0.943)	1932105	1000.00	1050(A)	
	41 Benzene	78	7.911	7.905	(0.910)	3022508	200.000	182	
*	42 Pentafluorobenzene	168	8.040	8.041	(1.000)	346006	50.0000		
	43 Cyclohexane	56	7.018	7.019	(0.873)	1544062	200.000	205(A)	
	44 Ethyl Methacrylate	69	11.056	11.057	(1.271)	958099	200.000	200	
$	45 1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	849763	200.000	180	
	46 Tertiary-amyl methyl ether	73	8.083	8.076	(1.005)	1892612	200.000	215(A)	
	47 1,2-Dichloroethane	62	8.176	8.177	(0.940)	1411357	200.000	175	
	48 Trichloroethene	95	8.648	8.648	(0.994)	926614	200.000	181	
*	49 1,4-Difluorobenzene	114	8.698	8.698	(1.000)	590032	50.0000		
	50 Dibromomethane	93	9.162	9.163	(1.053)	548724	200.000	200	
	51 1,2-Dichloropropane	63	9.284	9.284	(1.067)	841835	200.000	194	
	52 Bromodichloromethane	83	9.370	9.370	(1.077)	1338031	200.000	206(A)	
	53 cis-1,3-dichloropropene	75	10.106	10.106	(1.162)	1502474	200.000	218(A)	
	54 1,4-Dioxane	88	9.613	9.606	(1.105)	126170	4000.00	1800	
$	55 Toluene-D8	98	10.320	10.321	(1.187)	2019864	200.000	187	
	56 2-Chloroethylvinylether	63	10.049	10.049	(1.155)	18124	200.000	97.3	
	57 Toluene	92	10.377	10.378	(1.193)	2029762	200.000	189	
	58 4-methyl-2-pentanone	43	10.828	10.828	(1.245)	3217015	1000.00	849	
	59 Tetrachloroethene	164	10.821	10.821	(0.887)	664641	200.000	185	
	60 trans-1,3-Dichloropropene	75	10.871	10.871	(1.250)	1392388	200.000	214(A)	
	61 1,1,2-Trichloroethane	83	11.056	11.057	(1.271)	638886	200.000	193	
	62 Dibromochloromethane	129	11.271	11.264	(0.924)	973085	200.000	230(A)	
	63 1,3-Dichloropropane	76	11.385	11.379	(0.934)	1397265	200.000	196	
	64 1,2-Dibromoethane	107	11.550	11.550	(1.328)	849089	200.000	198	
	65 2-Hexanone	43	11.836	11.836	(0.971)	2625955	1000.00	1010(A)	
*	66 Chlorobenzene-D5	117	12.193	12.187	(1.000)	558593	50.0000		
	67 Chlorobenzene	112	12.214	12.208	(1.002)	2137941	200.000	186	
	152 1-Chlorohexane	91	12.186	12.179	(0.999)	1327396	200.000	203(A)	
	68 Ethylbenzene	106	12.250	12.244	(1.005)	1304366	200.000	202(A)	
	69 1,1,1,2-Tetrachloroethane	131	12.300	12.294	(1.009)	918420	200.000	216(A)	
	71 m+p-Xylenes	106	12.436	12.437	(1.020)	2881567	400.000	382	
	72 o-Xylene	106	13.008	13.001	(1.067)	1451352	200.000	215(A)	
	73 Styrene	104	13.079	13.080	(1.073)	2495996	200.000	206(A)	
	74 Bromoform	173	13.115	13.116	(1.076)	623540	200.000	238(A)	
	75 Isopropylbenzene	105	13.437	13.437	(0.866)	3725588	200.000	182	
$	76 P-Bromofluorobenzene	95	13.837	13.838	(1.591)	1130230	200.000	201(A)	
	77 cis-1,4-Dichloro-2-Butene	53	13.937	13.938	(0.898)	454844	200.000	200(A)	
	78 trans-1,4-Dichloro-2-Butene	53	14.402	14.395	(0.928)	362239	200.000	200	
	79 Bromobenzene	156	13.987	13.981	(0.901)	964461	200.000	194	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2180.D
Report Date: 10-Apr-2015 09:24

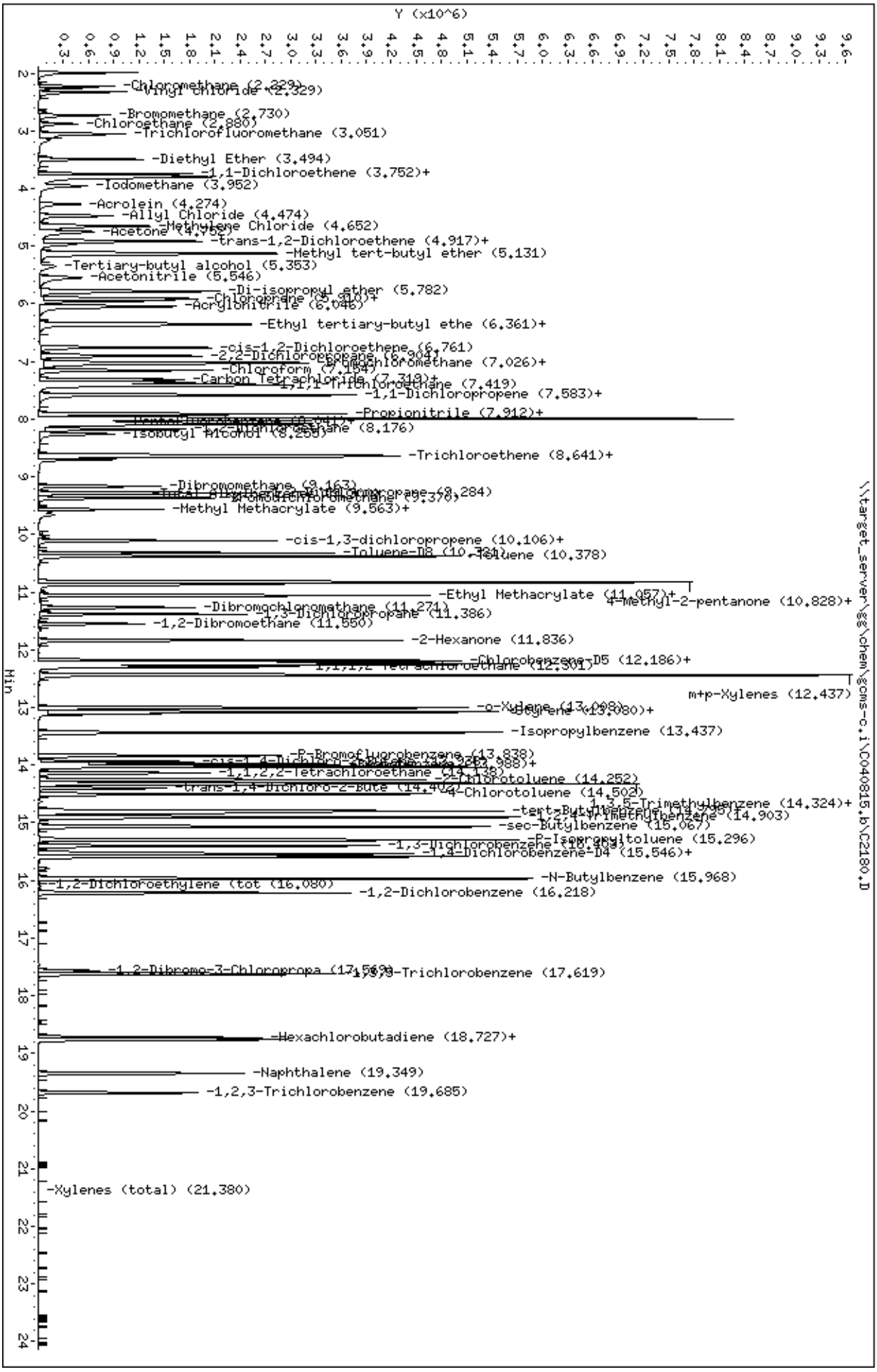
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	80 N-Propylbenzene	91	14.030	14.024	(0.904)	4353832	200.000	174	
	81 1,1,2,2-Tetrachloroethane	83	14.137	14.131	(0.911)	1091281	200.000	190	
	82 1,3,5-Trimethylbenzene	105	14.323	14.317	(0.923)	3413517	200.000	175	
	83 2-Chlorotoluene	91	14.259	14.252	(0.919)	2928995	200.000	178	
	84 1,2,3-Trichloropropane	75	14.330	14.331	(0.924)	929698	200.000	180	
	85 4-Chlorotoluene	91	14.502	14.502	(0.935)	2972215	200.000	178	
	86 tert-Butylbenzene	119	14.795	14.788	(0.953)	3257076	200.000	192	
	87 Pentachloroethane	117	14.823	14.824	(0.955)	747774	200.000	216(A)	
	88 1,2,4-Trimethylbenzene	105	14.902	14.903	(0.960)	3438952	200.000	181	
	89 P-Isopropyltoluene	119	15.295	15.296	(0.986)	3431984	200.000	185	
	90 1,3-Dichlorobenzene	146	15.402	15.396	(0.993)	1674882	200.000	185	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	347312	50.0000		
	92 1,4-Dichlorobenzene	146	15.545	15.539	(1.002)	1780870	200.000	180	
	93 N-Butylbenzene	91	15.967	15.968	(1.029)	3642654	200.000	184	
	94 sec-Butylbenzene	105	15.067	15.067	(0.971)	4024264	200.000	176	
	95 1,2-Dichlorobenzene	146	16.217	16.218	(1.045)	1553136	200.000	190	
	96 1,2-Dibromo-3-Chloropropane	75	17.568	17.562	(1.132)	239826	200.000	200(A)	
	97 1,3,5-Trichlorobenzene	180	17.625	17.619	(1.136)	1214070	200.000	199	
	98 Hexachlorobutadiene	225	18.726	18.720	(1.207)	592498	200.000	200	
	99 1,2,4-Trichlorobenzene	180	18.762	18.763	(1.209)	971578	200.000	200	
	100 1,2,3-Trimethylbenzene	105	15.588	15.582	(1.005)	3138352	200.000	174	
	101 Naphthalene	128	19.348	19.349	(1.247)	2041182	200.000	200(A)	
	102 1,2,3-Trichlorobenzene	180	19.684	19.685	(1.269)	629222	200.000	200(A)	
	103 Methyl Acetate	43	4.974	4.967	(0.619)	766108	200.000	223(A)	
	104 Methylcyclohexane	83	8.626	8.627	(1.073)	1530842	200.000	208(A)	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2180.D
Date : 08-APR-2015 13:34
Client ID: Initial Calibration
Sample Info: WG160924-6
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2181.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2181.D
Lab Smp Id: WG160924-5 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 14:06 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-5
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.989	1.986	(0.247)	606325	100.000	96.1	
2 Chloromethane	50	2.232	2.229	(0.278)	790259	100.000	95.6	
3 Vinyl chloride	62	2.325	2.322	(0.289)	614367	100.000	101	
4 Bromomethane	94	2.725	2.730	(0.339)	308622	100.000	102	
5 Chloroethane	64	2.882	2.880	(0.358)	227436	100.000	97.7	
6 Trichlorofluoromethane	101	3.054	3.051	(0.380)	633154	100.000	86.2	
7 Diethyl Ether	59	3.490	3.487	(0.434)	386539	100.000	93.2	
8 Tertiary-butyl alcohol	59	5.348	5.353	(0.665)	273266	500.000	560	
9 1,1-Dichloroethene	96	3.747	3.745	(0.466)	414434	100.000	97.0	
10 Carbon Disulfide	76	3.783	3.780	(0.470)	1272587	100.000	105	
11 Freon-113	151	3.811	3.809	(0.474)	284989	100.000	97.1	
12 Iodomethane	142	3.954	3.952	(0.492)	482227	100.000	99.6	
13 Acrolein	56	4.269	4.267	(0.531)	338660	500.000	525	
14 Methylene Chloride	84	4.648	4.645	(0.578)	501477	100.000	101	
15 Acetone	43	4.748	4.753	(0.590)	798621	500.000	518	
16 Isobutyl Alcohol	43	8.250	8.255	(1.026)	426302	2000.00	2410	
17 trans-1,2-Dichloroethene	96	4.912	4.917	(0.611)	479270	100.000	99.4	
18 Allyl Chloride	41	4.469	4.474	(0.556)	471997	100.000	103	
19 Methyl tert-butyl ether	73	5.127	5.124	(0.637)	2240164	200.000	209	
20 Acetonitrile	39	5.548	5.546	(0.690)	129283	1000.00	1070	
21 Di-isopropyl ether	45	5.784	5.782	(0.719)	1412038	100.000	104	
22 Chloroprene	53	5.906	5.911	(0.734)	726941	100.000	102	
23 Propionitrile	54	7.972	7.962	(0.991)	700830	1000.00	961	
24 Methacrylonitrile	41	7.993	7.984	(0.994)	2334204	1000.00	890	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2181.D
Report Date: 10-Apr-2015 09:24

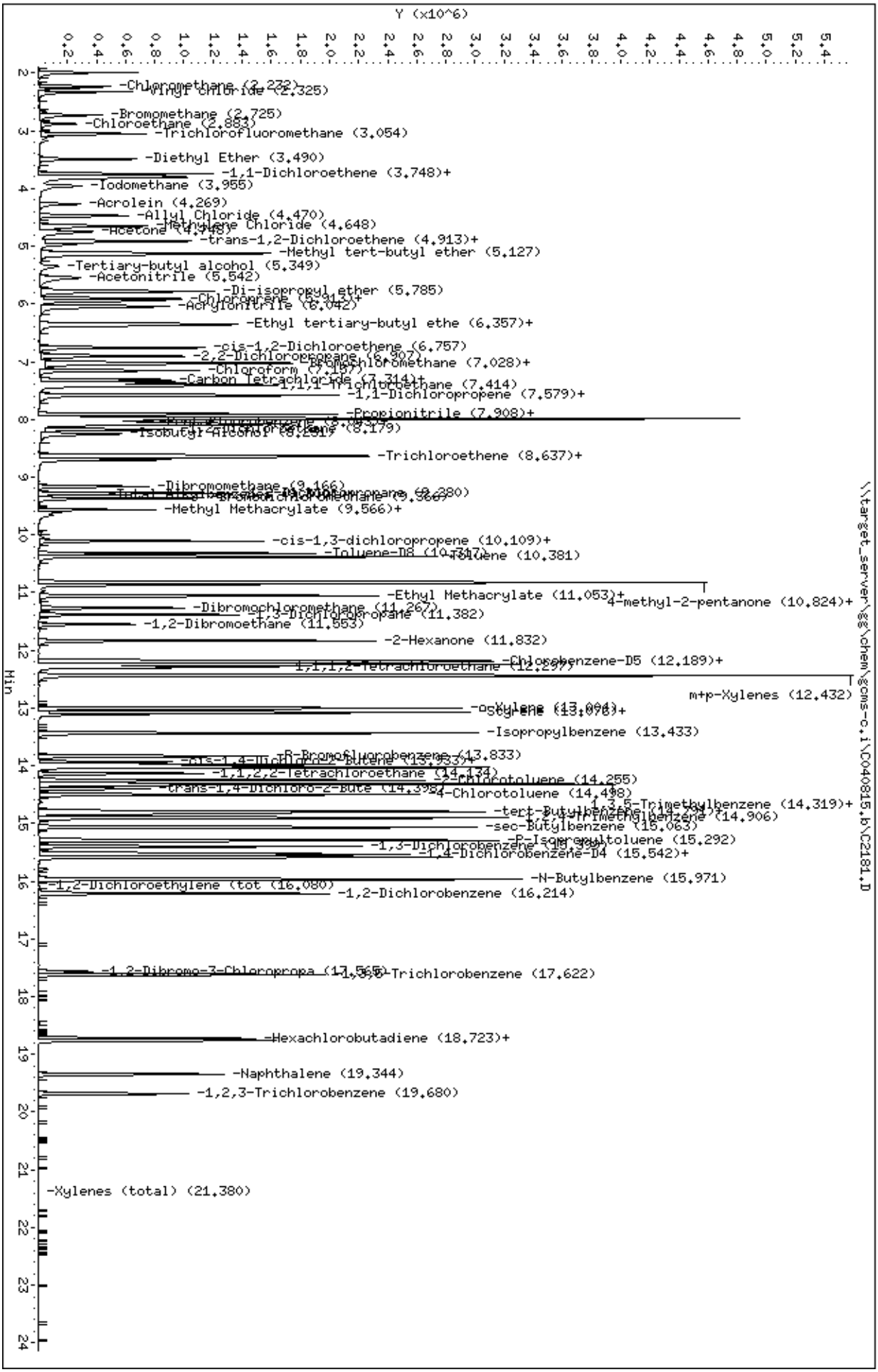
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.949	5.946	(0.740)	940966	100.000	100	
	26 Acrylonitrile	52	6.042	6.039	(0.751)	805625	500.000	493	
	27 Ethyl tertiary-butyl ether	59	6.349	6.347	(0.789)	1312308	100.000	107	
	28 Vinyl Acetate	43	6.370	6.368	(0.732)	1053589	100.000	101	
	29 cis-1,2-Dichloroethene	96	6.756	6.761	(0.840)	494860	100.000	99.4	
	31 Methyl Methacrylate	41	9.566	9.563	(1.099)	362113	100.000	99.9	
	32 2,2-Dichloropropane	77	6.906	6.904	(0.859)	808537	100.000	104	
	33 Bromochloromethane	128	7.035	7.033	(0.875)	193296	100.000	97.0	
	34 Chloroform	83	7.157	7.154	(0.890)	949792	100.000	97.7	
	35 Carbon Tetrachloride	117	7.314	7.312	(0.841)	628712	100.000	108	
	36 Tetrahydrofuran	42	7.357	7.362	(0.915)	685158	500.000	520	
$	37 Dibromofluoromethane	113	7.400	7.405	(0.920)	366962	100.000	101	
	38 1,1,1-Trichloroethane	97	7.414	7.412	(0.922)	886378	100.000	96.4	
	39 1,1-Dichloropropene	75	7.578	7.583	(0.871)	693938	100.000	101	
	40 2-Butanone	43	7.578	7.583	(0.942)	1060379	500.000	513	
	41 Benzene	78	7.907	7.905	(0.909)	1717579	100.000	99.2	
*	42 Pentafluorobenzene	168	8.043	8.041	(1.000)	363005	50.0000		
	43 Cyclohexane	56	7.021	7.019	(0.873)	822810	100.000	104	
	44 Ethyl Methacrylate	69	11.059	11.057	(1.271)	497029	100.000	106	
$	45 1,2-Dichloroethane-D4	65	8.093	8.090	(1.006)	453509	100.000	93.1	
	46 Tertiary-amyl methyl ether	73	8.079	8.076	(1.004)	1010242	100.000	108	
	47 1,2-Dichloroethane	62	8.179	8.177	(0.940)	743312	100.000	90.4	
	48 Trichloroethene	95	8.651	8.648	(0.994)	495835	100.000	94.1	
*	49 1,4-Difluorobenzene	114	8.701	8.698	(1.000)	614202	50.0000		
	50 Dibromomethane	93	9.165	9.163	(1.053)	291490	100.000	95.0	
	51 1,2-Dichloropropane	63	9.280	9.284	(1.067)	460390	100.000	101	
	52 Bromodichloromethane	83	9.365	9.370	(1.076)	723437	100.000	106	
	53 cis-1,3-dichloropropene	75	10.109	10.106	(1.162)	811000	100.000	111	
	54 1,4-Dioxane	88	9.608	9.606	(1.104)	131159	2000.00	3000	
$	55 Toluene-D8	98	10.316	10.321	(1.186)	1136901	100.000	101	
	56 2-Chloroethylvinylether	63	10.044	10.049	(1.154)	11582	100.000	97.8	
	57 Toluene	92	10.380	10.378	(1.193)	1126410	100.000	100	
	58 4-methyl-2-pentanone	43	10.824	10.828	(1.244)	1903151	500.000	485	
	59 Tetrachloroethene	164	10.816	10.821	(0.887)	359299	100.000	95.8	
	60 trans-1,3-Dichloropropene	75	10.866	10.871	(1.249)	734058	100.000	107	
	61 1,1,2-Trichloroethane	83	11.052	11.057	(1.270)	342776	100.000	99.5	
	62 Dibromochloromethane	129	11.267	11.264	(0.924)	506126	100.000	99.5	
	63 1,3-Dichloropropane	76	11.381	11.379	(0.934)	760675	100.000	101	
	64 1,2-Dibromoethane	107	11.553	11.550	(1.328)	456702	100.000	102	
	65 2-Hexanone	43	11.831	11.836	(0.971)	1486411	500.000	522	
*	66 Chlorobenzene-D5	117	12.189	12.187	(1.000)	587786	50.0000		
	67 Chlorobenzene	112	12.210	12.208	(1.002)	1180717	100.000	98.2	
	152 1-Chlorohexane	91	12.182	12.179	(0.999)	708128	100.000	102	
	68 Ethylbenzene	106	12.246	12.244	(1.005)	692120	100.000	101	
	69 1,1,1,2-Tetrachloroethane	131	12.296	12.294	(1.009)	490215	100.000	108	
	71 m+p-Xylenes	106	12.432	12.437	(1.020)	1611338	200.000	203	
	72 o-Xylene	106	13.004	13.001	(1.067)	800691	100.000	110	
	73 Styrene	104	13.075	13.080	(1.073)	1402329	100.000	108	
	74 Bromoform	173	13.111	13.116	(1.076)	321759	100.000	99.1	
	75 Isopropylbenzene	105	13.433	13.437	(0.866)	2158760	100.000	99.5	
$	76 P-Bromofluorobenzene	95	13.833	13.838	(1.590)	625208	100.000	105	
	77 cis-1,4-Dichloro-2-Butene	53	13.933	13.938	(0.898)	227481	100.000	95.6	
	78 trans-1,4-Dichloro-2-Butene	53	14.398	14.395	(0.928)	185418	100.000	97.0	
	79 Bromobenzene	156	13.983	13.981	(0.901)	532873	100.000	100	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2181.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	80 N-Propylbenzene	91	14.026	14.024	(0.904)	2581964	100.000	97.5	
	81 1,1,2,2-Tetrachloroethane	83	14.133	14.131	(0.911)	601697	100.000	99.0	
	82 1,3,5-Trimethylbenzene	105	14.319	14.317	(0.923)	1999079	100.000	96.9	
	83 2-Chlorotoluene	91	14.255	14.252	(0.918)	1688934	100.000	97.2	
	84 1,2,3-Trichloropropane	75	14.333	14.331	(0.924)	509657	100.000	93.9	
	85 4-Chlorotoluene	91	14.498	14.502	(0.934)	1713170	100.000	97.2	
	86 tert-Butylbenzene	119	14.791	14.788	(0.953)	1830181	100.000	101	
	87 Pentachloroethane	117	14.819	14.824	(0.955)	395668	100.000	99.4	
	88 1,2,4-Trimethylbenzene	105	14.905	14.903	(0.960)	2008407	100.000	99.3	
	89 P-Isopropyltoluene	119	15.291	15.296	(0.985)	1981112	100.000	100	
	90 1,3-Dichlorobenzene	146	15.398	15.396	(0.992)	918209	100.000	96.0	
*	91 1,4-Dichlorobenzene-D4	152	15.520	15.518	(1.000)	369268	50.0000		
	92 1,4-Dichlorobenzene	146	15.541	15.539	(1.001)	984195	100.000	94.6	
	93 N-Butylbenzene	91	15.970	15.968	(1.029)	2108601	100.000	105	
	94 sec-Butylbenzene	105	15.062	15.067	(0.971)	2327469	100.000	96.5	
	95 1,2-Dichlorobenzene	146	16.213	16.218	(1.045)	843252	100.000	97.4	
	96 1,2-Dibromo-3-Chloropropane	75	17.564	17.562	(1.132)	124589	100.000	99.0	
	97 1,3,5-Trichlorobenzene	180	17.621	17.619	(1.135)	668233	100.000	102	
	98 Hexachlorobutadiene	225	18.722	18.720	(1.206)	337044	100.000	105	
	99 1,2,4-Trichlorobenzene	180	18.758	18.763	(1.209)	539676	100.000	104	
	100 1,2,3-Trimethylbenzene	105	15.584	15.582	(1.004)	1793805	100.000	94.6	
	101 Naphthalene	128	19.351	19.349	(1.247)	1120569	100.000	103	
	102 1,2,3-Trichlorobenzene	180	19.680	19.685	(1.268)	351310	100.000	104	
	103 Methyl Acetate	43	4.969	4.967	(0.618)	392569	100.000	107	
	104 Methylcyclohexane	83	8.629	8.627	(1.073)	817675	100.000	105	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2181.D
Date : 08-APR-2015 14:06
Client ID: Initial Calibration
Sample Info: WG160924-5
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Lab Smp Id: WG160924-7 Client Smp ID: Independent Source
Inj Date : 08-APR-2015 14:53 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-7
Misc Info : WG160924,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 7 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	334890	51.3109	51.3	
2 Chloromethane	50	2.229	2.229	(0.277)	409595	47.8800	47.9	
3 Vinyl chloride	62	2.329	2.322	(0.290)	303019	48.1451	48.1	
4 Bromomethane	94	2.729	2.730	(0.339)	159436	50.5233	50.5	
5 Chloroethane	64	2.879	2.880	(0.358)	115324	45.9998	46.0	
6 Trichlorofluoromethane	101	3.058	3.051	(0.380)	332220	43.7269	43.7	
7 Diethyl Ether	59	3.487	3.487	(0.434)	203825	47.4934	47.5	
8 Tertiary-butyl alcohol	59	5.345	5.353	(0.665)	143553	284.268	284	
9 1,1-Dichloroethene	96	3.744	3.745	(0.466)	225046	50.8899	50.9	
10 Carbon Disulfide	76	3.780	3.780	(0.470)	663440	52.7731	52.8	
11 Freon-113	151	3.808	3.809	(0.474)	159009	52.3502	52.4	
12 Iodomethane	142	3.959	3.952	(0.492)	258055	51.5185	51.5	
13 Acrolein	56	4.266	4.267	(0.531)	182990	274.111	274	
14 Methylene Chloride	84	4.645	4.645	(0.578)	256192	49.3277	49.3	
15 Acetone	43	4.752	4.753	(0.591)	102929	64.5838	64.6(R)	
16 Isobutyl Alcohol	43	8.626	8.255	(1.073)	26892	146.855	147(R)	
17 trans-1,2-Dichloroethene	96	4.916	4.917	(0.612)	241758	48.4292	48.4	
18 Allyl Chloride	41	4.473	4.474	(0.556)	251900	52.9651	53.0	
19 Methyl tert-butyl ether	73	5.124	5.124	(0.637)	1244278	112.401	112	
20 Acetonitrile	39	5.545	5.546	(0.690)	60020	479.886	480	
21 Di-isopropyl ether	45	5.781	5.782	(0.719)	765485	54.5492	54.5	
22 Chloroprene	53	5.910	5.911	(0.735)	389627	53.0191	53.0	
23 Propionitrile	54	7.961	7.962	(0.990)	390726	517.729	518	
24 Methacrylonitrile	41	7.983	7.984	(0.993)	1355260	499.152	499	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.946	5.946	(0.740)	499560	51.5814	51.6	
	26 Acrylonitrile	52	6.039	6.039	(0.751)	453062	267.765	268	
	27 Ethyl tertiary-butyl ether	59	6.346	6.347	(0.789)	698592	55.0212	55.0	
	28 Vinyl Acetate	43	6.367	6.368	(0.732)	573133	56.3242	56.3	
	29 cis-1,2-Dichloroethene	96	6.753	6.761	(0.840)	252670	49.0540	49.0	
M	30 1,2-Dichloroethylene (total)	96				494428	97.4832	97.5	
	31 Methyl Methacrylate	41	9.563	9.563	(1.099)	188513	50.8563	50.8	
	32 2,2-Dichloropropane	77	6.904	6.904	(0.859)	403399	50.0355	50.0	
	33 Bromochloromethane	128	7.032	7.033	(0.875)	107473	52.0935	52.1	
	34 Chloroform	83	7.154	7.154	(0.890)	497888	49.4876	49.5	
	35 Carbon Tetrachloride	117	7.311	7.312	(0.841)	314088	52.6918	52.7	
	36 Tetrahydrofuran	42	7.361	7.362	(0.916)	74242	54.4861	54.5	
$	37 Dibromofluoromethane	113	7.397	7.405	(0.920)	196973	52.2656	52.3	
	38 1,1,1-Trichloroethane	97	7.411	7.412	(0.922)	460587	48.4293	48.4	
	39 1,1-Dichloropropene	75	7.583	7.583	(0.872)	374331	53.0899	53.1	
	40 2-Butanone	43	7.583	7.583	(0.943)	127764	53.8998	53.9	
	41 Benzene	78	7.904	7.905	(0.909)	911943	51.4512	51.4	
*	42 Pentafluorobenzene	168	8.040	8.041	(1.000)	375671	50.0000		
	43 Cyclohexane	56	7.018	7.019	(0.873)	416292	50.6438	50.6	
	44 Ethyl Methacrylate	69	11.057	11.057	(1.271)	269189	56.2190	56.2	
$	45 1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	266821	52.9163	52.9	
	46 Tertiary-amyl methyl ether	73	8.076	8.076	(1.004)	528635	54.5344	54.5	
	47 1,2-Dichloroethane	62	8.176	8.177	(0.940)	399163	47.3851	47.4	
	48 Trichloroethene	95	8.648	8.648	(0.994)	265157	49.1588	49.2	
*	49 1,4-Difluorobenzene	114	8.698	8.698	(1.000)	629003	50.0000		
	50 Dibromomethane	93	9.162	9.163	(1.053)	153275	48.7768	48.8	
	51 1,2-Dichloropropane	63	9.284	9.284	(1.067)	247108	53.1427	53.1	
	52 Bromodichloromethane	83	9.370	9.370	(1.077)	383589	54.8118	54.8	
	53 cis-1,3-dichloropropene	75	10.106	10.106	(1.162)	404692	53.9540	54.0	
	54 1,4-Dioxane	88	9.606	9.606	(1.104)	80020	1090.27	1090	
$	55 Toluene-D8	98	10.320	10.321	(1.187)	688599	59.6972	59.7	
	56 2-Chloroethylvinylether	63	10.042	10.049	(1.154)	10022	77.3026	77.3(R)	
	57 Toluene	92	10.378	10.378	(1.193)	582935	50.7797	50.8	
	58 4-methyl-2-pentanone	43	10.828	10.828	(1.245)	244669	60.9374	60.9(R)	
	59 Tetrachloroethene	164	10.821	10.821	(0.888)	189018	49.1921	49.2	
	60 trans-1,3-Dichloropropene	75	10.864	10.871	(1.249)	384988	54.7366	54.7	
	61 1,1,2-Trichloroethane	83	11.057	11.057	(1.271)	178719	50.6679	50.7	
	62 Dibromochloromethane	129	11.264	11.264	(0.924)	255951	49.5818	49.6	
	63 1,3-Dichloropropane	76	11.378	11.379	(0.934)	400618	52.0124	52.0	
	64 1,2-Dibromoethane	107	11.550	11.550	(1.328)	240298	52.3599	52.4	
	65 2-Hexanone	43	11.836	11.836	(0.971)	186455	54.7843	54.8	
*	66 Chlorobenzene-D5	117	12.186	12.187	(1.000)	601919	50.0000		
	67 Chlorobenzene	112	12.207	12.208	(1.002)	659439	53.5505	53.6	
	152 1-Chlorohexane	91	12.179	12.179	(0.999)	373250	52.6931	52.7	
	68 Ethylbenzene	106	12.243	12.244	(1.005)	352704	50.5032	50.5	
	69 1,1,1,2-Tetrachloroethane	131	12.293	12.294	(1.009)	248073	53.3890	53.4	
M	70 Xylenes (total)	106				1308104	165.707	166	
	71 m+p-Xylenes	106	12.436	12.437	(1.021)	871403	106.995	107	
	72 o-Xylene	106	13.001	13.001	(1.067)	436701	58.7116	58.7	
	73 Styrene	104	13.079	13.080	(1.073)	725014	54.5367	54.5	
	74 Bromoform	173	13.115	13.116	(1.076)	159013	48.4475	48.4	
	75 Isopropylbenzene	105	13.437	13.437	(0.866)	1228311	56.7292	56.7	
$	76 P-Bromofluorobenzene	95	13.837	13.838	(1.591)	317523	52.3157	52.3	
	77 cis-1,4-Dichloro-2-Butene	53	13.937	13.938	(0.898)	114715	48.9440	48.9	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

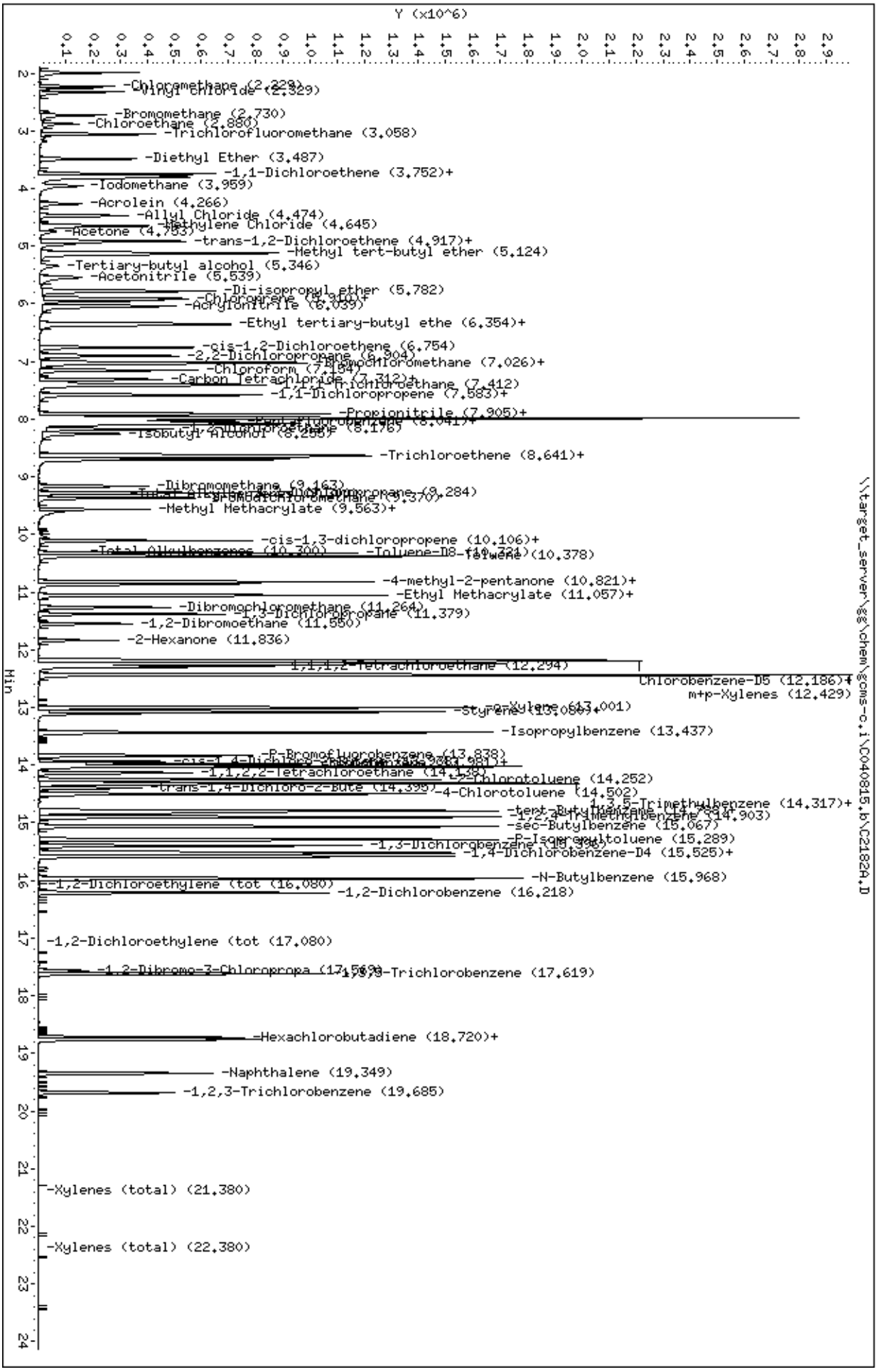
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
78 trans-1,4-Dichloro-2-Butene	53	14.395	14.395	(0.928)	90667	47.8076	47.8	
79 Bromobenzene	156	13.980	13.981	(0.901)	278812	52.7325	52.7	
80 N-Propylbenzene	91	14.023	14.024	(0.904)	1504603	56.9553	57.0	
81 1,1,2,2-Tetrachloroethane	83	14.137	14.131	(0.911)	314450	51.8496	51.8	
82 1,3,5-Trimethylbenzene	105	14.316	14.317	(0.923)	1040475	50.5508	50.6	
83 2-Chlorotoluene	91	14.252	14.252	(0.918)	936724	54.0282	54.0	
84 1,2,3-Trichloropropane	75	14.330	14.331	(0.924)	272757	50.3767	50.4	
85 4-Chlorotoluene	91	14.502	14.502	(0.935)	985937	56.0903	56.1	
86 tert-Butylbenzene	119	14.788	14.788	(0.953)	1018895	56.4543	56.4	
87 Pentachloroethane	117	14.824	14.824	(0.955)	201915	54.2450	54.2	
88 1,2,4-Trimethylbenzene	105	14.902	14.903	(0.960)	1061329	52.6243	52.6	
89 P-Isopropyltoluene	119	15.295	15.296	(0.986)	1105946	56.2885	56.3	
90 1,3-Dichlorobenzene	146	15.395	15.396	(0.992)	516318	54.0932	54.1	
* 91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	368395	50.0000		
92 1,4-Dichlorobenzene	146	15.538	15.539	(1.001)	513934	49.5277	49.5	
93 N-Butylbenzene	91	15.967	15.968	(1.029)	1113774	54.1082	54.1	
94 sec-Butylbenzene	105	15.067	15.067	(0.971)	1325087	55.0742	55.1	
95 1,2-Dichlorobenzene	146	16.217	16.218	(1.045)	469845	54.3968	54.4	
96 1,2-Dibromo-3-Chloropropane	75	17.561	17.562	(1.132)	60855	49.2534	49.2	
97 1,3,5-Trichlorobenzene	180	17.618	17.619	(1.135)	348184	53.1550	53.2	
98 Hexachlorobutadiene	225	18.719	18.720	(1.206)	169749	51.8734	51.9	
99 1,2,4-Trichlorobenzene	180	18.762	18.763	(1.209)	272263	52.3652	52.4	
100 1,2,3-Trimethylbenzene	105	15.581	15.582	(1.004)	975931	51.5653	51.6	
101 Naphthalene	128	19.348	19.349	(1.247)	547561	51.5748	51.6	
102 1,2,3-Trichlorobenzene	180	19.684	19.685	(1.269)	175255	52.0281	52.0	
103 Methyl Acetate	43	4.974	4.967	(0.619)	202638	53.6103	53.6	
104 Methylcyclohexane	83	8.626	8.627	(1.073)	445236	55.2186	55.2	
M 153 Total Alkylbenzenes	100				8170109	382.056	382	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Date : 08-APR-2015 14:53
Client ID: Independent Source
Sample Info: WG160924-7
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG160655-4
Analytical Date: 04/02/15 08:52
Lab File ID : C2041.D
Instrument ID: GCMS-C
Initial Calibration Date(s): 03/28/15 11:07 03/28/15 14:44
Column ID:

	Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1	Dichlorodifluoromethane	0.55172	0.48208	0.48208	0.010	-12.62338	20.00000	Averaged	
2	Chloromethane	50.00000	47.23891	0.74543	0.100	-5.52217	20.00000	Linear	
3	Vinyl chloride	0.67459	0.59812	0.59812	0.010	-11.33500	20.00000	Averaged	
4	Bromomethane	50.00000	46.74299	0.26978	0.010	-6.51402	20.00000	Linear	
5	Chloroethane	50.00000	60.79893	0.26784	0.010	21.59786	20.00000	Linear	*
6	Trichlorofluoromethane	0.66929	0.68162	0.68162	0.010	1.84226	20.00000	Averaged	
9	1,1-Dichloroethene	0.45589	0.42110	0.42110	0.100	-7.62997	20.00000	Averaged	
10	Carbon Disulfide	50.00000	43.02502	0.26381	0.010	-13.94996	20.00000	Linear	
11	Freon-113	0.22130	0.21382	0.21382	0.010	-3.38193	20.00000	Averaged	
14	Methylene Chloride	0.56975	0.53438	0.53438	0.010	-6.20671	20.00000	Averaged	
15	Acetone	0.15382	0.15310	0.15310	0.010	-0.47243	20.00000	Averaged	
17	trans-1,2-Dichloroethene	0.54699	0.49472	0.49472	0.010	-9.55654	20.00000	Averaged	
19	Methyl tert-butyl ether	1.09948	1.18087	1.18087	0.010	7.40284	20.00000	Averaged	
25	1,1-Dichloroethane	0.99541	1.00723	1.00723	0.100	1.18729	20.00000	Averaged	
29	cis-1,2-Dichloroethene	0.56628	0.54125	0.54125	0.010	-4.41948	20.00000	Averaged	
30	1,2-Dichloroethylene (total	++++	1.03597	1.03597	0.010	++++	20.00000	Averaged	*
34	Chloroform	0.98155	1.01261	1.01261	0.010	3.16436	20.00000	Averaged	
35	Carbon Tetrachloride	50.00000	54.60858	0.37971	0.010	9.21717	20.00000	Linear	
38	1,1,1-Trichloroethane	0.89319	0.92516	0.92516	0.010	3.57894	20.00000	Averaged	
40	2-Butanone	0.20160	0.23163	0.23163	0.010	14.89711	20.00000	Averaged	
41	Benzene	1.13806	1.07256	1.07256	0.010	-5.75488	20.00000	Averaged	
43	Cyclohexane	0.45317	0.45816	0.45816	0.010	1.10195	20.00000	Averaged	
47	1,2-Dichloroethane	0.41765	0.46424	0.46424	0.010	11.15537	20.00000	Averaged	
48	Trichloroethene	0.32412	0.30632	0.30632	0.010	-5.49235	20.00000	Averaged	
51	1,2-Dichloropropane	0.28746	0.27942	0.27942	0.010	-2.79621	20.00000	Averaged	
52	Bromodichloromethane	0.39691	0.43482	0.43482	0.010	9.55110	20.00000	Averaged	
53	cis-1,3-dichloropropene	0.47746	0.49366	0.49366	0.010	3.39301	20.00000	Averaged	
57	Toluene	0.73998	0.70699	0.70699	0.010	-4.45754	20.00000	Averaged	
58	4-methyl-2-pentanone	0.22690	0.25471	0.25471	0.010	12.25777	20.00000	Averaged	
59	Tetrachloroethene	0.25478	0.24210	0.24210	0.010	-4.97779	20.00000	Averaged	
60	trans-1,3-Dichloropropene	0.41051	0.45492	0.45492	0.010	10.81799	20.00000	Averaged	
61	1,1,2-Trichloroethane	0.20704	0.21432	0.21432	0.010	3.51957	20.00000	Averaged	
62	Dibromochloromethane	0.30293	0.33155	0.33155	0.010	9.44723	20.00000	Averaged	
64	1,2-Dibromoethane	0.27781	0.27576	0.27576	0.010	-0.73835	20.00000	Averaged	
65	2-Hexanone	0.17764	0.20520	0.20520	0.010	15.51085	20.00000	Averaged	
67	Chlorobenzene	0.82325	0.80732	0.80732	0.300	-1.93596	20.00000	Averaged	
68	Ethylbenzene	0.49372	0.46651	0.46651	0.010	-5.51009	20.00000	Averaged	
70	Xylenes (total)	++++	0.54108	0.54108	0.010	++++	20.00000	Averaged	*
71	m+p-Xylenes	0.57534	0.54671	0.54671	0.010	-4.97615	20.00000	Averaged	
72	o-Xylene	0.54923	0.52982	0.52982	0.010	-3.53351	20.00000	Averaged	
73	Styrene	0.93240	0.94855	0.94855	0.010	1.73235	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG160655-4
Analytical Date: 04/02/15 08:52
Lab File ID : C2041.D
Instrument ID: GCMS-C
Initial Calibration Date(s): 03/28/15 11:07 03/28/15 14:44
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
74 Bromoform	0.19736	0.20271	0.20271	0.100	2.71258	20.00000	Averaged
75 Isopropylbenzene	2.73969	2.59768	2.59768	0.010	-5.18357	20.00000	Averaged
81 1,1,2,2-Tetrachloroethane	0.71385	0.71641	0.71641	0.300	0.35935	20.00000	Averaged
90 1,3-Dichlorobenzene	1.18107	1.09989	1.09989	0.010	-6.87326	20.00000	Averaged
92 1,4-Dichlorobenzene	1.26236	1.17889	1.17889	0.010	-6.61212	20.00000	Averaged
95 1,2-Dichlorobenzene	1.05850	1.01538	1.01538	0.010	-4.07370	20.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.12085	0.12197	0.12197	0.010	0.92714	20.00000	Averaged
99 1,2,4-Trichlorobenzene	50.00000	48.21278	0.59216	0.010	-3.57443	20.00000	Linear
103 Methyl Acetate	0.31280	0.29692	0.29692	0.010	-5.07466	20.00000	Averaged
104 Methylcyclohexane	0.56997	0.56516	0.56516	0.010	-0.84498	20.00000	Averaged
37 Dibromofluoromethane	0.34733	0.37940	0.37940	0.010	9.23453	20.00000	Averaged
45 1,2-Dichloroethane-D4	0.45243	0.52846	0.52846	0.010	16.80647	20.00000	Averaged
55 Toluene-D8	0.78162	0.77463	0.77463	0.010	-0.89465	20.00000	Averaged
76 P-Bromofluorobenzene	0.35675	0.36684	0.36684	0.010	2.82882	20.00000	Averaged

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2041.D
Report Date: 23-Apr-2015 16:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040215.b\C2041.D
Lab Smp Id: WG160655-4
Inj Date : 02-APR-2015 08:52 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160655-4,SI2008
Misc Info : WG160655,WG160458-4,SI2008-3
Comment : SW846 5030
Method : \\TARGET_SERVER\GG\chem\gcms-c.i\C040215.b\C826A34.m
Meth Date : 23-Apr-2015 16:09 gcms-c.i Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.987	1.986	(0.247)	203126	50.0000	43.7	
2 Chloromethane	50	2.230	2.229	(0.277)	314090	50.0000	47.2	
3 Vinyl chloride	62	2.323	2.329	(0.289)	252022	50.0000	44.3	
4 Bromomethane	94	2.730	2.729	(0.340)	113673	50.0000	46.7	
5 Chloroethane	64	2.880	2.879	(0.358)	112857	50.0000	60.8	
6 Trichlorofluoromethane	101	3.059	3.058	(0.380)	287203	50.0000	50.9	
7 Diethyl Ether	59	3.488	3.487	(0.434)	87554	50.0000	51.8	
8 Tertiary-butyl alcohol	59	5.346	5.338	(0.665)	86353	250.000	189	
9 1,1-Dichloroethene	96	3.752	3.751	(0.467)	177434	50.0000	46.2	
10 Carbon Disulfide	76	3.781	3.780	(0.470)	111158	50.0000	43.0	
11 Freon-113	151	3.809	3.815	(0.474)	90094	50.0000	48.3	
12 Iodomethane	142	3.952	3.958	(0.492)	121091	50.0000	45.5	
13 Acrolein	56	4.267	4.266	(0.531)	126360	250.000	245	
14 Methylene Chloride	84	4.646	4.652	(0.578)	225165	50.0000	46.9	
15 Acetone	43	4.753	4.745	(0.591)	322541	250.000	249	
16 Isobutyl Alcohol	43	8.248	8.247	(1.026)	120811	1000.00	718	
17 trans-1,2-Dichloroethene	96	4.917	4.916	(0.612)	208451	50.0000	45.2	
18 Allyl Chloride	41	4.474	4.473	(0.556)	254024	50.0000	50.8	
19 Methyl tert-butyl ether	73	5.125	5.123	(0.637)	995135	100.000	107	
20 Acetonitrile	39	5.539	5.538	(0.689)	50811	500.000	484	
21 Di-isopropyl ether	45	5.782	5.781	(0.719)	629630	50.0000	51.5	
22 Chloroprene	53	5.911	5.910	(0.735)	360092	50.0000	52.8	
23 Propionitrile	54	7.962	7.961	(0.990)	299357	500.000	504	
24 Methacrylonitrile	41	7.984	7.983	(0.993)	1150398	500.000	542	

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2041.D
Report Date: 23-Apr-2015 16:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.947	5.946	(0.740)	424401	50.0000	50.6	
	26 Acrylonitrile	52	6.040	6.038	(0.751)	312758	250.000	244	
	27 Ethyl tertiary-butyl ether	59	6.347	6.346	(0.789)	603615	50.0000	52.7	
	28 Vinyl Acetate	43	6.368	6.367	(0.732)	425650	50.0000	54.7	
	29 cis-1,2-Dichloroethene	96	6.761	6.753	(0.841)	228060	50.0000	47.8	
M	30 1,2-Dichloroethylene (total)	96				436511	50.0000	(a)	
	31 Methyl Methacrylate	41	9.563	9.562	(1.099)	166131	50.0000	53.4	
	32 2,2-Dichloropropane	77	6.904	6.903	(0.859)	373532	50.0000	56.1	
	33 Bromochloromethane	128	7.033	7.032	(0.875)	79287	50.0000	50.7	
	34 Chloroform	83	7.155	7.154	(0.890)	426670	50.0000	51.6	
	35 Carbon Tetrachloride	117	7.312	7.318	(0.841)	284071	50.0000	54.6	
	36 Tetrahydrofuran	42	7.355	7.361	(0.915)	255025	250.000	272	
$	37 Dibromofluoromethane	113	7.398	7.397	(0.920)	159862	50.0000	54.6	
	38 1,1,1-Trichloroethane	97	7.412	7.411	(0.922)	389819	50.0000	51.8	
	39 1,1-Dichloropropene	75	7.584	7.582	(0.872)	312755	50.0000	48.5	
	40 2-Butanone	43	7.576	7.575	(0.942)	487999	250.000	287	
	41 Benzene	78	7.905	7.911	(0.909)	802410	50.0000	47.1	
*	42 Pentafluorobenzene	168	8.041	8.039	(1.000)	421355	50.0000		
	43 Cyclohexane	56	7.019	7.018	(0.873)	193048	50.0000	50.6	
	44 Ethyl Methacrylate	69	11.057	11.056	(1.271)	243440	50.0000	53.8	
$	45 1,2-Dichloroethane-D4	65	8.091	8.090	(1.006)	222671	50.0000	58.4	
	46 Tertiary-amyl methyl ether	73	8.077	8.076	(1.004)	459630	50.0000	51.9	
	47 1,2-Dichloroethane	62	8.177	8.176	(0.940)	347312	50.0000	55.6	
	48 Trichloroethene	95	8.649	8.647	(0.994)	229167	50.0000	47.2	
*	49 1,4-Difluorobenzene	114	8.699	8.696	(1.000)	748123	50.0000		
	50 Dibromomethane	93	9.163	9.162	(1.053)	133802	50.0000	49.7	
	51 1,2-Dichloropropane	63	9.285	9.284	(1.067)	209041	50.0000	48.6	
	52 Bromodichloromethane	83	9.363	9.369	(1.076)	325298	50.0000	54.8	
	53 cis-1,3-dichloropropene	75	10.107	10.106	(1.162)	369322	50.0000	51.7	
	54 1,4-Dioxane	88	9.614	9.612	(1.105)	32882	1000.00	367	
$	55 Toluene-D8	98	10.321	10.320	(1.187)	579520	50.0000	49.6	
	56 2-Chloroethylvinylether	63	10.050	10.048	(1.155)	18893	50.0000	41.4	
	57 Toluene	92	10.378	10.377	(1.193)	528916	50.0000	47.8	
	58 4-methyl-2-pentanone	43	10.822	10.828	(1.244)	952781	250.000	281	
	59 Tetrachloroethene	164	10.822	10.820	(0.888)	166907	50.0000	47.5	
	60 trans-1,3-Dichloropropene	75	10.864	10.871	(1.249)	340333	50.0000	55.4	
	61 1,1,2-Trichloroethane	83	11.057	11.056	(1.271)	160340	50.0000	51.8	
	62 Dibromochloromethane	129	11.265	11.271	(0.924)	228574	50.0000	54.7	
	63 1,3-Dichloropropane	76	11.379	11.385	(0.934)	352310	50.0000	51.0	
	64 1,2-Dibromoethane	107	11.551	11.550	(1.328)	206305	50.0000	49.6	
	65 2-Hexanone	43	11.837	11.835	(0.971)	707316	250.000	289	
*	66 Chlorobenzene-D5	117	12.187	12.193	(1.000)	689407	50.0000		
	67 Chlorobenzene	112	12.208	12.214	(1.002)	556569	50.0000	49.0	
	152 1-Chlorohexane	91	12.180	12.186	(0.999)	322016	50.0000	45.9	
	68 Ethylbenzene	106	12.244	12.243	(1.005)	321618	50.0000	47.2	
	69 1,1,1,2-Tetrachloroethane	131	12.294	12.293	(1.009)	217061	50.0000	52.0	
M	70 Xylenes (total)	106				1119078	150.000	(a)	
	71 m+p-Xylenes	106	12.437	12.436	(1.021)	753815	100.000	95.0	
	72 o-Xylene	106	13.002	13.008	(1.067)	365263	50.0000	48.2	
	73 Styrene	104	13.073	13.079	(1.073)	653939	50.0000	50.9	
	74 Bromoform	173	13.116	13.115	(1.076)	139752	50.0000	51.4	
	75 Isopropylbenzene	105	13.438	13.437	(0.866)	1014996	50.0000	47.4	
$	76 P-Bromofluorobenzene	95	13.838	13.837	(1.591)	274442	50.0000	51.4	
	77 cis-1,4-Dichloro-2-Butene	53	13.938	13.937	(0.898)	99167	50.0000	52.9	

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2041.D
Report Date: 23-Apr-2015 16:09

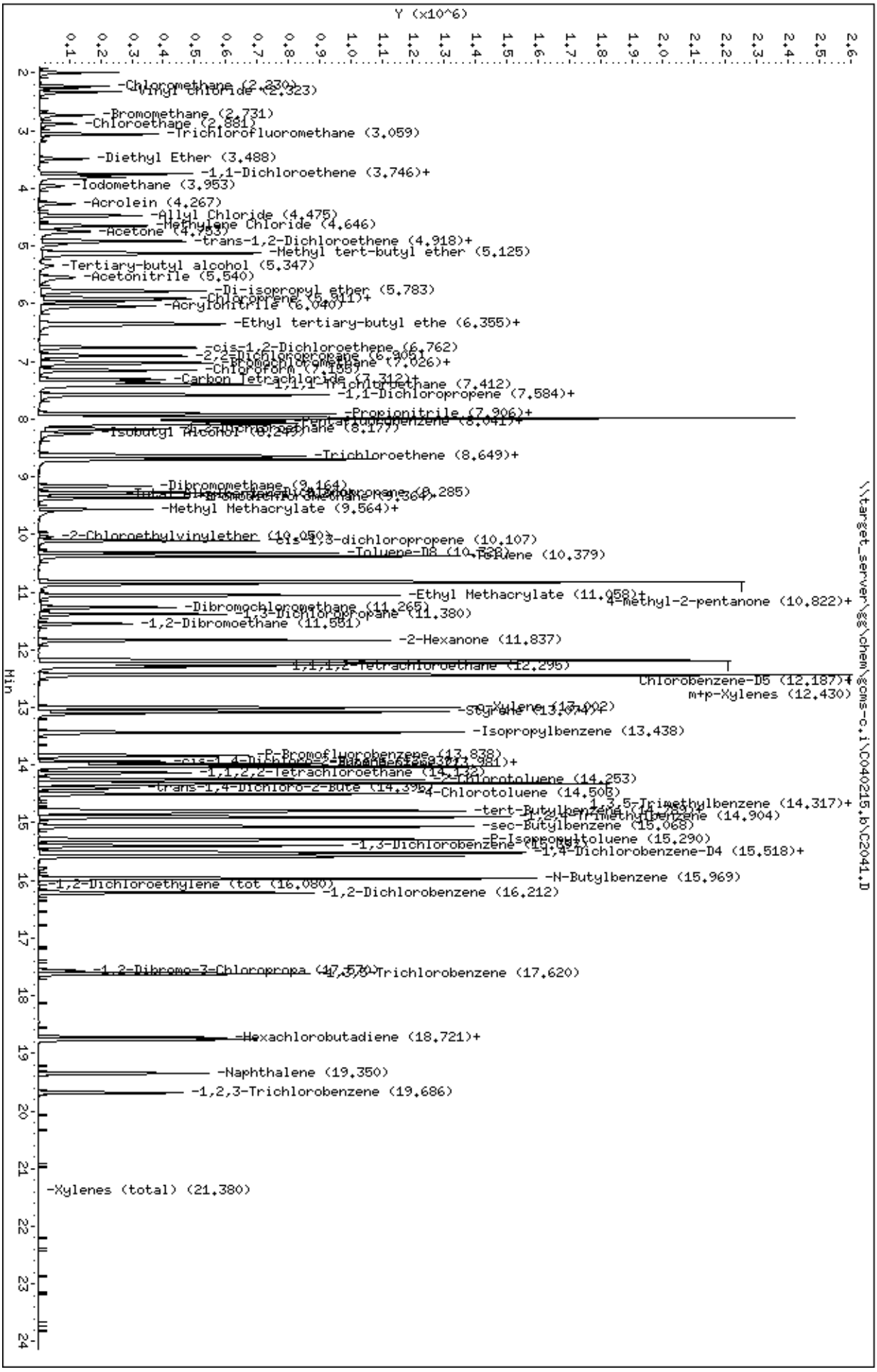
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
78 trans-1,4-Dichloro-2-Butene	53	14.396	14.394	(0.928)	79284	50.0000	52.9	
79 Bromobenzene	156	13.981	13.987	(0.901)	249139	50.0000	47.6	
80 N-Propylbenzene	91	14.024	14.030	(0.904)	1248443	50.0000	48.2	
81 1,1,2,2-Tetrachloroethane	83	14.131	14.137	(0.911)	279926	50.0000	50.2	
82 1,3,5-Trimethylbenzene	105	14.317	14.316	(0.923)	950961	50.0000	48.4	
83 2-Chlorotoluene	91	14.253	14.252	(0.918)	776345	50.0000	47.9	
84 1,2,3-Trichloropropane	75	14.331	14.337	(0.924)	236953	50.0000	51.8	
85 4-Chlorotoluene	91	14.503	14.502	(0.935)	807265	50.0000	49.6	
86 tert-Butylbenzene	119	14.789	14.795	(0.953)	851461	50.0000	48.2	
87 Pentachloroethane	117	14.817	14.823	(0.955)	177172	50.0000	50.7	
88 1,2,4-Trimethylbenzene	105	14.903	14.902	(0.960)	954212	50.0000	49.3	
89 P-Isopropyltoluene	119	15.296	15.295	(0.986)	921041	50.0000	47.6	
90 1,3-Dichlorobenzene	146	15.403	15.402	(0.993)	429762	50.0000	46.6	
* 91 1,4-Dichlorobenzene-D4	152	15.518	15.517	(1.000)	390732	50.0000		
92 1,4-Dichlorobenzene	146	15.539	15.545	(1.001)	460630	50.0000	46.7	
93 N-Butylbenzene	91	15.968	15.967	(1.029)	986345	50.0000	49.7	
94 sec-Butylbenzene	105	15.067	15.066	(0.971)	1102974	50.0000	47.0	
95 1,2-Dichlorobenzene	146	16.218	16.216	(1.045)	396742	50.0000	48.0	
96 1,2-Dibromo-3-Chloropropane	75	17.569	17.568	(1.132)	47657	50.0000	50.5	
97 1,3,5-Trichlorobenzene	180	17.619	17.625	(1.135)	294781	50.0000	46.6	
98 Hexachlorobutadiene	225	18.727	18.726	(1.207)	135773	50.0000	48.6	
99 1,2,4-Trichlorobenzene	180	18.763	18.762	(1.209)	231376	50.0000	48.2	
100 1,2,3-Trimethylbenzene	105	15.582	15.581	(1.004)	857859	50.0000	47.6	
101 Naphthalene	128	19.349	19.348	(1.247)	464394	50.0000	47.3	
102 1,2,3-Trichlorobenzene	180	19.685	19.684	(1.269)	159776	50.0000	50.1	
103 Methyl Acetate	43	4.974	4.973	(0.619)	125110	50.0000	47.5	
104 Methylcyclohexane	83	8.627	8.625	(1.073)	238132	50.0000	49.6	
M 153 Total Alkylbenzenes	100				7015437	50.0000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2041.D
Date : 02-APR-2015 08:52
Client ID:
Sample Info: WG160655-4,SI2008
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG160723-4
Analytical Date: 04/03/15 11:12
Lab File ID : C2067.D
Instrument ID: GCMS-C
Initial Calibration Date(s): 03/28/15 11:07 03/28/15 14:44
Column ID:

	Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1	Dichlorodifluoromethane	0.55172	0.71968	0.71968	0.010	30.44208	20.00000	Averaged	*
2	Chloromethane	50.00000	57.91566	0.90457	0.100	15.83132	20.00000	Linear	
3	Vinyl chloride	0.67459	0.75427	0.75427	0.010	11.81275	20.00000	Averaged	
4	Bromomethane	50.00000	62.06335	0.35514	0.010	24.12669	20.00000	Linear	*
5	Chloroethane	50.00000	83.74014	0.36027	0.010	67.48028	20.00000	Linear	*
6	Trichlorofluoromethane	0.66929	0.89959	0.89959	0.010	34.41041	20.00000	Averaged	*
9	1,1-Dichloroethene	0.45589	0.43514	0.43514	0.100	-4.54991	20.00000	Averaged	
10	Carbon Disulfide	50.00000	42.47241	0.26045	0.010	-15.05517	20.00000	Linear	
11	Freon-113	0.22130	0.18268	0.18268	0.010	-17.45199	20.00000	Averaged	
14	Methylene Chloride	0.56975	0.54330	0.54330	0.010	-4.64235	20.00000	Averaged	
15	Acetone	0.15382	0.13280	0.13280	0.010	-13.66872	20.00000	Averaged	
17	trans-1,2-Dichloroethene	0.54699	0.52921	0.52921	0.010	-3.24975	20.00000	Averaged	
19	Methyl tert-butyl ether	1.09948	1.14348	1.14348	0.010	4.00138	20.00000	Averaged	
25	1,1-Dichloroethane	0.99541	1.06290	1.06290	0.100	6.77981	20.00000	Averaged	
29	cis-1,2-Dichloroethene	0.56628	0.55394	0.55394	0.010	-2.17950	20.00000	Averaged	
30	1,2-Dichloroethylene (total	++++	1.08315	1.08315	0.010	++++	20.00000	Averaged	*
34	Chloroform	0.98155	1.07890	1.07890	0.010	9.91734	20.00000	Averaged	
35	Carbon Tetrachloride	50.00000	59.27175	0.41173	0.010	18.54349	20.00000	Linear	
38	1,1,1-Trichloroethane	0.89319	1.01084	1.01084	0.010	13.17230	20.00000	Averaged	
40	2-Butanone	0.20160	0.18400	0.18400	0.010	-8.72947	20.00000	Averaged	
41	Benzene	1.13806	1.12213	1.12213	0.010	-1.39947	20.00000	Averaged	
43	Cyclohexane	0.45317	0.47712	0.47712	0.010	5.28611	20.00000	Averaged	
47	1,2-Dichloroethane	0.41765	0.47772	0.47772	0.010	14.38298	20.00000	Averaged	
48	Trichloroethene	0.32412	0.32561	0.32561	0.010	0.45978	20.00000	Averaged	
51	1,2-Dichloropropane	0.28746	0.29037	0.29037	0.010	1.01174	20.00000	Averaged	
52	Bromodichloromethane	0.39691	0.45600	0.45600	0.010	14.88753	20.00000	Averaged	
53	cis-1,3-dichloropropene	0.47746	0.51304	0.51304	0.010	7.45056	20.00000	Averaged	
57	Toluene	0.73998	0.73939	0.73939	0.010	-0.07914	20.00000	Averaged	
58	4-methyl-2-pentanone	0.22690	0.20691	0.20691	0.010	-8.81138	20.00000	Averaged	
59	Tetrachloroethene	0.25478	0.24828	0.24828	0.010	-2.55181	20.00000	Averaged	
60	trans-1,3-Dichloropropene	0.41051	0.45685	0.45685	0.010	11.28979	20.00000	Averaged	
61	1,1,2-Trichloroethane	0.20704	0.20484	0.20484	0.010	-1.06026	20.00000	Averaged	
62	Dibromochloromethane	0.30293	0.32276	0.32276	0.010	6.54459	20.00000	Averaged	
64	1,2-Dibromoethane	0.27781	0.27176	0.27176	0.010	-2.17969	20.00000	Averaged	
65	2-Hexanone	0.17764	0.15802	0.15802	0.010	-11.04773	20.00000	Averaged	
67	Chlorobenzene	0.82325	0.81863	0.81863	0.300	-0.56149	20.00000	Averaged	
68	Ethylbenzene	0.49372	0.47219	0.47219	0.010	-4.36087	20.00000	Averaged	
70	Xylenes (total)	++++	0.55197	0.55197	0.010	++++	20.00000	Averaged	*
71	m+p-Xylenes	0.57534	0.56265	0.56265	0.010	-2.20525	20.00000	Averaged	
72	o-Xylene	0.54923	0.53061	0.53061	0.010	-3.38917	20.00000	Averaged	
73	Styrene	0.93240	0.95391	0.95391	0.010	2.30713	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG160723-4
Analytical Date: 04/03/15 11:12
Lab File ID : C2067.D
Instrument ID: GCMS-C
Initial Calibration Date(s): 03/28/15 11:07 03/28/15 14:44
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
74 Bromoform	0.19736	0.18824	0.18824	0.100	-4.61842	20.00000	Averaged	
75 Isopropylbenzene	2.73969	2.79757	2.79757	0.010	2.11242	20.00000	Averaged	
81 1,1,2,2-Tetrachloroethane	0.71385	0.63427	0.63427	0.300	-11.14848	20.00000	Averaged	
90 1,3-Dichlorobenzene	1.18107	1.15625	1.15625	0.010	-2.10091	20.00000	Averaged	
92 1,4-Dichlorobenzene	1.26236	1.21448	1.21448	0.010	-3.79247	20.00000	Averaged	
95 1,2-Dichlorobenzene	1.05850	1.03958	1.03958	0.010	-1.78744	20.00000	Averaged	
96 1,2-Dibromo-3-Chloropropane	0.12085	0.09837	0.09837	0.010	-18.60167	20.00000	Averaged	
99 1,2,4-Trichlorobenzene	50.00000	43.94446	0.54104	0.010	-12.11107	20.00000	Linear	
103 Methyl Acetate	0.31280	0.23813	0.23813	0.010	-23.87121	20.00000	Averaged	*
104 Methylcyclohexane	0.56997	0.29826	0.29826	0.010	-47.67171	20.00000	Averaged	*
37 Dibromofluoromethane	0.34733	0.38981	0.38981	0.010	12.23318	20.00000	Averaged	
45 1,2-Dichloroethane-D4	0.45243	0.52418	0.52418	0.010	15.85984	20.00000	Averaged	
55 Toluene-D8	0.78162	0.79885	0.79885	0.010	2.20403	20.00000	Averaged	
76 P-Bromofluorobenzene	0.35675	0.38144	0.38144	0.010	6.92218	20.00000	Averaged	

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2067.D
Report Date: 13-Apr-2015 14:10

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040315.b\C2067.D
Lab Smp Id: WG160723-4 Client Smp ID: ontinuing Calibrati
Inj Date : 03-APR-2015 11:12 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160723-4,SI2008
Misc Info : WG160723,WG160458-4,SI2008-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040315.b\C826A34.m
Meth Date : 13-Apr-2015 14:10 gcms-c.i Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.995	1.986	(0.248)	291190	50.0000	65.2	
2 Chloromethane	50	2.224	2.229	(0.277)	366000	50.0000	57.9	
3 Vinyl chloride	62	2.331	2.329	(0.290)	305187	50.0000	55.9	
4 Bromomethane	94	2.731	2.729	(0.340)	143694	50.0000	62.1	
5 Chloroethane	64	2.881	2.879	(0.358)	145768	50.0000	83.7	
6 Trichlorofluoromethane	101	3.060	3.058	(0.381)	363984	50.0000	67.2	
7 Diethyl Ether	59	3.489	3.487	(0.434)	41424	50.0000	25.5	
8 Tertiary-butyl alcohol	59	5.333	5.338	(0.663)	75455	250.000	172	
9 1,1-Dichloroethene	96	3.753	3.751	(0.467)	176064	50.0000	47.7	
10 Carbon Disulfide	76	3.789	3.780	(0.471)	105379	50.0000	42.5	
11 Freon-113	151	3.818	3.815	(0.475)	73915	50.0000	41.3	
12 Iodomethane	142	3.961	3.958	(0.493)	148514	50.0000	58.1	
13 Acrolein	56	4.268	4.266	(0.531)	131146	250.000	265	
14 Methylene Chloride	84	4.654	4.652	(0.579)	219823	50.0000	47.7	
15 Acetone	43	4.754	4.745	(0.591)	268657	250.000	216	
16 Isobutyl Alcohol	43	8.250	8.247	(1.026)	108392	1000.00	671	
17 trans-1,2-Dichloroethene	96	4.919	4.916	(0.612)	214125	50.0000	48.4	
18 Allyl Chloride	41	4.475	4.473	(0.556)	249437	50.0000	52.0	
19 Methyl tert-butyl ether	73	5.126	5.123	(0.637)	925324	100.000	104	
20 Acetonitrile	39	5.540	5.538	(0.689)	46378	500.000	460	
21 Di-isopropyl ether	45	5.783	5.781	(0.719)	672654	50.0000	57.3	
22 Chloroprene	53	5.912	5.910	(0.735)	388923	50.0000	59.4	
23 Propionitrile	54	7.964	7.961	(0.990)	249472	500.000	438	
24 Methacrylonitrile	41	7.985	7.983	(0.993)	998612	500.000	490	

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2067.D
Report Date: 13-Apr-2015 14:10

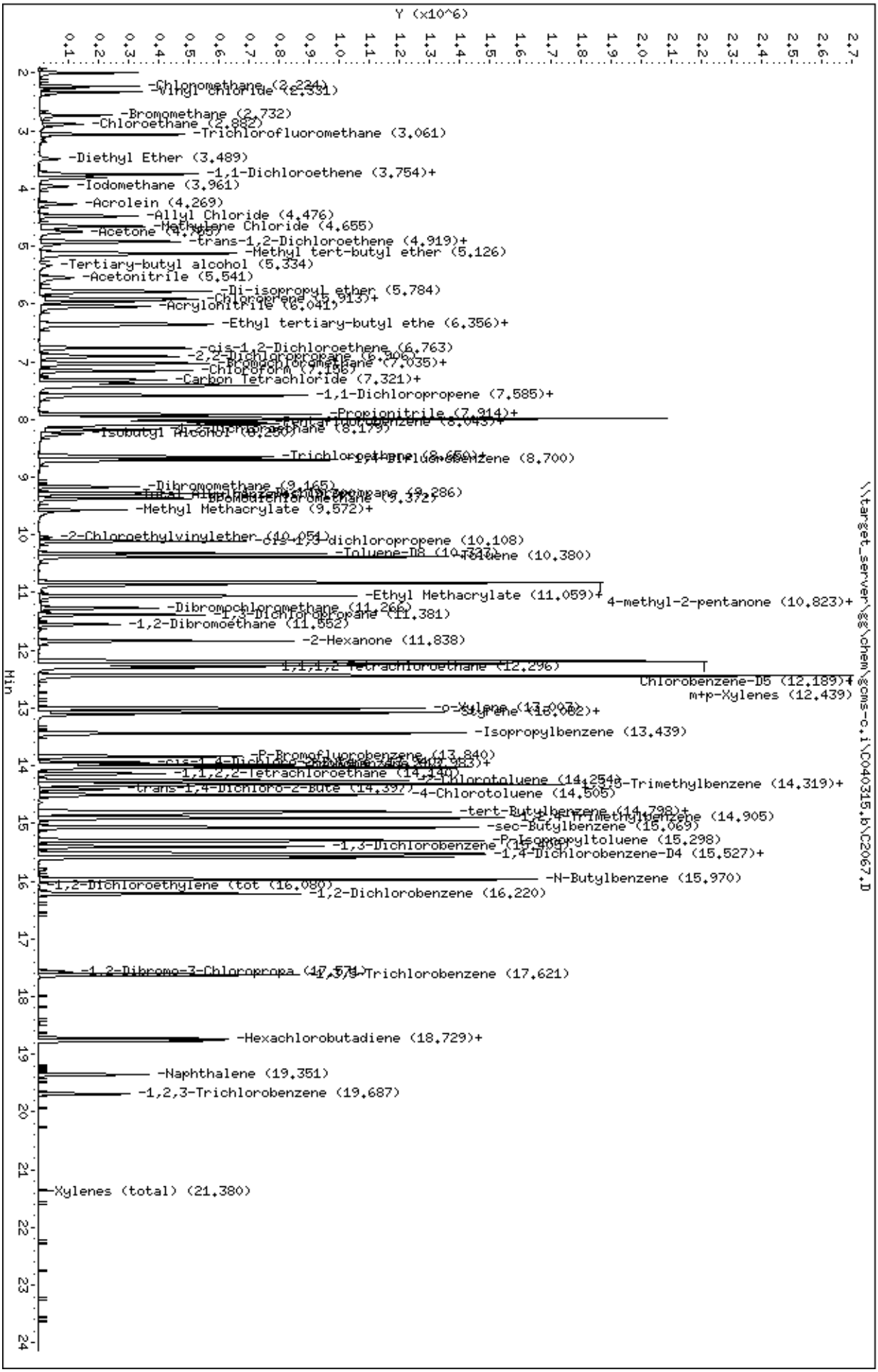
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.948	5.946	(0.740)	430059	50.0000	53.4	
	26 Acrylonitrile	52	6.041	6.038	(0.751)	306905	250.000	249	
	27 Ethyl tertiary-butyl ether	59	6.348	6.346	(0.789)	606582	50.0000	55.2	
	28 Vinyl Acetate	43	6.370	6.367	(0.732)	383519	50.0000	52.4	
	29 cis-1,2-Dichloroethene	96	6.763	6.753	(0.841)	224129	50.0000	48.9	
	31 Methyl Methacrylate	41	9.572	9.562	(1.100)	141554	50.0000	48.4	
	32 2,2-Dichloropropane	77	6.906	6.903	(0.859)	371395	50.0000	58.1	
	33 Bromochloromethane	128	7.041	7.032	(0.876)	75991	50.0000	50.6	
	34 Chloroform	83	7.156	7.154	(0.890)	436533	50.0000	55.0	
	35 Carbon Tetrachloride	117	7.320	7.318	(0.841)	289639	50.0000	59.3	
	36 Tetrahydrofuran	42	7.356	7.361	(0.915)	200104	250.000	222	
$	37 Dibromofluoromethane	113	7.406	7.397	(0.921)	157723	50.0000	56.1	
	38 1,1,1-Trichloroethane	97	7.413	7.411	(0.922)	408997	50.0000	56.6	
	39 1,1-Dichloropropene	75	7.585	7.582	(0.872)	319525	50.0000	52.7	
	40 2-Butanone	43	7.578	7.575	(0.942)	372245	250.000	228	
	41 Benzene	78	7.914	7.911	(0.910)	789388	50.0000	49.3	
*	42 Pentafluorobenzene	168	8.042	8.039	(1.000)	404610	50.0000		
	43 Cyclohexane	56	7.020	7.018	(0.873)	193048	50.0000	52.6	
	44 Ethyl Methacrylate	69	11.059	11.056	(1.271)	210855	50.0000	49.5	
$	45 1,2-Dichloroethane-D4	65	8.092	8.090	(1.006)	212089	50.0000	57.9	
	46 Tertiary-amyl methyl ether	73	8.078	8.076	(1.004)	447427	50.0000	52.6	
	47 1,2-Dichloroethane	62	8.178	8.176	(0.940)	336066	50.0000	57.2	
	48 Trichloroethene	95	8.650	8.647	(0.994)	229061	50.0000	50.2	
*	49 1,4-Difluorobenzene	114	8.700	8.696	(1.000)	703472	50.0000		
	50 Dibromomethane	93	9.164	9.162	(1.053)	124710	50.0000	49.3	
	51 1,2-Dichloropropane	63	9.286	9.284	(1.067)	204265	50.0000	50.5	
	52 Bromodichloromethane	83	9.372	9.369	(1.077)	320783	50.0000	57.4	
	53 cis-1,3-dichloropropene	75	10.108	10.106	(1.162)	360908	50.0000	53.7	
	54 1,4-Dioxane	88	9.608	9.612	(1.104)	35751	1000.00	424	
$	55 Toluene-D8	98	10.322	10.320	(1.186)	561970	50.0000	51.1	
	56 2-Chloroethylvinylether	63	10.051	10.048	(1.155)	17212	50.0000	39.8	
	57 Toluene	92	10.380	10.377	(1.193)	520140	50.0000	50.0	
	58 4-methyl-2-pentanone	43	10.830	10.828	(1.245)	727765	250.000	228	
	59 Tetrachloroethene	164	10.823	10.820	(0.888)	165925	50.0000	48.7	
	60 trans-1,3-Dichloropropene	75	10.873	10.871	(1.250)	321383	50.0000	55.6	
	61 1,1,2-Trichloroethane	83	11.059	11.056	(1.271)	144100	50.0000	49.5	
	62 Dibromochloromethane	129	11.273	11.271	(0.925)	215696	50.0000	53.3	
	63 1,3-Dichloropropane	76	11.380	11.385	(0.934)	327250	50.0000	48.9	
	64 1,2-Dibromoethane	107	11.552	11.550	(1.328)	191175	50.0000	48.9	
	65 2-Hexanone	43	11.838	11.835	(0.971)	528003	250.000	222	
*	66 Chlorobenzene-D5	117	12.188	12.193	(1.000)	668289	50.0000		
	67 Chlorobenzene	112	12.217	12.214	(1.002)	547082	50.0000	49.7	
	152 1-Chlorohexane	91	12.188	12.186	(1.000)	340986	50.0000	50.1	
	68 Ethylbenzene	106	12.245	12.243	(1.005)	315558	50.0000	47.8	
	69 1,1,1,2-Tetrachloroethane	131	12.295	12.293	(1.009)	217105	50.0000	53.6	
	71 m+p-Xylenes	106	12.438	12.436	(1.021)	752032	100.000	97.8	
	72 o-Xylene	106	13.003	13.008	(1.067)	354604	50.0000	48.3	
	73 Styrene	104	13.082	13.079	(1.073)	637489	50.0000	51.2	
	74 Bromoform	173	13.117	13.115	(1.076)	125802	50.0000	47.7	
	75 Isopropylbenzene	105	13.439	13.437	(0.866)	1024768	50.0000	51.0	
$	76 P-Bromofluorobenzene	95	13.839	13.837	(1.591)	268335	50.0000	53.5	
	77 cis-1,4-Dichloro-2-Butene	53	13.939	13.937	(0.898)	89366	50.0000	50.9	
	78 trans-1,4-Dichloro-2-Butene	53	14.397	14.394	(0.928)	68635	50.0000	48.8	
	79 Bromobenzene	156	13.989	13.987	(0.901)	243344	50.0000	49.6	

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2067.D
Report Date: 13-Apr-2015 14:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.025	14.030	(0.904)	1245770	50.0000	51.3	
81 1,1,2,2-Tetrachloroethane	83	14.139	14.137	(0.911)	232336	50.0000	44.4	
82 1,3,5-Trimethylbenzene	105	14.318	14.316	(0.923)	953051	50.0000	51.7	
83 2-Chlorotoluene	91	14.254	14.252	(0.918)	793908	50.0000	52.2	
84 1,2,3-Trichloropropane	75	14.332	14.337	(0.924)	200736	50.0000	46.8	
85 4-Chlorotoluene	91	14.504	14.502	(0.935)	799154	50.0000	52.4	
86 tert-Butylbenzene	119	14.797	14.795	(0.953)	855192	50.0000	51.6	
87 Pentachloroethane	117	14.826	14.823	(0.955)	177434	50.0000	54.1	
88 1,2,4-Trimethylbenzene	105	14.904	14.902	(0.960)	934934	50.0000	51.5	
89 P-Isopropyltoluene	119	15.297	15.295	(0.986)	943629	50.0000	52.1	
90 1,3-Dichlorobenzene	146	15.405	15.402	(0.993)	423544	50.0000	48.9	
* 91 1,4-Dichlorobenzene-D4	152	15.519	15.517	(1.000)	366307	50.0000		
92 1,4-Dichlorobenzene	146	15.548	15.545	(1.002)	444874	50.0000	48.1	
93 N-Butylbenzene	91	15.969	15.967	(1.029)	1029341	50.0000	55.4	
94 sec-Butylbenzene	105	15.069	15.066	(0.971)	1127707	50.0000	51.2	
95 1,2-Dichlorobenzene	146	16.220	16.216	(1.045)	380806	50.0000	49.1	
96 1,2-Dibromo-3-Chloropropane	75	17.563	17.568	(1.132)	36033	50.0000	40.7	
97 1,3,5-Trichlorobenzene	180	17.621	17.625	(1.135)	296383	50.0000	50.0	
98 Hexachlorobutadiene	225	18.721	18.726	(1.206)	141073	50.0000	54.3	
99 1,2,4-Trichlorobenzene	180	18.764	18.762	(1.209)	198186	50.0000	43.9	
100 1,2,3-Trimethylbenzene	105	15.583	15.581	(1.004)	882267	50.0000	52.2	
101 Naphthalene	128	19.350	19.348	(1.247)	306577	50.0000	33.3	
102 1,2,3-Trichlorobenzene	180	19.686	19.684	(1.269)	103406	50.0000	34.2	
103 Methyl Acetate	43	4.969	4.973	(0.618)	96349	50.0000	38.1	
104 Methylcyclohexane	83	8.628	8.625	(1.073)	120678	50.0000	26.2	

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2067.D
Date : 03-APR-2015 11:12
Client ID: ontinuing Calibrati
Sample Info: WG160723-4,SI2008
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG161013-4
Analytical Date: 04/10/15 08:51
Lab File ID : C2229.D
Instrument ID: GCMS-C
Initial Calibration Date(s): 04/08/15 10:49 04/08/15 14:06
Column ID:

	Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1	Dichlorodifluoromethane	0.86867	0.71675	0.71675	0.010	-17.48895	20.00000	Averaged	
2	Chloromethane	1.13858	0.99763	0.99763	0.100	-12.37919	20.00000	Averaged	
3	Vinyl chloride	0.83768	0.81764	0.81764	0.010	-2.39234	20.00000	Averaged	
4	Bromomethane	50.00000	49.41550	0.41522	0.010	-1.16899	20.00000	Linear	
5	Chloroethane	50.00000	50.98216	0.33775	0.010	1.96433	20.00000	Linear	
6	Trichlorofluoromethane	1.01121	0.96890	0.96890	0.010	-4.18363	20.00000	Averaged	
9	1,1-Dichloroethene	0.58858	0.56734	0.56734	0.100	-3.60867	20.00000	Averaged	
10	Carbon Disulfide	1.67321	1.68283	1.68283	0.010	0.57481	20.00000	Averaged	
11	Freon-113	0.40426	0.41558	0.41558	0.010	2.79810	20.00000	Averaged	
14	Methylene Chloride	50.00000	51.13102	0.70647	0.010	2.26204	20.00000	Linear	
15	Acetone	0.21212	0.22287	0.22287	0.010	5.06826	20.00000	Averaged	
17	trans-1,2-Dichloroethene	0.66441	0.65603	0.65603	0.010	-1.26043	20.00000	Averaged	
19	Methyl tert-butyl ether	1.47337	1.57395	1.57395	0.010	6.82706	20.00000	Averaged	
25	1,1-Dichloroethane	1.28901	1.31763	1.31763	0.100	2.22050	20.00000	Averaged	
29	cis-1,2-Dichloroethene	0.68555	0.68838	0.68838	0.010	0.41156	20.00000	Averaged	
30	1,2-Dichloroethylene (total	++++	1.34441	1.34441	0.010	++++	20.00000	Averaged	*
34	Chloroform	1.33905	1.37677	1.37677	0.010	2.81667	20.00000	Averaged	
35	Carbon Tetrachloride	0.47383	0.51342	0.51342	0.010	8.35491	20.00000	Averaged	
38	1,1,1-Trichloroethane	1.26580	1.26087	1.26087	0.010	-0.38953	20.00000	Averaged	
40	2-Butanone	250	259	0.29897	0.010	3.77710	20.00000	Linear	
41	Benzene	1.40893	1.45282	1.45282	0.010	3.11532	20.00000	Averaged	
43	Cyclohexane	1.09404	1.13211	1.13211	0.010	3.47956	20.00000	Averaged	
47	1,2-Dichloroethane	0.66962	0.63857	0.63857	0.010	-4.63592	20.00000	Averaged	
48	Trichloroethene	0.42876	0.41633	0.41633	0.010	-2.90020	20.00000	Averaged	
51	1,2-Dichloropropane	0.36962	0.37658	0.37658	0.010	1.88139	20.00000	Averaged	
52	Bromodichloromethane	0.55630	0.60044	0.60044	0.010	7.93514	20.00000	Averaged	
53	cis-1,3-dichloropropene	0.59624	0.66788	0.66788	0.010	12.01662	20.00000	Averaged	
57	Toluene	0.91253	0.94661	0.94661	0.010	3.73506	20.00000	Averaged	
58	4-methyl-2-pentanone	0.31916	0.34251	0.34251	0.010	7.31525	20.00000	Averaged	
59	Tetrachloroethene	0.31918	0.30850	0.30850	0.010	-3.34604	20.00000	Averaged	
60	trans-1,3-Dichloropropene	0.55910	0.59473	0.59473	0.010	6.37261	20.00000	Averaged	
61	1,1,2-Trichloroethane	0.28039	0.28422	0.28422	0.010	1.36844	20.00000	Averaged	
62	Dibromochloromethane	50.00000	48.26445	0.41373	0.010	-3.47109	20.00000	Linear	
64	1,2-Dibromoethane	0.36481	0.36428	0.36428	0.010	-0.14471	20.00000	Averaged	
65	2-Hexanone	250	271	0.26787	0.010	8.57238	20.00000	Linear	
67	Chlorobenzene	1.02292	1.01853	1.01853	0.300	-0.42903	20.00000	Averaged	
68	Ethylbenzene	0.58013	0.58400	0.58400	0.010	0.66682	20.00000	Averaged	
70	Xylenes (total)	++++	0.69495	0.69495	0.010	++++	20.00000	Averaged	*
71	m+p-Xylenes	0.67653	0.70523	0.70523	0.010	4.24225	20.00000	Averaged	
72	o-Xylene	0.61786	0.67439	0.67439	0.010	9.14918	20.00000	Averaged	
73	Styrene	1.10431	1.18834	1.18834	0.010	7.60993	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG161013-4
Analytical Date: 04/10/15 08:51
Lab File ID : C2229.D
Instrument ID: GCMS-C
Initial Calibration Date(s): 04/08/15 10:49 04/08/15 14:06
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
74 Bromoform	50.00000	47.60810	0.25948	0.100	-4.78380	20.00000	Linear
75 Isopropylbenzene	2.93872	3.17296	3.17296	0.010	7.97084	20.00000	Averaged
81 1,1,2,2-Tetrachloroethane	0.82312	0.81734	0.81734	0.300	-0.70198	20.00000	Averaged
90 1,3-Dichlorobenzene	1.29548	1.28127	1.28127	0.010	-1.09708	20.00000	Averaged
92 1,4-Dichlorobenzene	1.40837	1.37084	1.37084	0.010	-2.66466	20.00000	Averaged
95 1,2-Dichlorobenzene	1.17230	1.16770	1.16770	0.010	-0.39215	20.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	50.00000	46.60359	0.15601	0.010	-6.79282	20.00000	Linear
99 1,2,4-Trichlorobenzene	50.00000	48.89606	0.69008	0.010	-2.20788	20.00000	Linear
103 Methyl Acetate	0.50308	0.52388	0.52388	0.010	4.13563	20.00000	Averaged
104 Methylcyclohexane	1.07317	1.14653	1.14653	0.010	6.83600	20.00000	Averaged
37 Dibromofluoromethane	0.50159	0.46962	0.46962	0.010	-6.37395	20.00000	Averaged
45 1,2-Dichloroethane-D4	0.67111	0.65333	0.65333	0.010	-2.64890	20.00000	Averaged
55 Toluene-D8	0.91692	0.96889	0.96889	0.010	5.66829	20.00000	Averaged
76 P-Bromofluorobenzene	0.48246	0.45379	0.45379	0.010	-5.94297	20.00000	Averaged

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2229.D
Report Date: 13-Apr-2015 14:22

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C041015.b\C2229.D
Lab Smp Id: WG161013-4 Client Smp ID: ontinuing Calibrati
Inj Date : 10-APR-2015 08:51 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG161013-4,SI2008
Misc Info : WG161013,WG160924-4,SI2008-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C041015.b\C826A36.m
Meth Date : 13-Apr-2015 14:13 gcms-c.i Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	252965	50.0000	41.2	
2 Chloromethane	50	2.229	2.229	(0.277)	352098	50.0000	43.8	
3 Vinyl chloride	62	2.329	2.322	(0.290)	288574	50.0000	48.8	
4 Bromomethane	94	2.730	2.730	(0.340)	146545	50.0000	49.4	
5 Chloroethane	64	2.880	2.880	(0.358)	119204	50.0000	51.0	
6 Trichlorofluoromethane	101	3.058	3.051	(0.380)	341958	50.0000	47.9	
7 Diethyl Ether	59	3.487	3.487	(0.434)	191869	50.0000	47.6	
8 Tertiary-butyl alcohol	59	5.346	5.353	(0.665)	111645	250.000	235	
9 1,1-Dichloroethene	96	3.752	3.745	(0.467)	200232	50.0000	48.2	
10 Carbon Disulfide	76	3.788	3.780	(0.471)	593928	50.0000	50.3	
11 Freon-113	151	3.816	3.809	(0.475)	146671	50.0000	51.4	
12 Iodomethane	142	3.959	3.952	(0.492)	215314	50.0000	45.8	
13 Acrolein	56	4.266	4.267	(0.531)	155119	250.000	247	
14 Methylene Chloride	84	4.652	4.645	(0.579)	249339	50.0000	51.1	
15 Acetone	43	4.753	4.753	(0.591)	393289	250.000	263	
16 Isobutyl Alcohol	43	8.255	8.255	(1.027)	174356	1000.00	1010	
17 trans-1,2-Dichloroethene	96	4.917	4.917	(0.612)	231537	50.0000	49.4	
18 Allyl Chloride	41	4.474	4.474	(0.556)	230988	50.0000	51.7	
19 Methyl tert-butyl ether	73	5.124	5.124	(0.637)	1111004	100.000	107	
20 Acetonitrile	39	5.546	5.546	(0.690)	48939	500.000	416	
21 Di-isopropyl ether	45	5.782	5.782	(0.719)	699308	50.0000	53.0	
22 Chloroprene	53	5.910	5.911	(0.735)	370671	50.0000	53.7	
23 Propionitrile	54	7.969	7.962	(0.991)	357028	500.000	504	
24 Methacrylonitrile	41	7.991	7.984	(0.994)	1279272	500.000	502	

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2229.D
Report Date: 13-Apr-2015 14:22

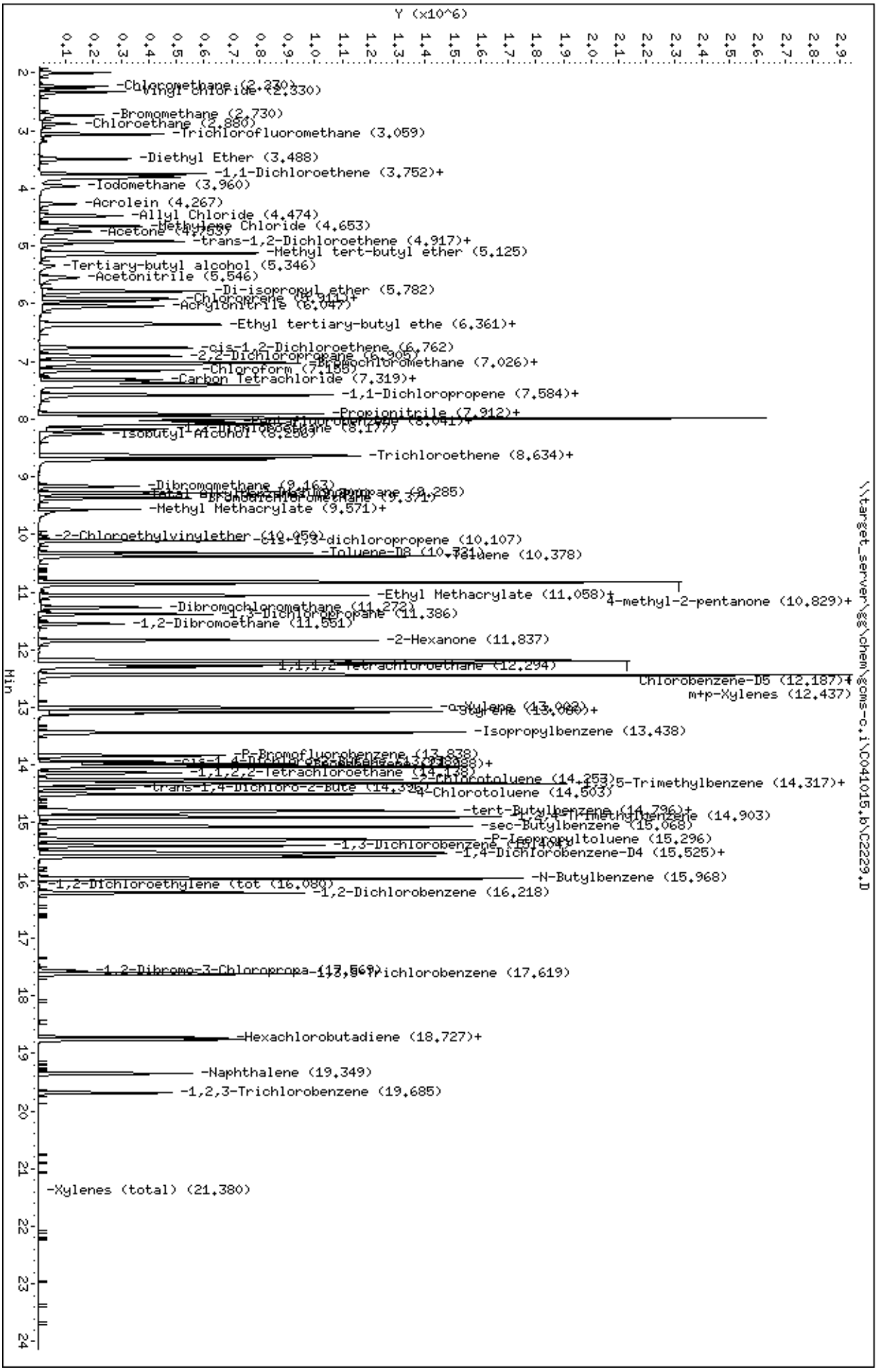
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.946	5.946	(0.740)	465038	50.0000	51.1	
	26 Acrylonitrile	52	6.046	6.039	(0.752)	390019	250.000	245	
	27 Ethyl tertiary-butyl ether	59	6.347	6.347	(0.789)	650763	50.0000	54.6	
	28 Vinyl Acetate	43	6.368	6.368	(0.732)	514341	50.0000	53.9	
	29 cis-1,2-Dichloroethene	96	6.761	6.761	(0.841)	242951	50.0000	50.2	
	31 Methyl Methacrylate	41	9.570	9.563	(1.100)	172484	50.0000	49.6	
	32 2,2-Dichloropropane	77	6.904	6.904	(0.859)	413135	50.0000	54.5	
	33 Bromochloromethane	128	7.040	7.033	(0.876)	96772	50.0000	49.9	
	34 Chloroform	83	7.154	7.154	(0.890)	485909	50.0000	51.4	
	35 Carbon Tetrachloride	117	7.319	7.312	(0.841)	302801	50.0000	54.2	
	36 Tetrahydrofuran	42	7.362	7.362	(0.916)	337955	250.000	264	
$	37 Dibromofluoromethane	113	7.404	7.405	(0.921)	165746	50.0000	46.8	
	38 1,1,1-Trichloroethane	97	7.412	7.412	(0.922)	445004	50.0000	49.8	
	39 1,1-Dichloropropene	75	7.583	7.583	(0.872)	351958	50.0000	53.2	
	40 2-Butanone	43	7.583	7.583	(0.943)	527592	250.000	259	
	41 Benzene	78	7.912	7.905	(0.910)	856832	50.0000	51.6	
*	42 Pentafluorobenzene	168	8.041	8.041	(1.000)	352934	50.0000		
	43 Cyclohexane	56	7.018	7.019	(0.873)	399560	50.0000	51.7	
	44 Ethyl Methacrylate	69	11.057	11.057	(1.271)	241275	50.0000	53.7	
$	45 1,2-Dichloroethane-D4	65	8.091	8.090	(1.006)	230583	50.0000	48.7	
	46 Tertiary-amyl methyl ether	73	8.076	8.076	(1.004)	495615	50.0000	54.4	
	47 1,2-Dichloroethane	62	8.176	8.177	(0.940)	376612	50.0000	47.7	
	48 Trichloroethene	95	8.648	8.648	(0.994)	245539	50.0000	48.5	
*	49 1,4-Difluorobenzene	114	8.698	8.698	(1.000)	589771	50.0000		
	50 Dibromomethane	93	9.163	9.163	(1.053)	141929	50.0000	48.2	
	51 1,2-Dichloropropane	63	9.284	9.284	(1.067)	222095	50.0000	50.9	
	52 Bromodichloromethane	83	9.370	9.370	(1.077)	354124	50.0000	54.0	
	53 cis-1,3-dichloropropene	75	10.106	10.106	(1.162)	393898	50.0000	56.0	
	54 1,4-Dioxane	88	9.613	9.606	(1.105)	39314	1000.00	571	
$	55 Toluene-D8	98	10.321	10.321	(1.187)	571423	50.0000	52.8	
	56 2-Chloroethylvinylether	63	10.042	10.049	(1.154)	10855	50.0000	94.5	
	57 Toluene	92	10.378	10.378	(1.193)	558285	50.0000	51.9	
	58 4-methyl-2-pentanone	43	10.828	10.828	(1.245)	1010013	250.000	268	
	59 Tetrachloroethene	164	10.821	10.821	(0.887)	176897	50.0000	48.3	
	60 trans-1,3-Dichloropropene	75	10.871	10.871	(1.250)	350752	50.0000	53.2	
	61 1,1,2-Trichloroethane	83	11.057	11.057	(1.271)	167626	50.0000	50.7	
	62 Dibromochloromethane	129	11.271	11.264	(0.924)	237234	50.0000	48.3	
	63 1,3-Dichloropropane	76	11.386	11.379	(0.934)	369723	50.0000	50.4	
	64 1,2-Dibromoethane	107	11.550	11.550	(1.328)	214844	50.0000	49.9	
	65 2-Hexanone	43	11.836	11.836	(0.971)	767990	250.000	271	
*	66 Chlorobenzene-D5	117	12.194	12.187	(1.000)	573405	50.0000		
	67 Chlorobenzene	112	12.215	12.208	(1.002)	584033	50.0000	49.8	
	152 1-Chlorohexane	91	12.186	12.179	(0.999)	345647	50.0000	51.2	
	68 Ethylbenzene	106	12.244	12.244	(1.004)	334866	50.0000	50.3	
	69 1,1,1,2-Tetrachloroethane	131	12.294	12.294	(1.008)	234795	50.0000	53.0	
	71 m+p-Xylenes	106	12.437	12.437	(1.020)	808766	100.000	104	
	72 o-Xylene	106	13.001	13.001	(1.066)	386700	50.0000	54.6	
	73 Styrene	104	13.080	13.080	(1.073)	681402	50.0000	53.8	
	74 Bromoform	173	13.116	13.116	(1.076)	148787	50.0000	47.6	
	75 Isopropylbenzene	105	13.437	13.437	(0.866)	1103780	50.0000	54.0	
$	76 P-Bromofluorobenzene	95	13.838	13.838	(1.591)	267630	50.0000	47.0	
	77 cis-1,4-Dichloro-2-Butene	53	13.938	13.938	(0.898)	111262	50.0000	50.2	
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.395	(0.928)	89429	50.0000	49.9	
	79 Bromobenzene	156	13.988	13.981	(0.901)	255150	50.0000	51.1	

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2229.D
Report Date: 13-Apr-2015 14:22

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.023	14.024	(0.904)	1322620	50.0000	53.0	
81 1,1,2,2-Tetrachloroethane	83	14.138	14.131	(0.911)	284329	50.0000	49.6	
82 1,3,5-Trimethylbenzene	105	14.317	14.317	(0.923)	1036401	50.0000	53.3	
83 2-Chlorotoluene	91	14.252	14.252	(0.918)	845713	50.0000	51.6	
84 1,2,3-Trichloropropane	75	14.331	14.331	(0.924)	252420	50.0000	49.4	
85 4-Chlorotoluene	91	14.502	14.502	(0.935)	863352	50.0000	52.0	
86 tert-Butylbenzene	119	14.795	14.788	(0.953)	906496	50.0000	53.2	
87 Pentachloroethane	117	14.824	14.824	(0.955)	184783	50.0000	52.6	
88 1,2,4-Trimethylbenzene	105	14.903	14.903	(0.960)	1021077	50.0000	53.6	
89 P-Isopropyltoluene	119	15.296	15.296	(0.986)	982018	50.0000	52.9	
90 1,3-Dichlorobenzene	146	15.403	15.396	(0.993)	445716	50.0000	49.4	
* 91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	347871	50.0000		
92 1,4-Dichlorobenzene	146	15.539	15.539	(1.001)	476875	50.0000	48.7	
93 N-Butylbenzene	91	15.968	15.968	(1.029)	1081633	50.0000	55.7	
94 sec-Butylbenzene	105	15.067	15.067	(0.971)	1192436	50.0000	52.5	
95 1,2-Dichlorobenzene	146	16.218	16.218	(1.045)	406209	50.0000	49.8	
96 1,2-Dibromo-3-Chloropropane	75	17.562	17.562	(1.132)	54272	50.0000	46.6	
97 1,3,5-Trichlorobenzene	180	17.619	17.619	(1.135)	316505	50.0000	51.2	
98 Hexachlorobutadiene	225	18.727	18.720	(1.207)	147163	50.0000	47.4	
99 1,2,4-Trichlorobenzene	180	18.763	18.763	(1.209)	240060	50.0000	48.9	
100 1,2,3-Trimethylbenzene	105	15.582	15.582	(1.004)	914620	50.0000	51.2	
101 Naphthalene	128	19.349	19.349	(1.247)	471544	50.0000	47.2	
102 1,2,3-Trichlorobenzene	180	19.685	19.685	(1.269)	157926	50.0000	49.6	
103 Methyl Acetate	43	4.974	4.967	(0.619)	184896	50.0000	52.1	
104 Methylcyclohexane	83	8.627	8.627	(1.073)	404649	50.0000	53.4	

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2229.D
Date : 10-APR-2015 08:51
Client ID: ontinuing Calibrati
Sample Info: WG161013-4,SI2008
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\CB045.D

Date : 28-MAR-2015 10:39

Client ID:

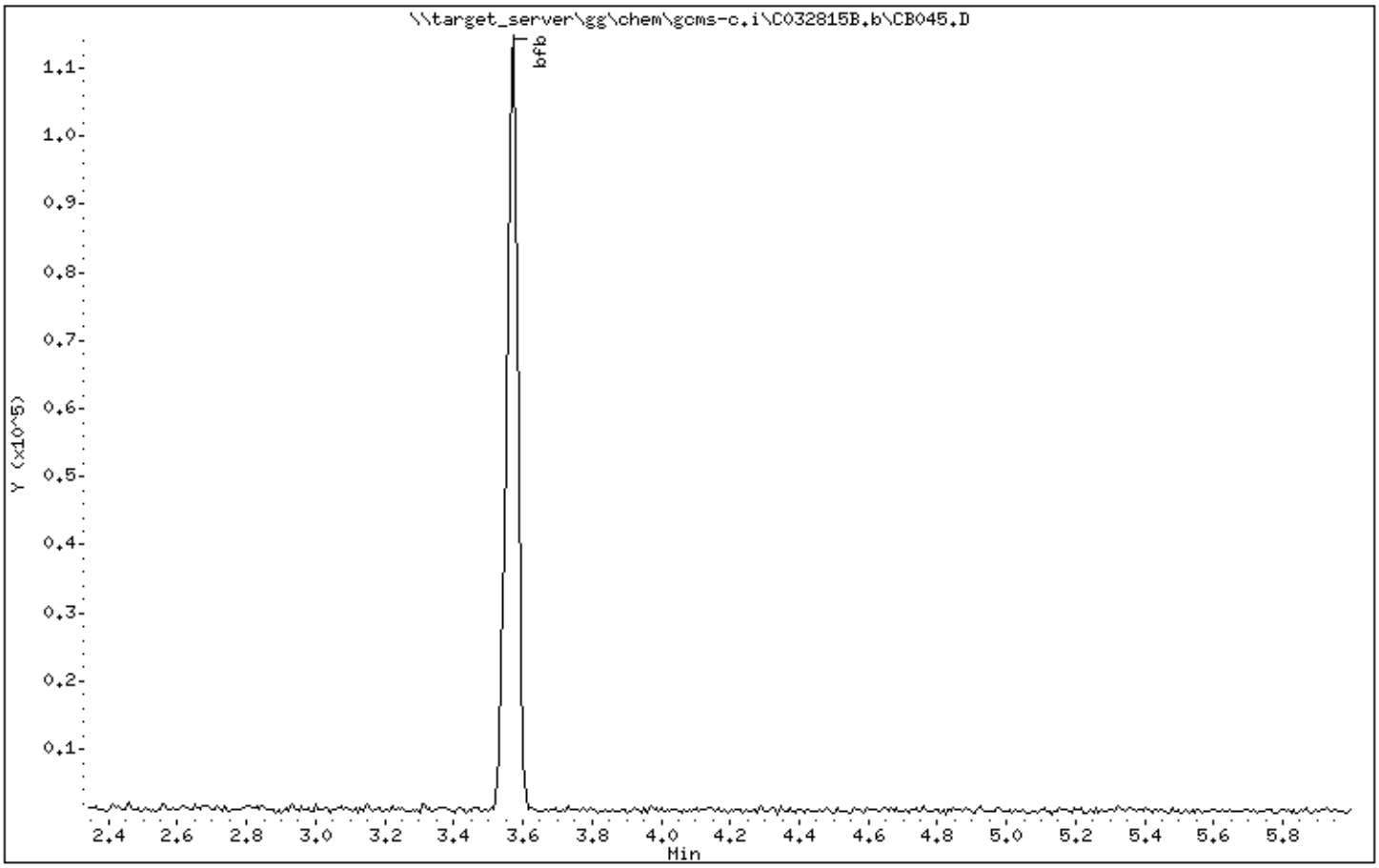
Instrument: gcms-c.i

Sample Info: WG160458-8,SI2008

Operator: REC

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C032815B.b\CB045.D

Date : 28-MAR-2015 10:39

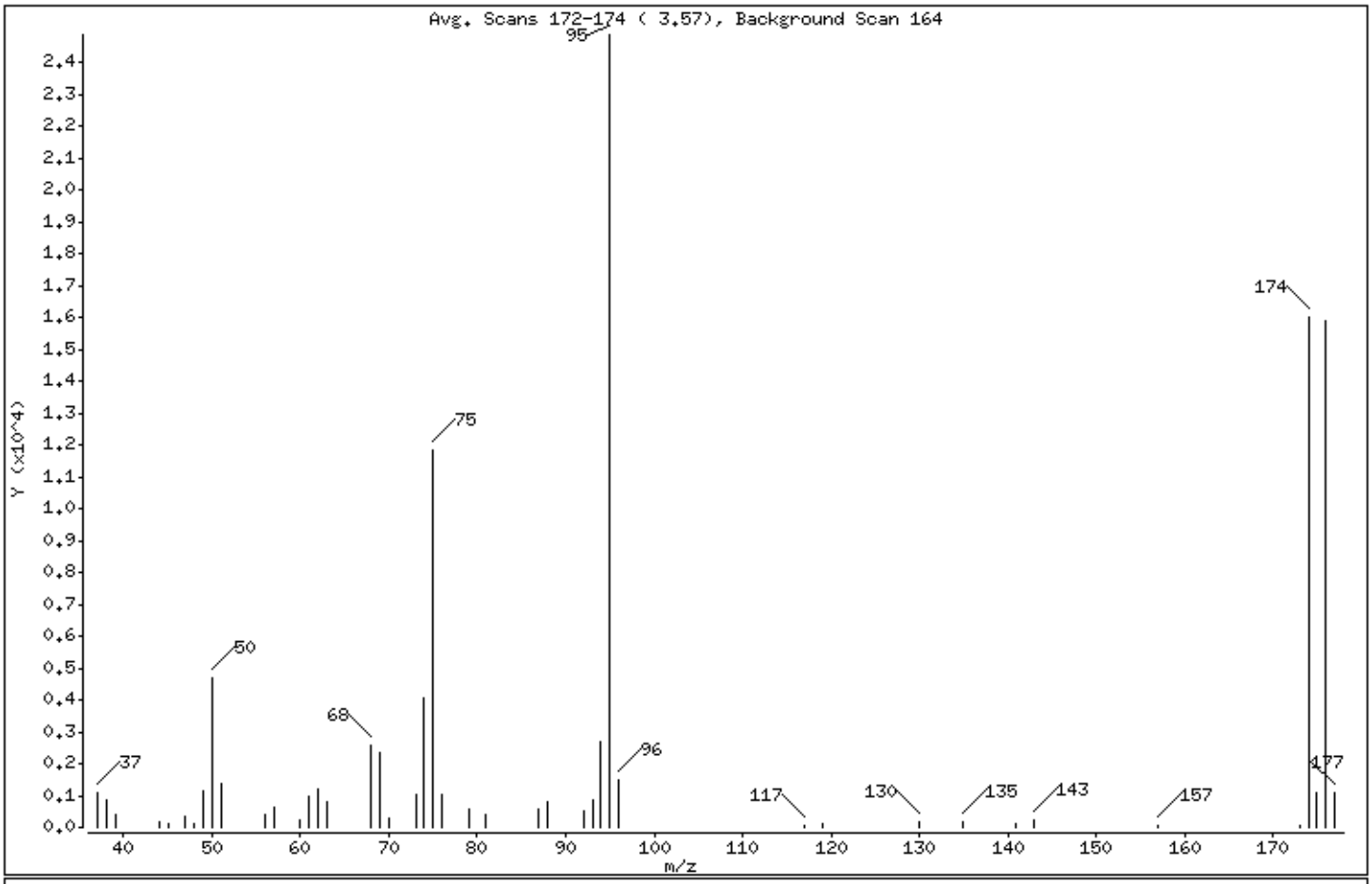
Client ID: Instrument: gcms-c.i

Sample Info: WG160458-8,SI2008

Operator: REC

Column phase: RTX-VMS Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.94
75	30.00 - 60.00% of mass 95	47.48
96	5.00 - 9.00% of mass 95	6.08
173	Less than 2.00% of mass 174	0.34 (0.52)
174	Greater than 50.00% of mass 95	64.43
175	5.00 - 9.00% of mass 174	4.47 (6.93)
176	95.00 - 101.00% of mass 174	63.95 (99.26)
177	5.00 - 9.00% of mass 176	4.27 (6.67)

Date : 28-MAR-2015 10:39

Client ID: Instrument: gcms-c.i

Sample Info: WG160458-8,SI2008

Operator: REC

Column phase: RTX-VMS Column diameter: 0.18

Data File: CB045.D
Spectrum: Avg. Scans 172-174 (3.57), Background Scan 164
Location of Maximum: 95.00
Number of points: 44

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	1060	60.00	239	81.00	378	141.00	120
38.00	836	61.00	985	87.00	600	143.00	201
39.00	383	62.00	1181	88.00	786	157.00	73
44.00	145	63.00	787	92.00	523	173.00	84
45.00	122	68.00	2595	93.00	884	174.00	16029
47.00	341	69.00	2347	94.00	2699	175.00	1111
48.00	101	70.00	265	95.00	24880	176.00	15911
49.00	1126	73.00	1018	96.00	1512	177.00	1062
50.00	4713	74.00	4063	117.00	77		
51.00	1376	75.00	11812	119.00	138		
56.00	407	76.00	1004	130.00	185		
57.00	629	79.00	572	135.00	157		

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\CB049.D

Date : 02-APR-2015 08:16

Client ID:

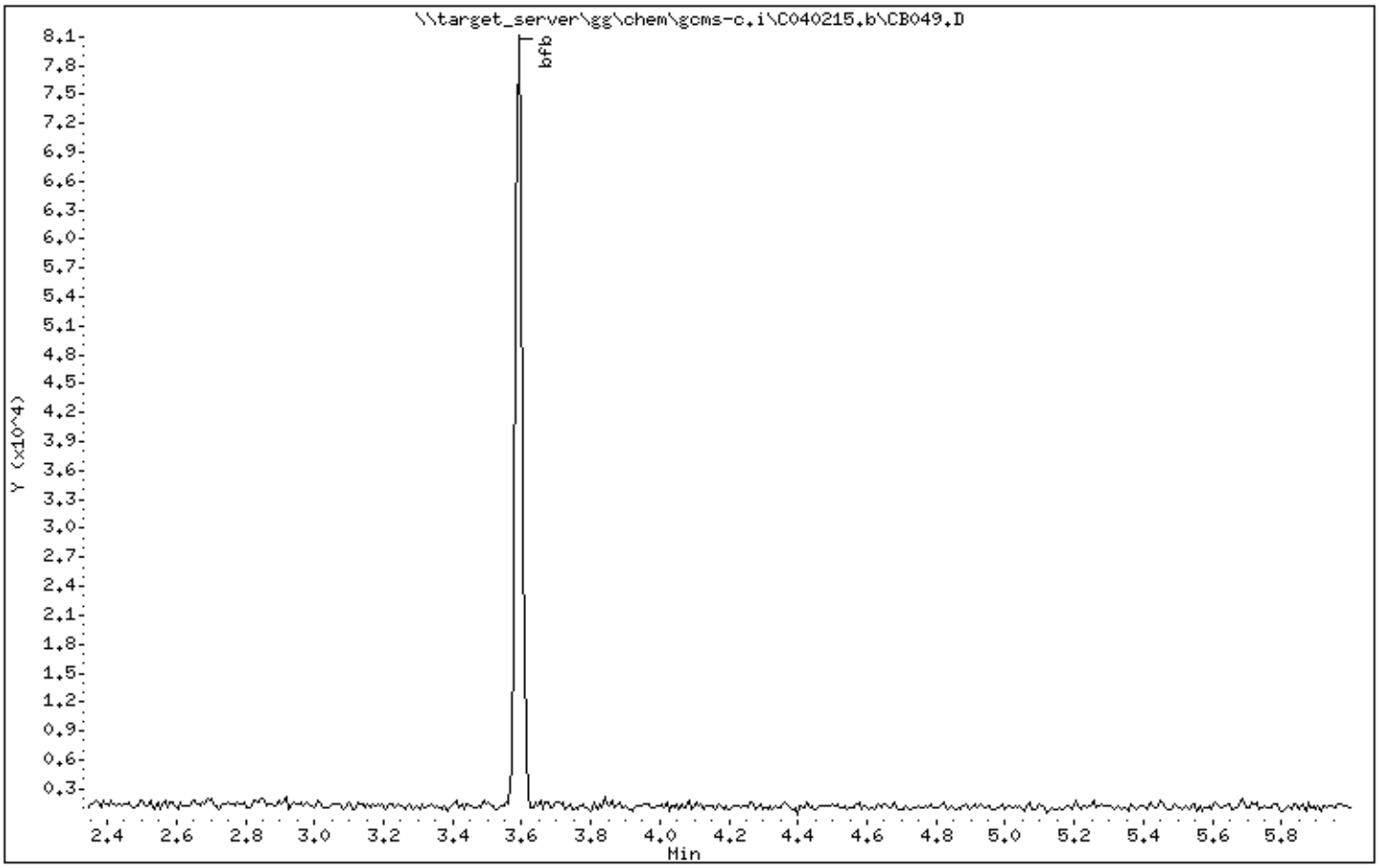
Instrument: gcms-c.i

Sample Info: WG160655-3,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\CB049.D

Date : 02-APR-2015 08:16

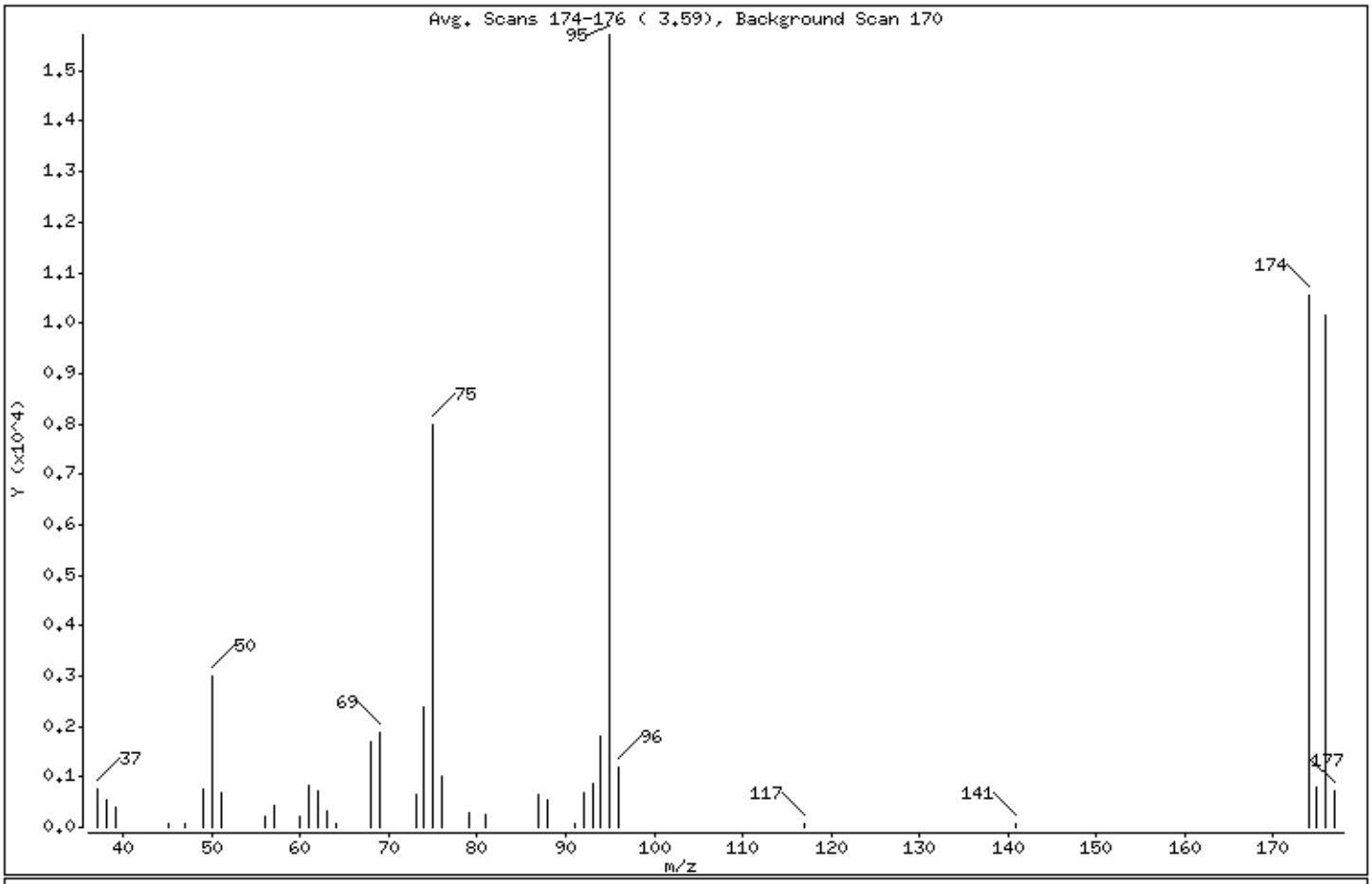
Client ID: Instrument: gcms-c.i

Sample Info: WG160655-3,SI2008

Operator: EME

Column phase: RTX-VMS Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.98
75	30.00 - 60.00% of mass 95	50.89
96	5.00 - 9.00% of mass 95	7.68
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	67.19
175	5.00 - 9.00% of mass 174	5.01 (7.46)
176	95.00 - 101.00% of mass 174	64.50 (95.99)
177	5.00 - 9.00% of mass 176	4.54 (7.04)

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\CB049.D

Date : 02-APR-2015 08:16

Client ID:

Instrument: gcms-c.i

Sample Info: WG160655-3,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18

Data File: CB049.D
Spectrum: Avg. Scans 174-176 (3.59), Background Scan 170
Location of Maximum: 95.00
Number of points: 37

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	751	60.00	229	76.00	1026	96.00	1207
38.00	537	61.00	841	79.00	280	117.00	71
39.00	404	62.00	731	81.00	254	141.00	70
45.00	81	63.00	343	87.00	634	174.00	10559
47.00	79	64.00	70	88.00	525	175.00	788
49.00	752	68.00	1684	91.00	88	176.00	10136
50.00	2982	69.00	1870	92.00	690	177.00	714
51.00	701	73.00	654	93.00	868		
56.00	218	74.00	2379	94.00	1800		
57.00	445	75.00	7998	95.00	15715		

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\CB050.D

Date : 03-APR-2015 09:30

Client ID:

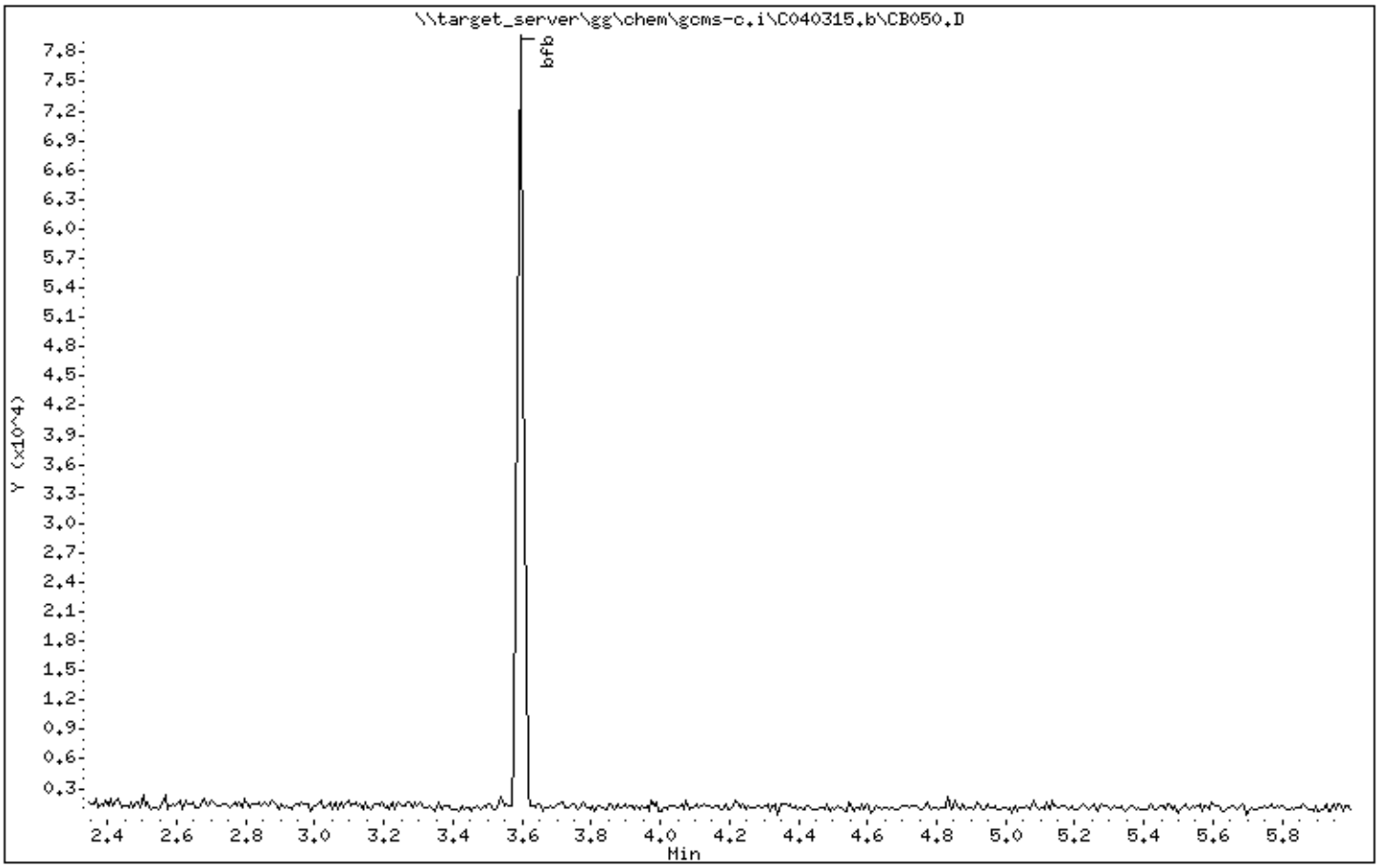
Instrument: gcms-c.i

Sample Info: WG160723-3,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\CB050.D

Date : 03-APR-2015 09:30

Client ID:

Instrument: gcms-c.i

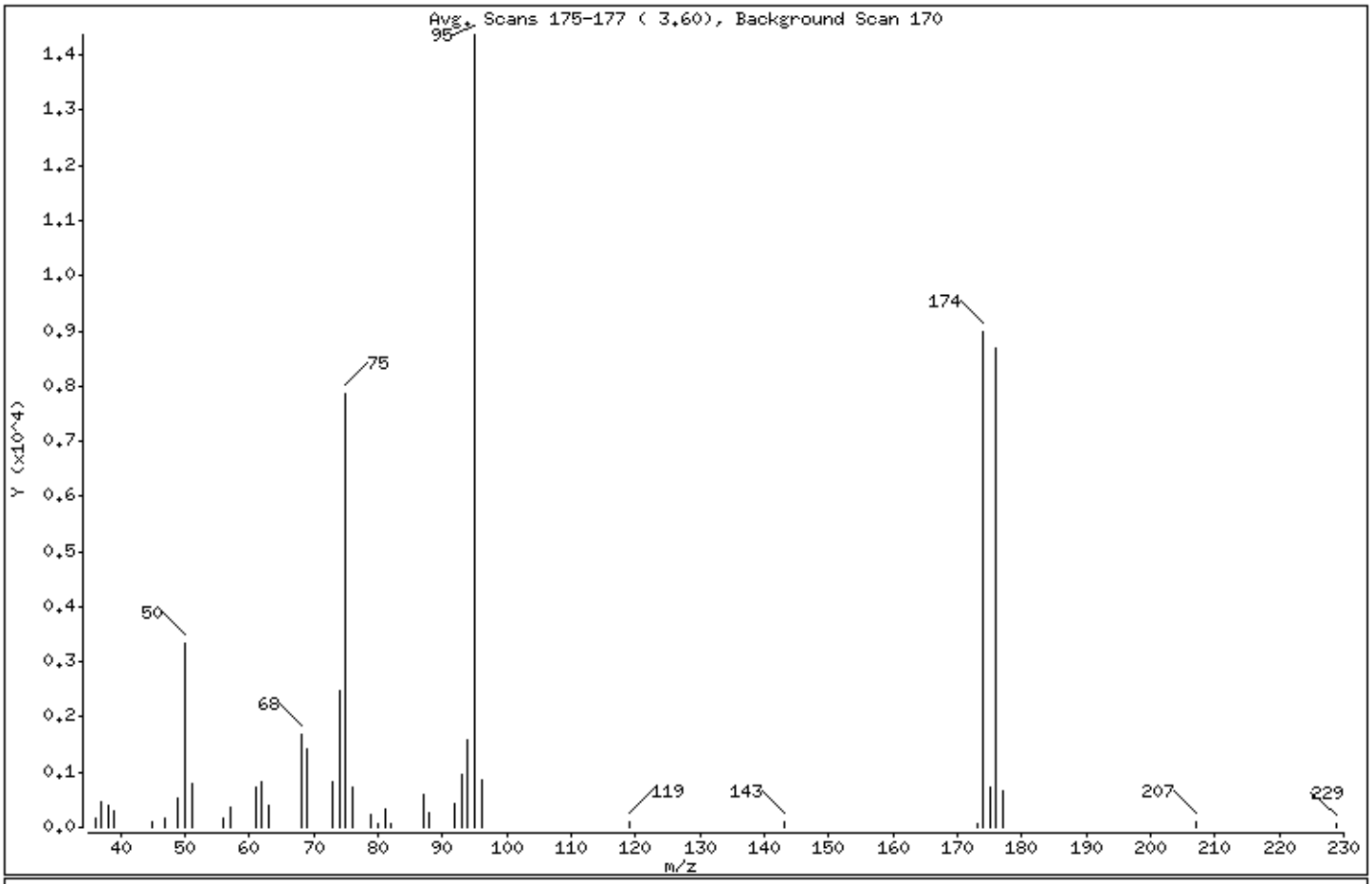
Sample Info: WG160723-3,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	23.21
75	30.00 - 60.00% of mass 95	54.70
96	5.00 - 9.00% of mass 95	6.01
173	Less than 2.00% of mass 174	0.49 (0.79)
174	Greater than 50.00% of mass 95	62.52
175	5.00 - 9.00% of mass 174	5.00 (8.00)
176	95.00 - 101.00% of mass 174	60.51 (96.79)
177	5.00 - 9.00% of mass 176	4.63 (7.66)

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\CB050.D

Date : 03-APR-2015 09:30

Client ID:

Instrument: gcms-c.i

Sample Info: WG160723-3,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18

Data File: CB050.D
Spectrum: Avg. Scans 175-177 (3.60), Background Scan 170
Location of Maximum: 95.00
Number of points: 40

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	164	61.00	722	81.00	336	173.00	71
37.00	447	62.00	818	82.00	73	174.00	8984
38.00	394	63.00	409	87.00	580	175.00	719
39.00	297	68.00	1685	88.00	263	176.00	8696
45.00	102	69.00	1428	92.00	423	177.00	666
47.00	149	73.00	835	93.00	947	207.00	87
49.00	526	74.00	2493	94.00	1598	229.00	68
50.00	3335	75.00	7860	95.00	14370		
51.00	806	76.00	725	96.00	864		
56.00	161	79.00	240	119.00	98		
57.00	358	80.00	82	143.00	98		

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\CB054.D

Date : 06-APR-2015 11:15

Client ID:

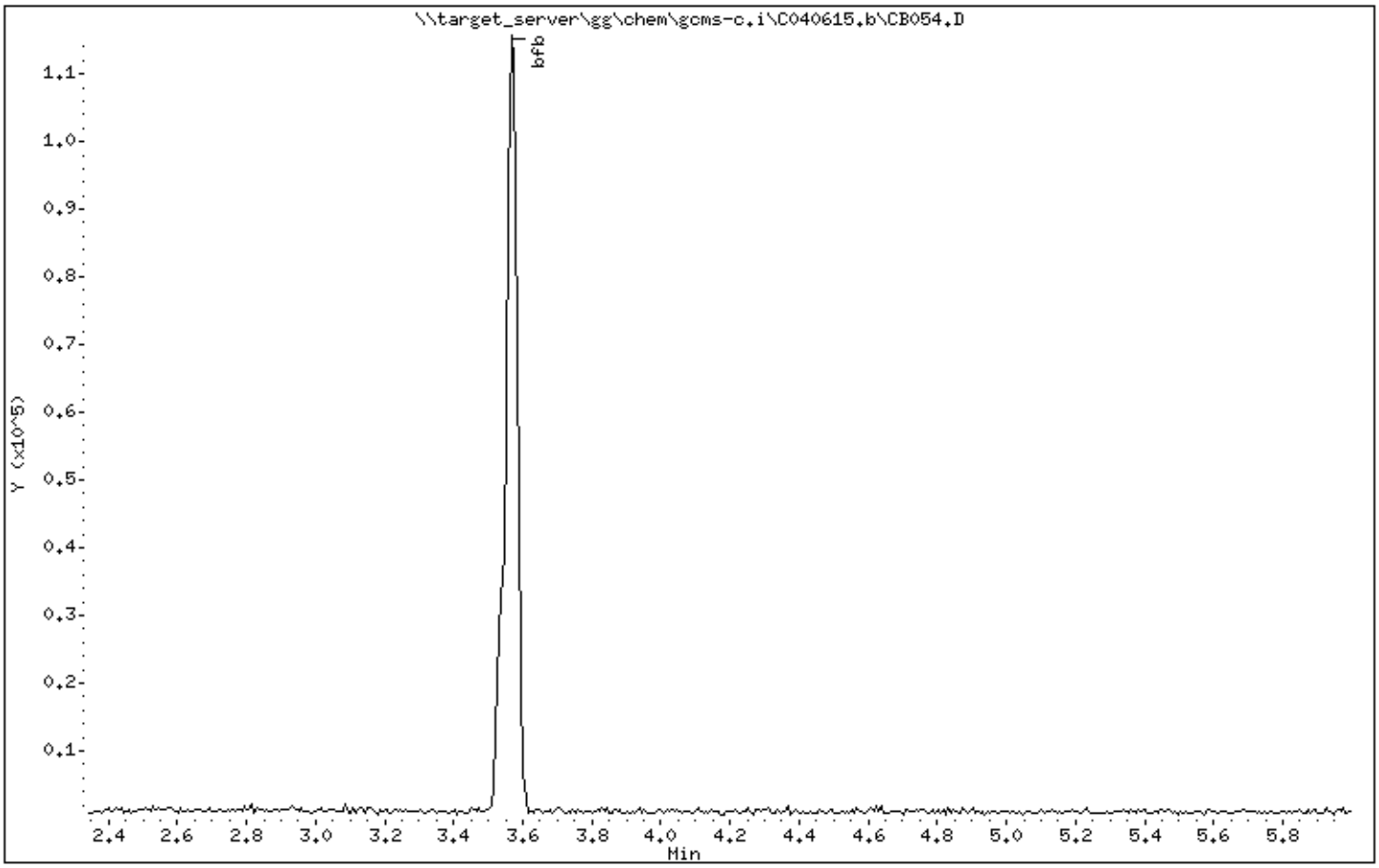
Instrument: gcms-c.i

Sample Info: WG160815-10,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\CB054.D

Date : 06-APR-2015 11:15

Client ID:

Instrument: gcms-c.i

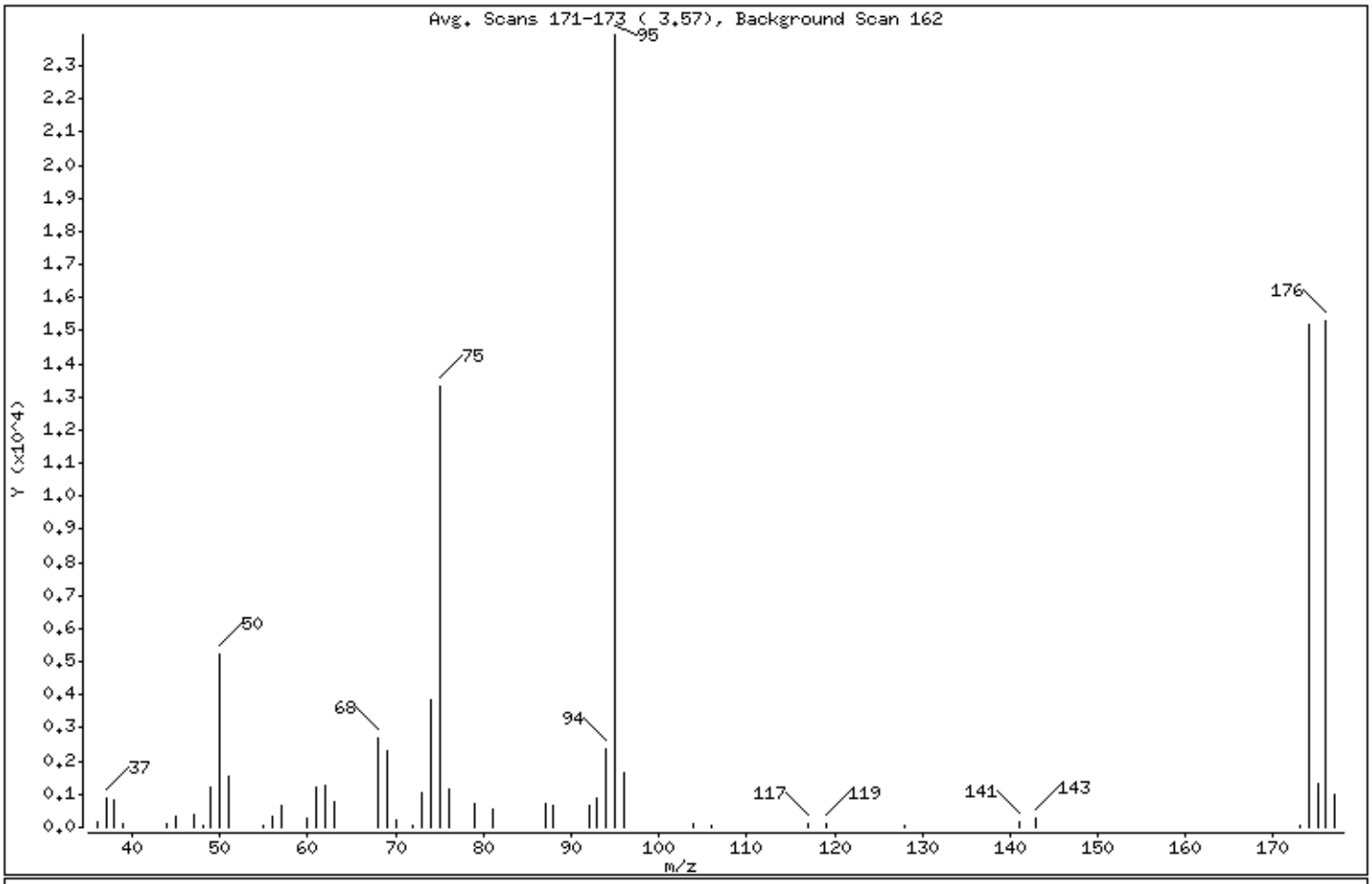
Sample Info: WG160815-10,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.89
75	30.00 - 60.00% of mass 95	55.57
96	5.00 - 9.00% of mass 95	6.80
173	Less than 2.00% of mass 174	0.28 (0.45)
174	Greater than 50.00% of mass 95	63.44
175	5.00 - 9.00% of mass 174	5.48 (8.63)
176	95.00 - 101.00% of mass 174	64.01 (100.89)
177	5.00 - 9.00% of mass 176	4.23 (6.62)

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\CB054.D

Date : 06-APR-2015 11:15

Client ID:

Instrument: gcms-c.i

Sample Info: WG160815-10,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18

Data File: CB054.D
Spectrum: Avg. Scans 171-173 (3.57), Background Scan 162
Location of Maximum: 95.00
Number of points: 47

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	163	56.00	303	75.00	13306	106.00	68
37.00	905	57.00	638	76.00	1157	117.00	91
38.00	810	60.00	286	79.00	694	119.00	84
39.00	129	61.00	1186	81.00	538	128.00	77
44.00	90	62.00	1254	87.00	713	141.00	170
45.00	342	63.00	745	88.00	647	143.00	264
47.00	390	68.00	2694	92.00	679	173.00	68
48.00	81	69.00	2312	93.00	871	174.00	15191
49.00	1216	70.00	210	94.00	2344	175.00	1311
50.00	5242	72.00	77	95.00	23944	176.00	15326
51.00	1561	73.00	1049	96.00	1629	177.00	1014
55.00	73	74.00	3854	104.00	103		

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\CB057.D

Date : 08-APR-2015 10:19

Client ID:

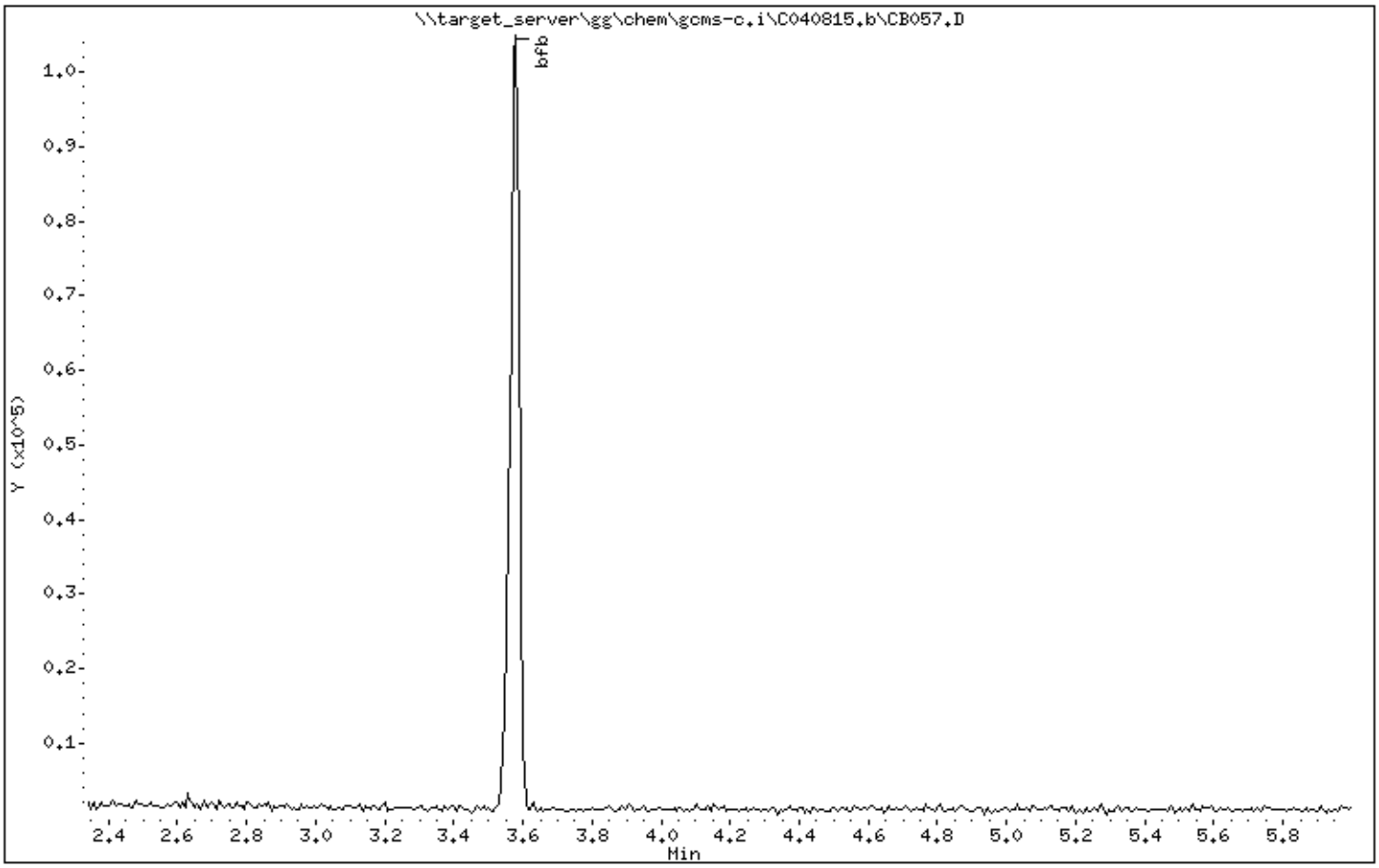
Instrument: gcms-c.i

Sample Info: WG160924-10,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\CB057.D

Date : 08-APR-2015 10:19

Client ID:

Instrument: gcms-c.i

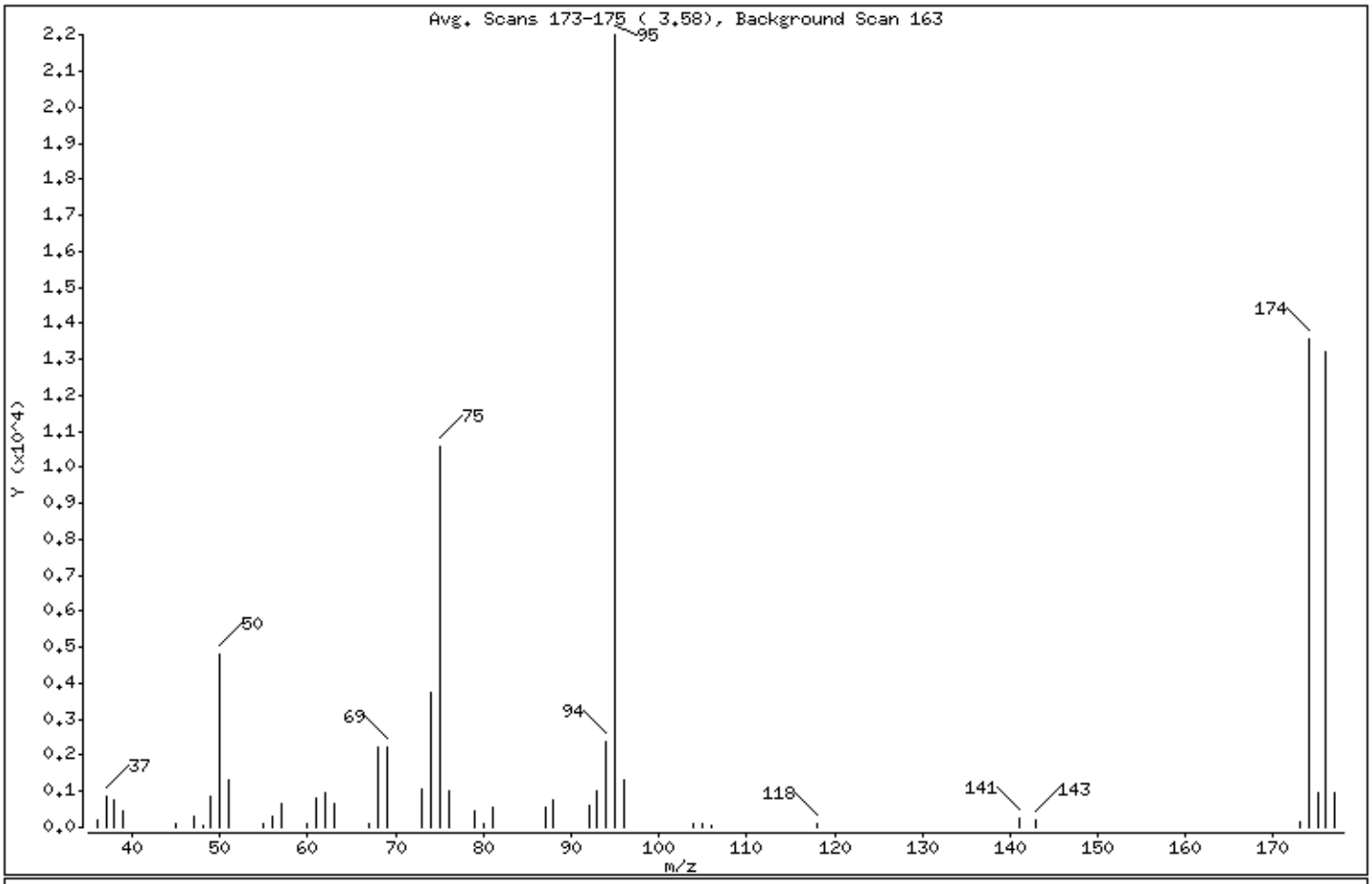
Sample Info: WG160924-10,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.88
75	30.00 - 60.00% of mass 95	48.03
96	5.00 - 9.00% of mass 95	5.87
173	Less than 2.00% of mass 174	0.58 (0.94)
174	Greater than 50.00% of mass 95	61.69
175	5.00 - 9.00% of mass 174	4.31 (6.99)
176	95.00 - 101.00% of mass 174	60.05 (97.33)
177	5.00 - 9.00% of mass 176	4.30 (7.16)

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\CB057.D

Date : 08-APR-2015 10:19

Client ID:

Instrument: gcms-c.i

Sample Info: WG160924-10,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18

Data File: CB057.D
Spectrum: Avg. Scans 173-175 (3.58), Background Scan 163
Location of Maximum: 95.00
Number of points: 45

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	213	57.00	640	79.00	457	106.00	67
37.00	845	60.00	81	80.00	125	118.00	96
38.00	780	61.00	807	81.00	537	141.00	230
39.00	466	62.00	982	87.00	567	143.00	200
45.00	109	63.00	658	88.00	781	173.00	127
47.00	282	67.00	76	92.00	585	174.00	13582
48.00	67	68.00	2217	93.00	997	175.00	949
49.00	856	69.00	2239	94.00	2396	176.00	13220
50.00	4817	73.00	1085	95.00	22016	177.00	947
51.00	1293	74.00	3742	96.00	1292		
55.00	105	75.00	10574	104.00	76		
56.00	304	76.00	1037	105.00	82		

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\CB059.D

Date : 10-APR-2015 08:25

Client ID:

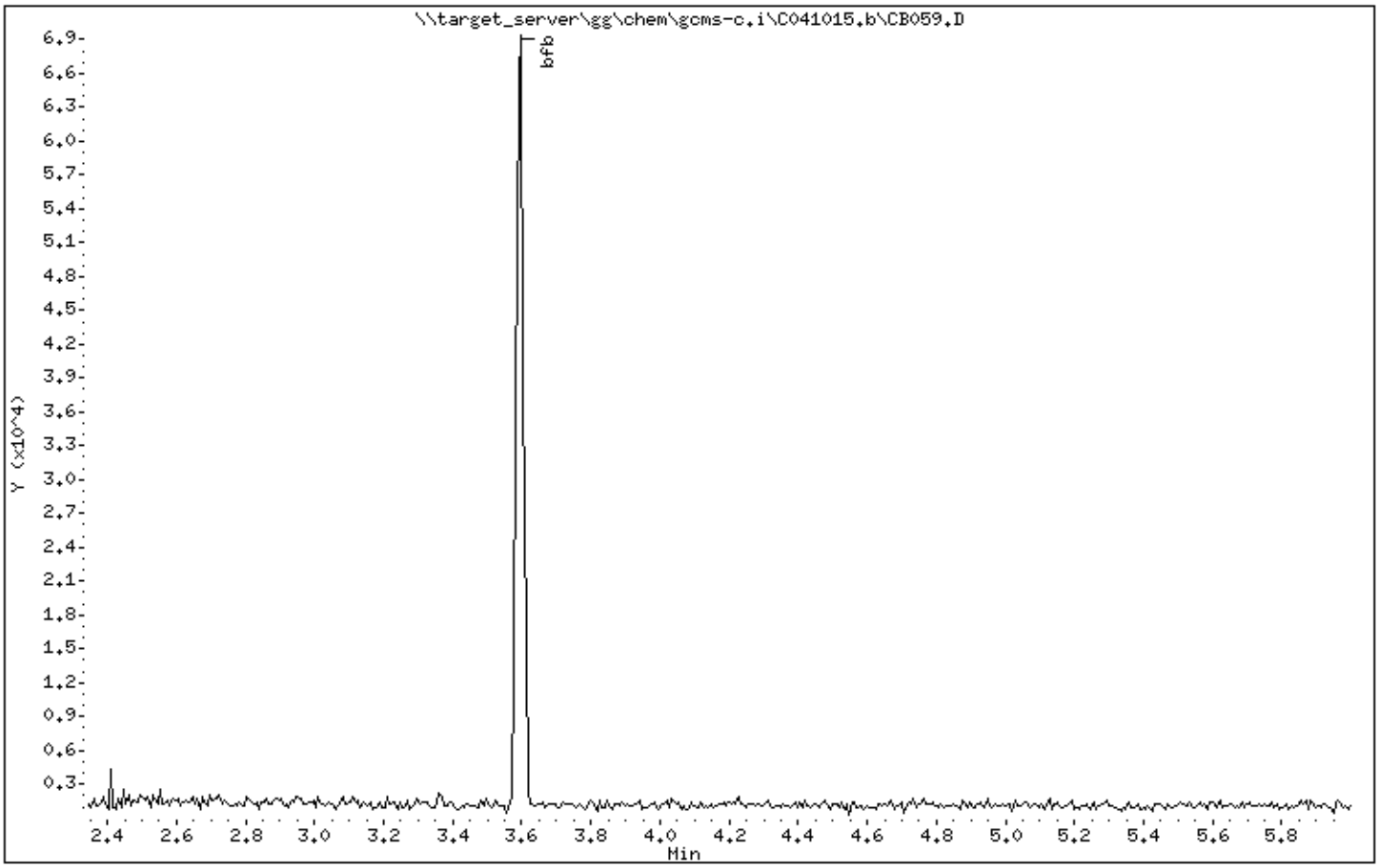
Instrument: gcms-c.i

Sample Info: WG161013-3,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\CB059.D

Date : 10-APR-2015 08:25

Client ID:

Instrument: gcms-c.i

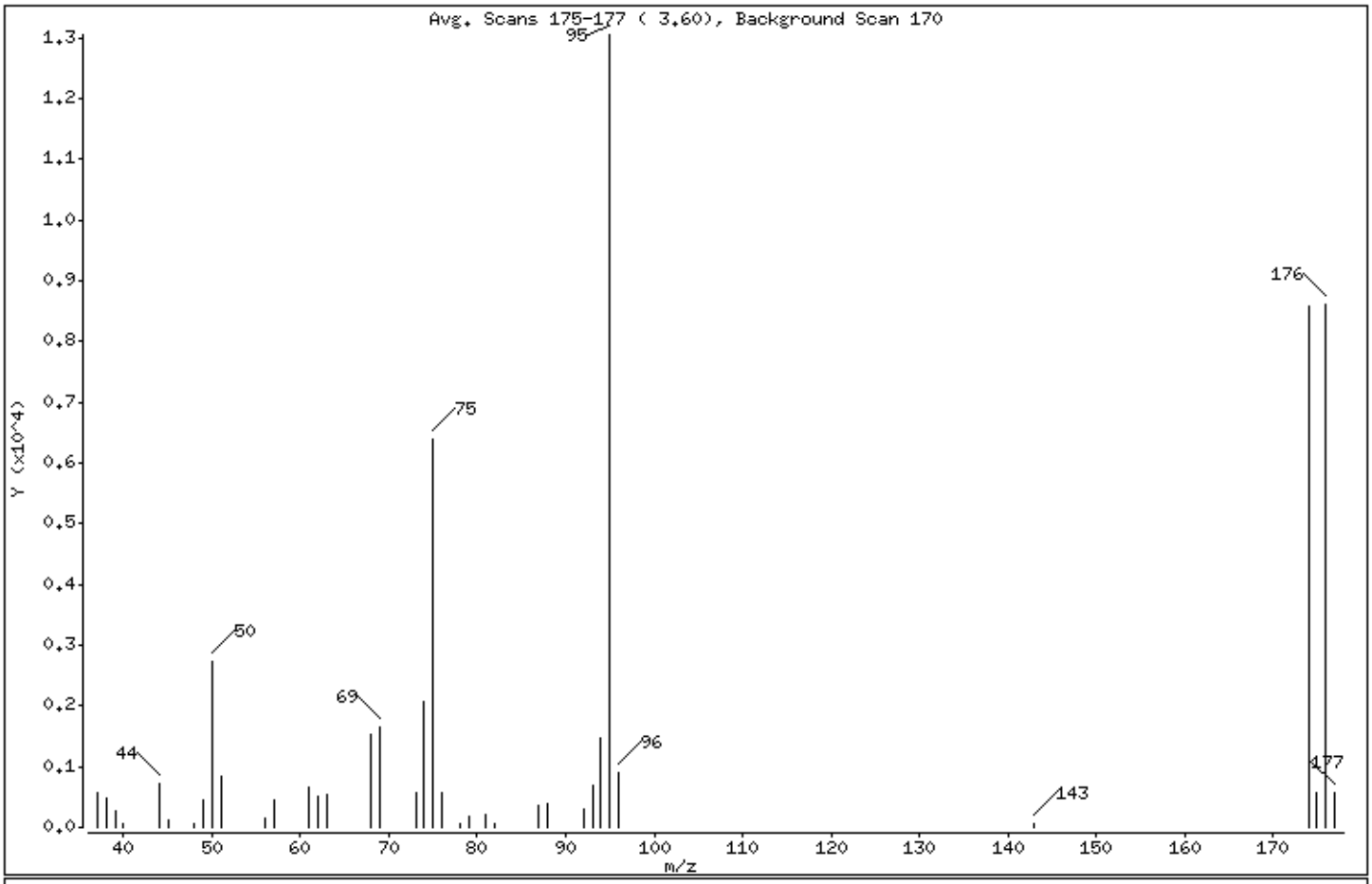
Sample Info: WG161013-3,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.97
75	30.00 - 60.00% of mass 95	49.08
96	5.00 - 9.00% of mass 95	6.89
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	65.73
175	5.00 - 9.00% of mass 174	4.31 (6.55)
176	95.00 - 101.00% of mass 174	66.06 (100.49)
177	5.00 - 9.00% of mass 176	4.35 (6.58)

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\CB059.D

Date : 10-APR-2015 08:25

Client ID:

Instrument: gcms-c.i

Sample Info: WG161013-3,SI2008

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18

Data File: CB059.D
Spectrum: Avg. Scans 175-177 (3.60), Background Scan 170
Location of Maximum: 95.00
Number of points: 37

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	583	56.00	136	76.00	571	95.00	13045
38.00	466	57.00	435	78.00	70	96.00	899
39.00	267	61.00	662	79.00	180	143.00	71
40.00	51	62.00	510	81.00	206	174.00	8575
44.00	716	63.00	541	82.00	72	175.00	562
45.00	125	68.00	1529	87.00	365	176.00	8617
48.00	67	69.00	1646	88.00	377	177.00	567
49.00	464	73.00	569	92.00	314		
50.00	2735	74.00	2061	93.00	697		
51.00	836	75.00	6402	94.00	1462		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160655-2
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: C2046.D

Sample Date:
Received Date:
Extract Date: 02-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160655

Analysis Date: 02-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 23-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160655-2
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: C2046.D

Sample Date:
Received Date:
Extract Date: 02-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160655

Analysis Date: 02-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 23-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		102.	%					
Toluene-d8		102.	%					
1,2-Dichloroethane-d4		117.	%					
Dibromofluoromethane		112.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2046.D
Report Date: 23-Apr-2015 16:10

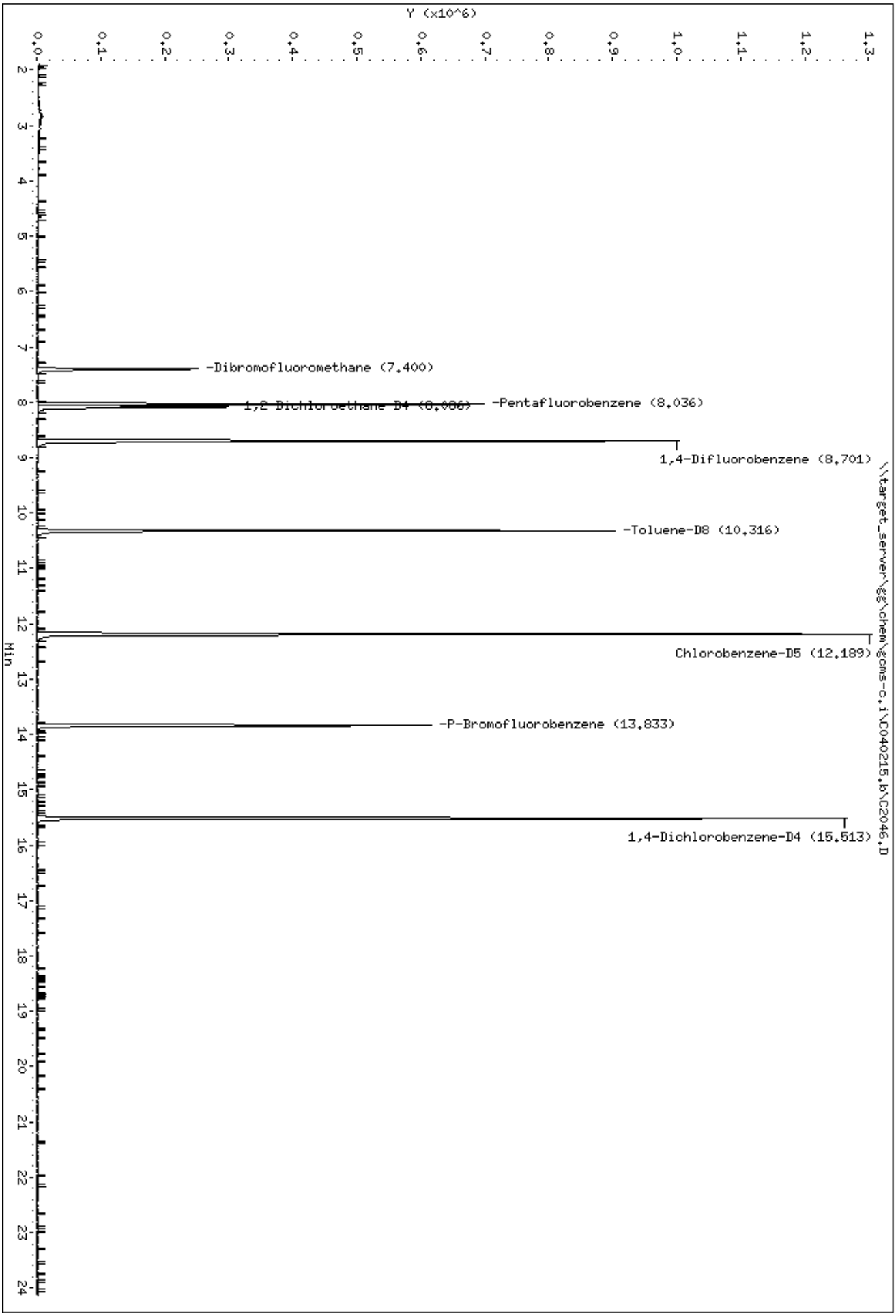
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040215.b\C2046.D
Lab Smp Id: WG160655-2 Client Smp ID: WG160655-Blank
Inj Date : 02-APR-2015 12:12 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160655-2,SI2008
Misc Info : WG160655,WG160458-4,SI2008-3
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040215.b\C826A34.m
Meth Date : 23-Apr-2015 16:09 gcms-c.i Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.399	7.397	(0.920)	160061	56.1365	56.1	
* 42 Pentafluorobenzene	168	8.043	8.039	(1.000)	410462	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.086	8.090	(1.005)	216932	58.4080	58.4	
* 49 1,4-Difluorobenzene	114	8.700	8.696	(1.000)	702988	50.0000		
$ 55 Toluene-D8	98	10.323	10.320	(1.186)	562965	51.2277	51.2	
* 66 Chlorobenzene-D5	117	12.188	12.193	(1.000)	670514	50.0000		
$ 76 P-Bromofluorobenzene	95	13.833	13.837	(1.590)	256988	51.2356	51.2	
* 91 1,4-Dichlorobenzene-D4	152	15.519	15.517	(1.000)	352230	50.0000		


Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2046.D
Date : 02-APR-2015 12:12
Client ID: WG160655-Blank
Sample Info: WG160655-2,SI2008
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C040215.b\C2046.D
Y (x10^6)
Min
-Dibromofluoromethane (7.400)
1,2-Dichloroethane-D4 (8.006)
-Pentafluorobenzene (8.036)
1,4-Difluorobenzene (8.701)
-Toluene-D8 (10.316)
Chlorobenzene-D5 (12.189)
-P-Bromofluorobenzene (13.833)
1,4-Dichlorobenzene-D4 (15.513)

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160723-2
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: C2071.D

Sample Date:
Received Date:
Extract Date: 03-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160723

Analysis Date: 03-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160723-2
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: C2071.D

Sample Date:
Received Date:
Extract Date: 03-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160723

Analysis Date: 03-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		105.	%					
Toluene-d8		104.	%					
1,2-Dichloroethane-d4	*	125.	%					
Dibromofluoromethane	*	116.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2071.D
Report Date: 13-Apr-2015 14:10

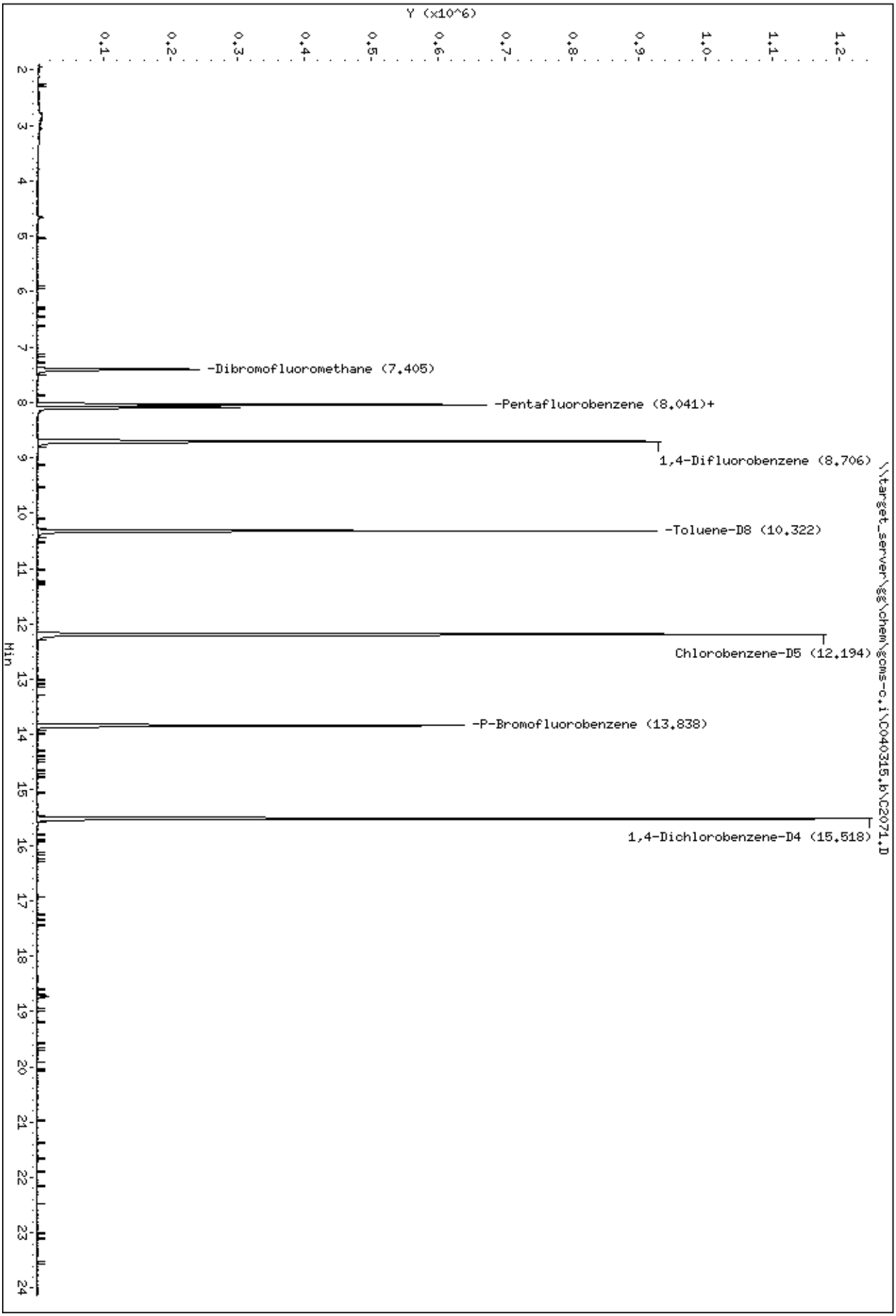
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040315.b\C2071.D
Lab Smp Id: WG160723-2 Client Smp ID: WG160723-Blank
Inj Date : 03-APR-2015 14:13 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160723-2,SI2008
Misc Info : WG160723,WG160458-4,SI2008-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040315.b\C826A34.m
Meth Date : 13-Apr-2015 14:10 gcms-c.i Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.405	7.397	(0.921)	153444	58.2209	58.2	
* 42 Pentafluorobenzene	168	8.041	8.039	(1.000)	379406	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.091	8.090	(1.006)	215173	62.6765	62.7	
* 49 1,4-Difluorobenzene	114	8.706	8.696	(1.000)	663350	50.0000		
$ 55 Toluene-D8	98	10.321	10.320	(1.186)	538734	51.9521	52.0	
* 66 Chlorobenzene-D5	117	12.194	12.193	(1.000)	631435	50.0000		
$ 76 P-Bromofluorobenzene	95	13.838	13.837	(1.589)	248388	52.4802	52.5	
* 91 1,4-Dichlorobenzene-D4	152	15.518	15.517	(1.000)	334203	50.0000		


Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2071.D
Date : 03-APR-2015 14:13
Client ID: WG160723-Blank
Sample Info: WG160723-2,SI2008
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C040315.b\C2071.D
Y (x10^6)
Min
-Dibromofluoromethane (7.405)
-Pentafluorobenzene (8.041)+
1,4-Difluorobenzene (8.706)
-Toluene-D8 (10.322)
Chlorobenzene-D5 (12.194)
-P-Bromofluorobenzene (13.838)
1,4-Dichlorobenzene-D4 (15.518)

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160815-9
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: C2125.D

Sample Date:
Received Date:
Extract Date: 06-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160815

Analysis Date: 06-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160815-9
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: C2125.D

Sample Date:
Received Date:
Extract Date: 06-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160815

Analysis Date: 06-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		96.9	%					
Toluene-d8	*	124.	%					
1,2-Dichloroethane-d4		113.	%					
Dibromofluoromethane		110.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2125.D
Report Date: 13-Apr-2015 14:17

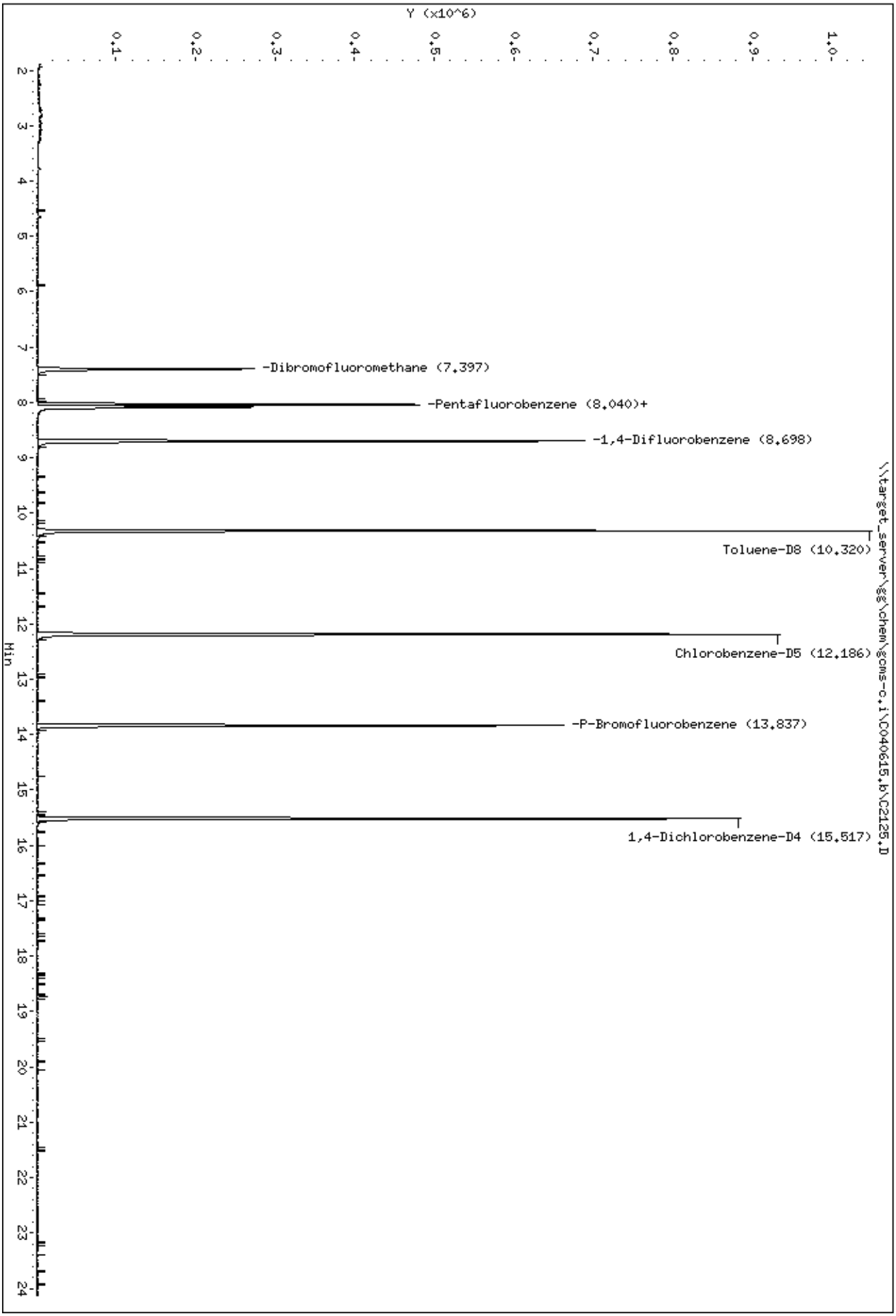
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2125.D
Lab Smp Id: WG160815-9 Client Smp ID: WG160815-Blank
Inj Date : 06-APR-2015 19:21 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-9,SI2008
Misc Info : WG160815,WG160815-4,SI2008-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 15:49 Cal File: C2120.D
Als bottle: 13 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.396	7.401	(0.920)	172338	54.9055	54.9	
* 42 Pentafluorobenzene	168	8.039	8.037	(1.000)	279872	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.090	8.087	(1.006)	200789	56.6616	56.7	
* 49 1,4-Difluorobenzene	114	8.697	8.702	(1.000)	471267	50.0000		
$ 55 Toluene-D8	98	10.320	10.317	(1.187)	616722	61.7742	61.8	
* 66 Chlorobenzene-D5	117	12.185	12.190	(1.000)	469067	50.0000		
$ 76 P-Bromofluorobenzene	95	13.837	13.834	(1.591)	262264	48.4344	48.4	
* 91 1,4-Dichlorobenzene-D4	152	15.516	15.514	(1.000)	236703	50.0000		


Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2125.D
Date : 06-APR-2015 19:21
Client ID: WG160815-Blank
Sample Info: WG160815-9,SI2008
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C040615.b\C2125.D
Y (x10^6)
Min
-Dibromofluoromethane (7.397)
-Pentafluorobenzene (8.040)+
-1,4-Difluorobenzene (8.698)
Toluene-D8 (10.320)
Chlorobenzene-D5 (12.186)
-P-Bromofluorobenzene (13.837)
1,4-Dichlorobenzene-D4 (15.517)

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG161013-2
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: C2233.D

Sample Date:
Received Date:
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG161013-2
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: C2233.D

Sample Date:
Received Date:
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		89.6	%					
Toluene-d8		104.	%					
1,2-Dichloroethane-d4		103.	%					
Dibromofluoromethane		99.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2233.D
Report Date: 13-Apr-2015 14:22

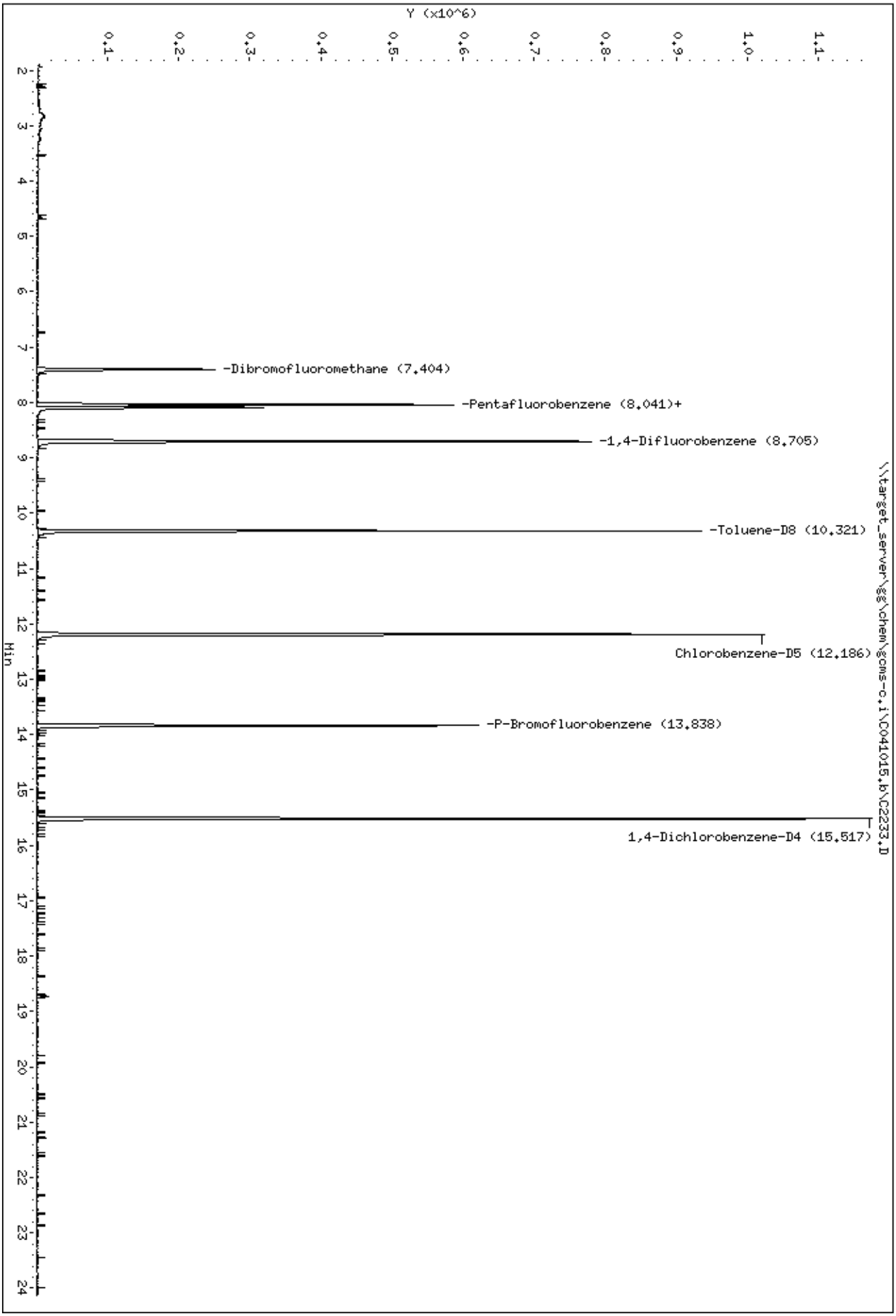
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C041015.b\C2233.D
Lab Smp Id: WG161013-2 Client Smp ID: WG161013-Blank
Inj Date : 10-APR-2015 11:22 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG161013-2,SI2008
Misc Info : WG161013,WG160924-4,SI2008-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C041015.b\C826A36.m
Meth Date : 13-Apr-2015 14:13 gcms-c.i Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.404	7.405	(0.921)	160499	49.6608	49.7	
* 42 Pentafluorobenzene	168	8.040	8.041	(1.000)	322163	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	222617	51.4825	51.5	
* 49 1,4-Difluorobenzene	114	8.705	8.698	(1.000)	554008	50.0000		
$ 55 Toluene-D8	98	10.320	10.321	(1.186)	528788	52.0482	52.0	
* 66 Chlorobenzene-D5	117	12.193	12.187	(1.000)	536950	50.0000		
$ 76 P-Bromofluorobenzene	95	13.837	13.838	(1.590)	239447	44.7923	44.8	
* 91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	308124	50.0000		


Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2233.D
Date : 10-APR-2015 11:22
Client ID: WG161013-Blank
Sample Info: WG161013-2,SI2008
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C041015.b\C2233.D
Y (x10^6)
Min
-Dibromofluoromethane (7.404)
-Pentafluorobenzene (8.041)+
-1,4-Difluorobenzene (8.705)
-Toluene-D8 (10.321)
Chlorobenzene-D5 (12.186)
-P-Bromofluorobenzene (13.838)
1,4-Dichlorobenzene-D4 (15.517)

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG160655-1
Client ID: LCS
Project:
SDG: SI2008
LCS File ID: C2043.D

Sample Date:
Received Date:
Extract Date: 02-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160655

Analysis Date: 02-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 23-APR-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	104.	50.0	52.1	ug/L	30-155
Chloromethane	104.	50.0	52.1	ug/L	40-125
Vinyl Chloride	93.4	50.0	46.7	ug/L	50-145
Bromomethane	120.	50.0	60.1	ug/L	30-145
Chloroethane	* 140.	50.0	69.9	ug/L	60-135
Trichlorofluoromethane	112.	50.0	56.2	ug/L	60-145
1,1-Dichloroethene	105.	50.0	52.4	ug/L	70-130
Carbon Disulfide	* 500.	50.0	250.	ug/L	35-160
Freon-113	89.6	50.0	44.8	ug/L	73-126
Methylene Chloride	94.8	50.0	47.4	ug/L	55-140
Acetone	103.	50.0	51.6	ug/L	40-140
trans-1,2-Dichloroethene	95.8	50.0	47.9	ug/L	60-140
Methyl tert-butyl Ether	112.	100.	112.	ug/L	65-125
1,1-Dichloroethane	106.	50.0	53.2	ug/L	70-135
cis-1,2-Dichloroethene	97.8	50.0	48.9	ug/L	70-125
Chloroform	110.	50.0	55.0	ug/L	65-135
1,1,1-Trichloroethane	111.	50.0	55.4	ug/L	65-130
2-Butanone	112.	50.0	56.1	ug/L	30-150
Cyclohexane	* 185.	50.0	92.6	ug/L	71-133
Carbon Tetrachloride	114.	50.0	57.1	ug/L	65-140
Benzene	98.6	50.0	49.3	ug/L	80-120
1,2-Dichloroethane	111.	50.0	55.5	ug/L	70-130
Trichloroethene	101.	50.0	50.5	ug/L	70-125
1,2-Dichloropropane	103.	50.0	51.6	ug/L	75-125
Bromodichloromethane	115.	50.0	57.6	ug/L	75-120
cis-1,3-Dichloropropene	105.	50.0	52.3	ug/L	70-130
Toluene	98.6	50.0	49.3	ug/L	75-120
4-Methyl-2-Pentanone	117.	50.0	58.5	ug/L	60-135
trans-1,3-Dichloropropene	117.	50.0	58.4	ug/L	55-140
1,1,2-Trichloroethane	101.	50.0	50.6	ug/L	75-125
Tetrachloroethene	100.	50.0	50.0	ug/L	45-150
Dibromochloromethane	110.	50.0	54.9	ug/L	60-135
2-Hexanone	115.	50.0	57.5	ug/L	55-130
Chlorobenzene	108.	50.0	53.8	ug/L	80-120
Ethylbenzene	97.2	50.0	48.6	ug/L	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG160655-1
Client ID: LCS
Project:
SDG: SI2008
LCS File ID: C2043.D

Sample Date:
Received Date:
Extract Date: 02-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160655

Analysis Date: 02-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 23-APR-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Xylenes (total)	103.	150.	155.	ug/L	89-116
Styrene	105.	50.0	52.3	ug/L	65-135
Bromoform	105.	50.0	52.3	ug/L	70-130
Isopropylbenzene	109.	50.0	54.5	ug/L	75-125
1,1,2,2-Tetrachloroethane	102.	50.0	51.0	ug/L	65-130
1,3-Dichlorobenzene	105.	50.0	52.3	ug/L	75-125
1,4-Dichlorobenzene	96.8	50.0	48.4	ug/L	75-125
1,2-Dichlorobenzene	108.	50.0	54.1	ug/L	70-120
1,2,4-Trichlorobenzene	100.	50.0	50.0	ug/L	65-135
Methyl Acetate	95.4	50.0	47.7	ug/L	70-132
Methylcyclohexane	93.4	50.0	46.7	ug/L	73-125
o-Xylene	106.	50.0	53.2	ug/L	80-120
M+P-Xylenes	102.	100.	102.	ug/L	75-130
1,2-Dichloroethylene (Total)	96.7	100.	96.7	ug/L	84-121
1,2-Dibromoethane	101.	50.0	50.5	ug/L	80-120
1,2-Dibromo-3-Chloropropane	105.	50.0	52.4	ug/L	50-130
P-Bromofluorobenzene	101.				75-120
Toluene-d8	98.0				85-120
1,2-Dichloroethane-d4	114.				70-120
Dibromofluoromethane	107.				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2043.D
Report Date: 23-Apr-2015 16:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040215.b\C2043.D
Lab Smp Id: WG160655-1 Client Smp ID: WG160655-LCS
Inj Date : 02-APR-2015 10:26 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160655-1,SI2008
Misc Info : WG160655,WG160458-4,SI2008-3
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040215.b\C826A34.m
Meth Date : 23-Apr-2015 16:09 gcms-c.i Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	249052	52.1179	52.1	
2 Chloromethane	50	2.229	2.229	(0.277)	353975	52.0657	52.1	
3 Vinyl chloride	62	2.329	2.329	(0.290)	273117	46.7444	46.7	
4 Bromomethane	94	2.729	2.729	(0.339)	149126	60.1268	60.1	
5 Chloroethane	64	2.879	2.879	(0.358)	131818	69.8693	69.9(R)	
6 Trichlorofluoromethane	101	3.058	3.058	(0.380)	325994	56.2362	56.2	
7 Diethyl Ether	59	3.487	3.487	(0.434)	88479	50.9813	51.0	
8 Tertiary-butyl alcohol	59	5.338	5.338	(0.664)	82953	176.301	176	
9 1,1-Dichloroethene	96	3.751	3.751	(0.467)	207125	52.4558	52.4	
10 Carbon Disulfide	76	3.787	3.780	(0.471)	658903	249.567	250(AR)	
11 Freon-113	151	3.808	3.815	(0.474)	85975	44.8541	44.8	
12 Iodomethane	142	3.958	3.958	(0.492)	233368	85.3341	85.3(R)	
13 Acrolein	56	4.266	4.266	(0.531)	126376	238.622	239	
14 Methylene Chloride	84	4.645	4.652	(0.578)	233710	47.3604	47.4	
15 Acetone	43	4.752	4.745	(0.591)	68682	51.5512	51.6	
16 Isobutyl Alcohol	43	8.247	8.247	(1.026)	129430	749.026	749	
17 trans-1,2-Dichloroethene	96	4.916	4.916	(0.612)	226746	47.8608	47.9	
18 Allyl Chloride	41	4.473	4.473	(0.556)	247545	48.2019	48.2	
19 Methyl tert-butyl ether	73	5.124	5.123	(0.637)	1070824	112.447	112	
20 Acetonitrile	39	5.538	5.538	(0.689)	48619	450.374	450	
21 Di-isopropyl ether	45	5.781	5.781	(0.719)	627444	49.9041	49.9	
22 Chloroprene	53	5.910	5.910	(0.735)	352739	50.3794	50.4	
23 Propionitrile	54	7.961	7.961	(0.990)	300007	491.953	492	
24 Methacrylonitrile	41	7.983	7.983	(0.993)	1117553	512.416	512	

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2043.D
Report Date: 23-Apr-2015 16:09

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	25	1,1-Dichloroethane	63	5.946	5.946	(0.740)	458772	53.2125	53.2	
	26	Acrylonitrile	52	6.046	6.038	(0.752)	317258	240.708	241	
	27	Ethyl tertiary-butyl ether	59	6.346	6.346	(0.789)	584407	49.6747	49.7	
	28	Vinyl Acetate	43	6.367	6.367	(0.732)	517224	65.1558	65.2(R)	
	29	cis-1,2-Dichloroethene	96	6.760	6.753	(0.841)	239673	48.8660	48.9	
M	30	1,2-Dichloroethylene (total)	96				466419	96.7268	96.7	
	31	Methyl Methacrylate	41	9.570	9.562	(1.100)	163145	51.3790	51.4	
	32	2,2-Dichloropropane	77	6.903	6.903	(0.859)	398822	58.3230	58.3	
	33	Bromochloromethane	128	7.032	7.032	(0.875)	100681	62.6191	62.6	
	34	Chloroform	83	7.154	7.154	(0.890)	467442	54.9835	55.0	
	35	Carbon Tetrachloride	117	7.318	7.318	(0.841)	303051	57.1007	57.1	
	36	Tetrahydrofuran	42	7.361	7.361	(0.916)	61401	63.6234	63.6(R)	
$	37	Dibromofluoromethane	113	7.404	7.397	(0.921)	160456	53.3381	53.3	
	38	1,1,1-Trichloroethane	97	7.411	7.411	(0.922)	428942	55.4465	55.4	
	39	1,1-Dichloropropene	75	7.582	7.582	(0.872)	358615	54.5126	54.5	
	40	2-Butanone	43	7.582	7.575	(0.943)	98005	56.1275	56.1	
	41	Benzene	78	7.911	7.911	(0.910)	857296	49.3192	49.3	
*	42	Pentafluorobenzene	168	8.040	8.039	(1.000)	433063	50.0000		
	43	Cyclohexane	56	7.018	7.018	(0.873)	363380	92.5811	92.6(R)	
	44	Ethyl Methacrylate	69	11.056	11.056	(1.271)	234478	50.7283	50.7	
$	45	1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	222663	56.8222	56.8	
	46	Tertiary-amyl methyl ether	73	8.076	8.076	(1.004)	452205	49.6793	49.7	
	47	1,2-Dichloroethane	62	8.176	8.176	(0.940)	354238	55.5302	55.5	
	48	Trichloroethene	95	8.647	8.647	(0.994)	250218	50.5425	50.5	
*	49	1,4-Difluorobenzene	114	8.698	8.696	(1.000)	763695	50.0000		
	50	Dibromomethane	93	9.162	9.162	(1.053)	141128	51.3610	51.4	
	51	1,2-Dichloropropane	63	9.284	9.284	(1.067)	226591	51.6080	51.6	
	52	Bromodichloromethane	83	9.369	9.369	(1.077)	348915	57.5543	57.6	
	53	cis-1,3-dichloropropene	75	10.106	10.106	(1.162)	381216	52.2733	52.3	
	54	1,4-Dioxane	88	9.612	9.612	(1.105)	32593	356.500	356	
$	55	Toluene-D8	98	10.320	10.320	(1.187)	584822	48.9864	49.0	
	56	2-Chloroethylvinylether	63	10.048	10.048	(1.155)	26842	63.9391	63.9	
	57	Toluene	92	10.377	10.377	(1.193)	557289	49.3075	49.3	
	58	4-methyl-2-pentanone	43	10.828	10.828	(1.245)	202730	58.4971	58.5	
	59	Tetrachloroethene	164	10.820	10.820	(0.888)	177805	49.9978	50.0	
	60	trans-1,3-Dichloropropene	75	10.871	10.871	(1.250)	365983	58.3701	58.4	
	61	1,1,2-Trichloroethane	83	11.056	11.056	(1.271)	159994	50.5950	50.6	
	62	Dibromochloromethane	129	11.271	11.271	(0.925)	232313	54.9424	54.9	
	63	1,3-Dichloropropane	76	11.378	11.385	(0.934)	364268	52.1365	52.1	
	64	1,2-Dibromoethane	107	11.550	11.550	(1.328)	214174	50.4733	50.5	
	65	2-Hexanone	43	11.835	11.835	(0.971)	142556	57.4938	57.5	
*	66	Chlorobenzene-D5	117	12.186	12.193	(1.000)	697894	50.0000		
	67	Chlorobenzene	112	12.214	12.214	(1.002)	618070	53.7879	53.8	
	152	1-Chlorohexane	91	12.179	12.186	(0.999)	335976	47.3019	47.3	
	68	Ethylbenzene	106	12.243	12.243	(1.005)	335042	48.6184	48.6	
	69	1,1,1,2-Tetrachloroethane	131	12.293	12.293	(1.009)	232346	54.9560	55.0	
M	70	Xylenes (total)	106				1225661	155.039	155	
	71	m+p-Xylenes	106	12.436	12.436	(1.021)	817933	101.853	102	
	72	o-Xylene	106	13.008	13.008	(1.067)	407728	53.1860	53.2	
	73	Styrene	104	13.079	13.079	(1.073)	681215	52.3434	52.3	
	74	Bromoform	173	13.115	13.115	(1.076)	144029	52.2844	52.3	
	75	Isopropylbenzene	105	13.437	13.437	(0.866)	1154369	54.5197	54.5	
$	76	P-Bromofluorobenzene	95	13.837	13.837	(1.591)	275252	50.5147	50.5	
	77	cis-1,4-Dichloro-2-Butene	53	13.937	13.937	(0.898)	96164	51.8900	51.9	

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2043.D
Report Date: 23-Apr-2015 16:09

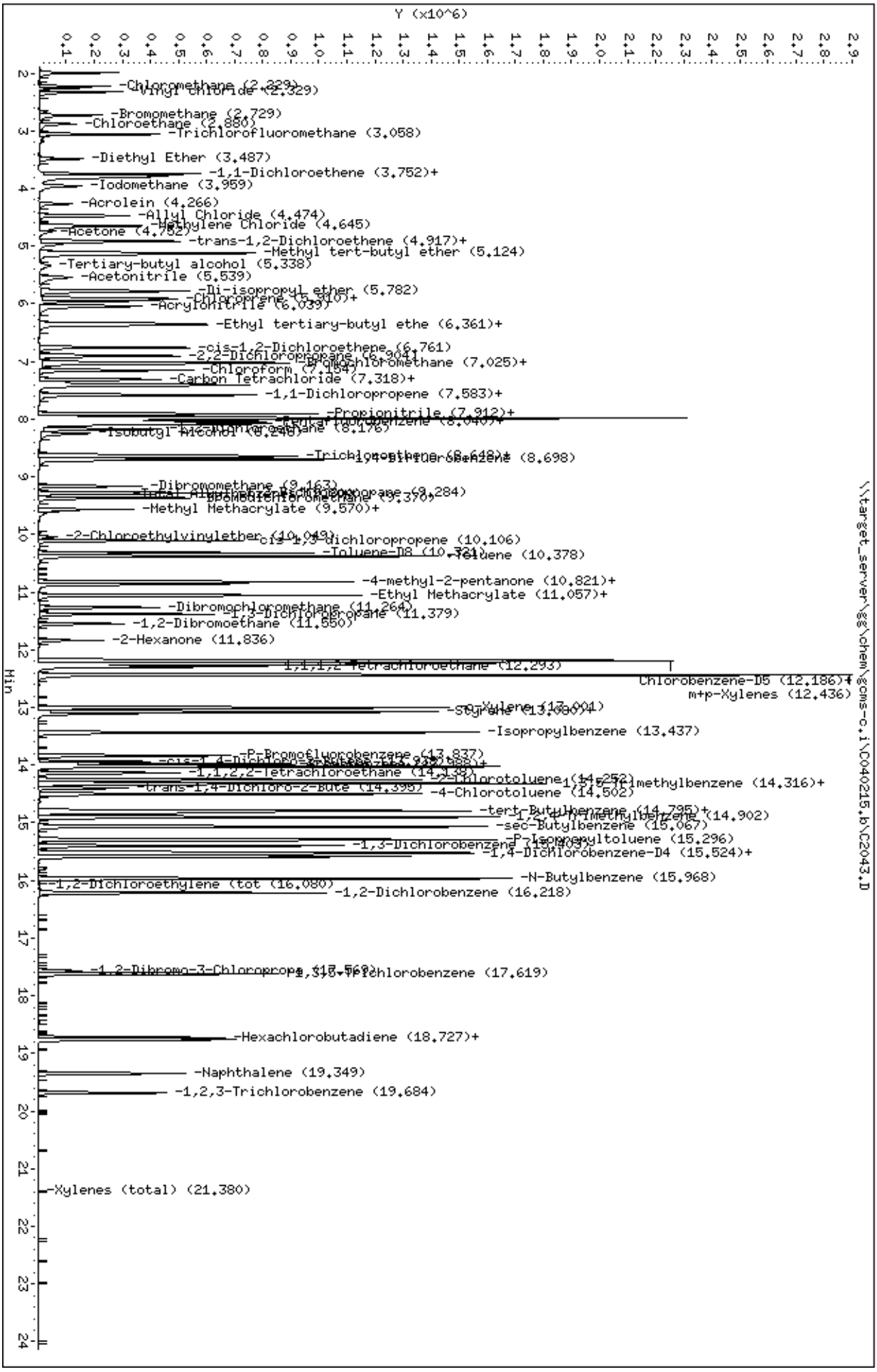
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	78 trans-1,4-Dichloro-2-Butene	53	14.394	14.394	(0.928)	79159	53.3965	53.4	
	79 Bromobenzene	156	13.987	13.987	(0.901)	257299	49.6804	49.7	
	80 N-Propylbenzene	91	14.023	14.030	(0.904)	1422047	55.4987	55.5	
	81 1,1,2,2-Tetrachloroethane	83	14.137	14.137	(0.911)	281384	51.0039	51.0	
	82 1,3,5-Trimethylbenzene	105	14.316	14.316	(0.923)	979965	50.4289	50.4	
	83 2-Chlorotoluene	91	14.252	14.252	(0.918)	880648	54.9401	54.9	
	84 1,2,3-Trichloropropane	75	14.330	14.337	(0.924)	237709	52.5587	52.6	
	85 4-Chlorotoluene	91	14.502	14.502	(0.935)	915139	56.8298	56.8	
	86 tert-Butylbenzene	119	14.795	14.795	(0.953)	937096	53.6103	53.6	
	87 Pentachloroethane	117	14.823	14.823	(0.955)	178611	51.6645	51.7	
	88 1,2,4-Trimethylbenzene	105	14.902	14.902	(0.960)	990846	51.7561	51.8	
	89 P-Isopropyltoluene	119	15.295	15.295	(0.986)	1041713	54.5019	54.5	
	90 1,3-Dichlorobenzene	146	15.402	15.402	(0.993)	477344	52.2959	52.3	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.517	(1.000)	386420	50.0000		
	92 1,4-Dichlorobenzene	146	15.545	15.545	(1.002)	472737	48.4560	48.4	
	93 N-Butylbenzene	91	15.967	15.967	(1.029)	1046099	53.3370	53.3	
	94 sec-Butylbenzene	105	15.066	15.066	(0.971)	1256197	54.0904	54.1	
	95 1,2-Dichlorobenzene	146	16.217	16.216	(1.045)	442431	54.0835	54.1	
	96 1,2-Dibromo-3-Chloropropane	75	17.561	17.568	(1.132)	48895	52.3522	52.4	
	97 1,3,5-Trichlorobenzene	180	17.618	17.625	(1.135)	294824	47.1745	47.2	
	98 Hexachlorobutadiene	225	18.726	18.726	(1.207)	149538	54.6304	54.6	
	99 1,2,4-Trichlorobenzene	180	18.762	18.762	(1.209)	236932	49.9649	50.0	
	100 1,2,3-Trimethylbenzene	105	15.581	15.581	(1.004)	865049	48.5005	48.5	
	101 Naphthalene	128	19.348	19.348	(1.247)	444885	45.8429	45.8	
	102 1,2,3-Trichlorobenzene	180	19.684	19.684	(1.269)	152387	48.2571	48.2	
	103 Methyl Acetate	43	4.966	4.973	(0.618)	129282	47.7194	47.7	
	104 Methylcyclohexane	83	8.626	8.625	(1.073)	230442	46.6794	46.7	
M	153 Total Alkylbenzenes	100				7673963	373.223	373	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-c.i\C040215.b\C2043.D
Date : 02-APR-2015 10:26
Client ID: WG160655-LCS
Sample Info: WG160655-1,SI2008
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG160723-1
Client ID: LCS
Project:
SDG: SI2008
LCS File ID: C2068.D

Sample Date:
Received Date:
Extract Date: 03-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160723

Analysis Date: 03-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	92.8	50.0	46.4	ug/L	30-155
Chloromethane	93.0	50.0	46.5	ug/L	40-125
Vinyl Chloride	84.8	50.0	42.4	ug/L	50-145
Bromomethane	118.	50.0	59.2	ug/L	30-145
Chloroethane	112.	50.0	55.9	ug/L	60-135
Trichlorofluoromethane	103.	50.0	51.6	ug/L	60-145
1,1-Dichloroethene	98.2	50.0	49.1	ug/L	70-130
Carbon Disulfide	* 464.	50.0	232.	ug/L	35-160
Freon-113	77.2	50.0	38.6	ug/L	73-126
Methylene Chloride	95.8	50.0	47.9	ug/L	55-140
Acetone	* 144.	50.0	71.8	ug/L	40-140
trans-1,2-Dichloroethene	92.8	50.0	46.4	ug/L	60-140
Methyl tert-butyl Ether	115.	100.	115.	ug/L	65-125
1,1-Dichloroethane	104.	50.0	51.8	ug/L	70-135
cis-1,2-Dichloroethene	94.6	50.0	47.3	ug/L	70-125
Chloroform	106.	50.0	53.0	ug/L	65-135
1,1,1-Trichloroethane	109.	50.0	54.4	ug/L	65-130
2-Butanone	123.	50.0	61.7	ug/L	30-150
Cyclohexane	* 173.	50.0	86.6	ug/L	71-133
Carbon Tetrachloride	112.	50.0	56.2	ug/L	65-140
Benzene	95.0	50.0	47.5	ug/L	80-120
1,2-Dichloroethane	112.	50.0	56.2	ug/L	70-130
Trichloroethene	98.0	50.0	49.0	ug/L	70-125
1,2-Dichloropropane	102.	50.0	51.0	ug/L	75-125
Bromodichloromethane	113.	50.0	56.6	ug/L	75-120
cis-1,3-Dichloropropene	100.	50.0	50.2	ug/L	70-130
Toluene	94.8	50.0	47.4	ug/L	75-120
4-Methyl-2-Pentanone	108.	50.0	54.2	ug/L	60-135
trans-1,3-Dichloropropene	112.	50.0	56.2	ug/L	55-140
1,1,2-Trichloroethane	97.8	50.0	48.9	ug/L	75-125
Tetrachloroethene	116.	50.0	58.0	ug/L	45-150
Dibromochloromethane	110.	50.0	54.8	ug/L	60-135
2-Hexanone	114.	50.0	57.2	ug/L	55-130
Chlorobenzene	104.	50.0	52.1	ug/L	80-120
Ethylbenzene	91.6	50.0	45.8	ug/L	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2068.D
Report Date: 13-Apr-2015 14:10

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040315.b\C2068.D
Lab Smp Id: WG160723-1 Client Smp ID: WG160723-LCS
Inj Date : 03-APR-2015 12:16 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160723-1,SI2008
Misc Info : WG160723,WG160458-4,SI2008-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040315.b\C826A34.m
Meth Date : 13-Apr-2015 14:10 gcms-c.i Quant Type: ISTD
Cal Date : 28-MAR-2015 14:44 Cal File: C1963.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.989	1.986	(0.247)	219638	46.4037	46.4	
2 Chloromethane	50	2.225	2.229	(0.277)	314896	46.4800	46.5	
3 Vinyl chloride	62	2.325	2.329	(0.289)	245657	42.4481	42.4	
4 Bromomethane	94	2.726	2.729	(0.339)	145579	59.2359	59.2	
5 Chloroethane	64	2.883	2.879	(0.358)	106465	55.9236	55.9	
6 Trichlorofluoromethane	101	3.062	3.058	(0.381)	296167	51.5812	51.6	
7 Diethyl Ether	59	3.490	3.487	(0.434)	43612	25.3703	25.4(R)	
8 Tertiary-butyl alcohol	59	5.342	5.338	(0.664)	115044	247.436	247	
9 1,1-Dichloroethene	96	3.748	3.751	(0.466)	192218	49.1478	49.1	
10 Carbon Disulfide	76	3.784	3.780	(0.470)	606607	231.944	232(AR)	
11 Freon-113	151	3.812	3.815	(0.474)	73363	38.6416	38.6	
12 Iodomethane	142	3.955	3.958	(0.492)	204719	75.5767	75.6	
13 Acrolein	56	4.270	4.266	(0.531)	147656	281.479	281	
14 Methylene Chloride	84	4.648	4.652	(0.578)	233989	47.8720	47.9	
15 Acetone	43	4.756	4.745	(0.591)	94687	71.7521	71.8	
16 Isobutyl Alcohol	43	8.251	8.247	(1.026)	164331	960.129	960	
17 trans-1,2-Dichloroethene	96	4.920	4.916	(0.612)	217637	46.3790	46.4	
18 Allyl Chloride	41	4.477	4.473	(0.557)	248400	48.8326	48.8	
19 Methyl tert-butyl ether	73	5.127	5.123	(0.637)	1083060	114.824	115	
20 Acetonitrile	39	5.542	5.538	(0.689)	57194	534.892	535	
21 Di-isopropyl ether	45	5.785	5.781	(0.719)	693692	55.7027	55.7	
22 Chloroprene	53	5.914	5.910	(0.735)	374987	54.0710	54.1	
23 Propionitrile	54	7.965	7.961	(0.990)	311660	515.966	516	
24 Methacrylonitrile	41	7.987	7.983	(0.993)	1143826	529.496	529	

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2068.D
Report Date: 13-Apr-2015 14:10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.949	5.946	(0.740)	442754	51.8475	51.8	
	26 Acrylonitrile	52	6.042	6.038	(0.751)	352876	270.301	270	
	27 Ethyl tertiary-butyl ether	59	6.350	6.346	(0.789)	646515	55.4813	55.5	
	28 Vinyl Acetate	43	6.371	6.367	(0.732)	462884	59.2460	59.2	
	29 cis-1,2-Dichloroethene	96	6.764	6.753	(0.841)	229947	47.3329	47.3	
M	30 1,2-Dichloroethylene (total)	96				447584	93.7120	93.7	
	31 Methyl Methacrylate	41	9.566	9.562	(1.099)	164082	52.5033	52.5	
	32 2,2-Dichloropropane	77	6.907	6.903	(0.859)	376360	55.5664	55.6	
	33 Bromochloromethane	128	7.036	7.032	(0.875)	94139	59.1122	59.1(R)	
	34 Chloroform	83	7.157	7.154	(0.890)	445926	52.9561	53.0	
	35 Carbon Tetrachloride	117	7.315	7.318	(0.841)	293376	56.1533	56.2	
	36 Tetrahydrofuran	42	7.365	7.361	(0.916)	53872	56.3577	56.4	
$	37 Dibromofluoromethane	113	7.400	7.397	(0.920)	167067	56.0688	56.1	
	38 1,1,1-Trichloroethane	97	7.415	7.411	(0.922)	416831	54.3981	54.4	
	39 1,1-Dichloropropene	75	7.586	7.582	(0.872)	342078	52.8332	52.8	
	40 2-Butanone	43	7.586	7.575	(0.943)	106743	61.7185	61.7	
	41 Benzene	78	7.908	7.911	(0.909)	813070	47.5255	47.5	
*	42 Pentafluorobenzene	168	8.044	8.039	(1.000)	428946	50.0000		
	43 Cyclohexane	56	7.022	7.018	(0.873)	336646	86.5931	86.6(R)	
	44 Ethyl Methacrylate	69	11.060	11.056	(1.271)	230989	50.7753	50.8	
$	45 1,2-Dichloroethane-D4	65	8.094	8.090	(1.006)	225491	58.0962	58.1	
	46 Tertiary-amyl methyl ether	73	8.080	8.076	(1.004)	491177	54.4787	54.5	
	47 1,2-Dichloroethane	62	8.180	8.176	(0.940)	353021	56.2273	56.2	
	48 Trichloroethene	95	8.651	8.647	(0.994)	238705	48.9906	49.0	
*	49 1,4-Difluorobenzene	114	8.701	8.696	(1.000)	751635	50.0000		
	50 Dibromomethane	93	9.166	9.162	(1.053)	133184	49.2476	49.2	
	51 1,2-Dichloropropane	63	9.288	9.284	(1.067)	220261	50.9713	51.0	
	52 Bromodichloromethane	83	9.373	9.369	(1.077)	337529	56.5695	56.6	
	53 cis-1,3-dichloropropene	75	10.110	10.106	(1.162)	360501	50.2260	50.2	
	54 1,4-Dioxane	88	9.609	9.612	(1.104)	50151	557.350	557	
$	55 Toluene-D8	98	10.324	10.320	(1.186)	597870	50.8829	50.9	
	56 2-Chloroethylvinylether	63	10.052	10.048	(1.155)	28154	69.6798	69.7(R)	
	57 Toluene	92	10.381	10.377	(1.193)	527059	47.3811	47.4	
	58 4-methyl-2-pentanone	43	10.831	10.828	(1.245)	184814	54.1831	54.2	
	59 Tetrachloroethene	164	10.824	10.820	(0.888)	204531	57.9531	58.0	
	60 trans-1,3-Dichloropropene	75	10.867	10.871	(1.249)	347035	56.2361	56.2	
	61 1,1,2-Trichloroethane	83	11.060	11.056	(1.271)	152321	48.9414	48.9	
	62 Dibromochloromethane	129	11.268	11.271	(0.924)	230129	54.8424	54.8	
	63 1,3-Dichloropropane	76	11.382	11.385	(0.934)	345185	49.7833	49.8	
	64 1,2-Dibromoethane	107	11.553	11.550	(1.328)	198395	47.5049	47.5	
	65 2-Hexanone	43	11.839	11.835	(0.971)	140655	57.1612	57.2	
*	66 Chlorobenzene-D5	117	12.190	12.193	(1.000)	692594	50.0000		
	67 Chlorobenzene	112	12.211	12.214	(1.002)	594313	52.1162	52.1	
	152 1-Chlorohexane	91	12.182	12.186	(0.999)	305375	43.3226	43.3	
	68 Ethylbenzene	106	12.247	12.243	(1.005)	313137	45.7874	45.8	
	69 1,1,1,2-Tetrachloroethane	131	12.297	12.293	(1.009)	223825	53.3457	53.3	
M	70 Xylenes (total)	106				1181370	150.586	150	
	71 m+p-Xylenes	106	12.433	12.436	(1.020)	787333	98.7923	98.8	
	72 o-Xylene	106	13.004	13.008	(1.067)	394037	51.7934	51.8	
	73 Styrene	104	13.083	13.079	(1.073)	648631	50.2211	50.2	
	74 Bromoform	173	13.119	13.115	(1.076)	134749	49.2899	49.3	
	75 Isopropylbenzene	105	13.440	13.437	(0.866)	1103007	51.2290	51.2	
$	76 P-Bromofluorobenzene	95	13.841	13.837	(1.591)	281067	52.4095	52.4	
	77 cis-1,4-Dichloro-2-Butene	53	13.941	13.937	(0.898)	99331	52.7090	52.7	

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2068.D
Report Date: 13-Apr-2015 14:10

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	78 trans-1,4-Dichloro-2-Butene	53	14.398	14.394	(0.928)	76927	51.0293	51.0	
	79 Bromobenzene	156	13.984	13.987	(0.901)	241508	45.8571	45.8	
	80 N-Propylbenzene	91	14.027	14.030	(0.904)	1343470	51.5615	51.6	
	81 1,1,2,2-Tetrachloroethane	83	14.141	14.137	(0.911)	256313	45.6881	45.7	
	82 1,3,5-Trimethylbenzene	105	14.320	14.316	(0.923)	935067	47.3196	47.3	
	83 2-Chlorotoluene	91	14.255	14.252	(0.918)	845118	51.8482	51.8	
	84 1,2,3-Trichloropropane	75	14.334	14.337	(0.924)	224842	48.8883	48.9	
	85 4-Chlorotoluene	91	14.506	14.502	(0.935)	892827	54.5237	54.5	
	86 tert-Butylbenzene	119	14.791	14.795	(0.953)	883633	49.7124	49.7	
	87 Pentachloroethane	117	14.827	14.823	(0.955)	140515	39.9701	40.0	
	88 1,2,4-Trimethylbenzene	105	14.906	14.902	(0.960)	966768	49.6600	49.6	
	89 P-Isopropyltoluene	119	15.292	15.295	(0.985)	1019998	52.4798	52.5	
	90 1,3-Dichlorobenzene	146	15.399	15.402	(0.992)	471536	50.8019	50.8	
*	91 1,4-Dichlorobenzene-D4	152	15.521	15.517	(1.000)	392944	50.0000		
	92 1,4-Dichlorobenzene	146	15.542	15.545	(1.001)	461311	46.4997	46.5	
	93 N-Butylbenzene	91	15.971	15.967	(1.029)	1028776	51.5828	51.6	
	94 sec-Butylbenzene	105	15.070	15.066	(0.971)	1224161	51.8358	51.8	
	95 1,2-Dichlorobenzene	146	16.221	16.216	(1.045)	427525	51.3936	51.4	
	96 1,2-Dibromo-3-Chloropropane	75	17.572	17.568	(1.132)	49811	52.4475	52.4	
	97 1,3,5-Trichlorobenzene	180	17.622	17.625	(1.135)	316515	49.8044	49.8	
	98 Hexachlorobutadiene	225	18.723	18.726	(1.206)	161597	58.3330	58.3(R)	
	99 1,2,4-Trichlorobenzene	180	18.759	18.762	(1.209)	231717	48.0069	48.0	
	100 1,2,3-Trimethylbenzene	105	15.585	15.581	(1.004)	912895	50.3333	50.3	
	101 Naphthalene	128	19.352	19.348	(1.247)	418901	42.4503	42.4	
	102 1,2,3-Trichlorobenzene	180	19.688	19.684	(1.268)	147530	45.8922	45.9	
	103 Methyl Acetate	43	4.970	4.973	(0.618)	111096	41.4004	41.4	
	104 Methylcyclohexane	83	8.630	8.625	(1.073)	113708	23.2543	23.2(R)	
M	153 Total Alkylbenzenes	100				7401873	354.152	354	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG160723-1
Client ID: LCS
Project:
SDG: SI2008
LCS File ID: C2068.D

Sample Date:
Received Date:
Extract Date: 03-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160723

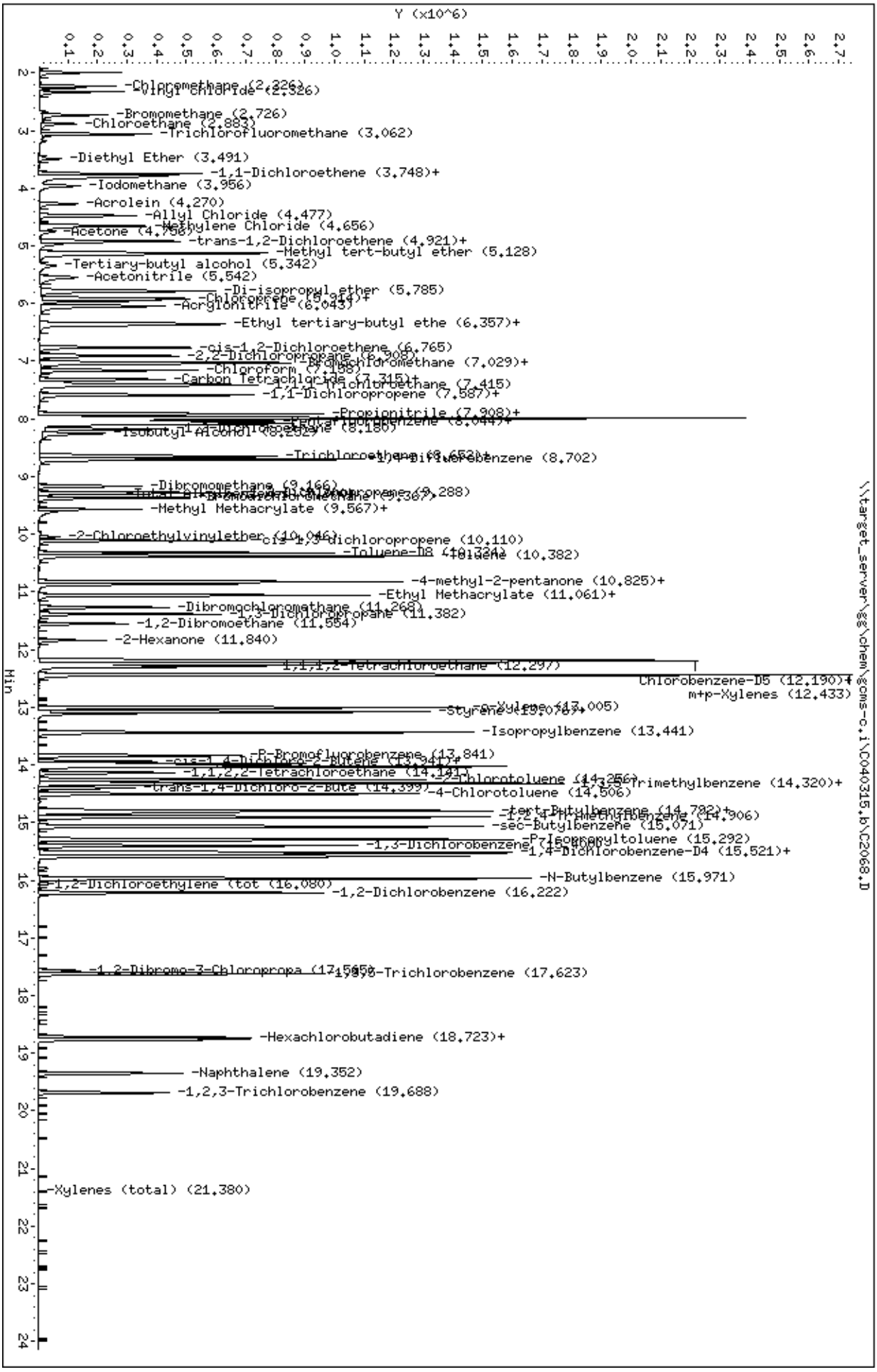
Analysis Date: 03-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Xylenes (total)	100.	150.	150.	ug/L	89-116
Styrene	100.	50.0	50.2	ug/L	65-135
Bromoform	98.6	50.0	49.3	ug/L	70-130
Isopropylbenzene	102.	50.0	51.2	ug/L	75-125
1,1,2,2-Tetrachloroethane	91.4	50.0	45.7	ug/L	65-130
1,3-Dichlorobenzene	102.	50.0	50.8	ug/L	75-125
1,4-Dichlorobenzene	93.0	50.0	46.5	ug/L	75-125
1,2-Dichlorobenzene	103.	50.0	51.4	ug/L	70-120
1,2,4-Trichlorobenzene	96.0	50.0	48.0	ug/L	65-135
Methyl Acetate	82.8	50.0	41.4	ug/L	70-132
Methylcyclohexane	* 46.4	50.0	23.2	ug/L	73-125
o-Xylene	104.	50.0	51.8	ug/L	80-120
M+P-Xylenes	98.8	100.	98.8	ug/L	75-130
1,2-Dichloroethylene (Total)	93.7	100.	93.7	ug/L	84-121
1,2-Dibromoethane	95.0	50.0	47.5	ug/L	80-120
1,2-Dibromo-3-Chloropropane	105.	50.0	52.4	ug/L	50-130
P-Bromofluorobenzene	105.				75-120
Toluene-d8	102.				85-120
1,2-Dichloroethane-d4	116.				70-120
Dibromofluoromethane	112.				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040315.b\C2068.D
Date : 03-APR-2015 12:16
Client ID: WG160723-LCS
Sample Info: WG160723-1,SI2008
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG160815-8
Client ID: LCS
Project:
SDG: SI2008
LCS File ID: C2122.D

Sample Date:
Received Date:
Extract Date: 06-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160815

Analysis Date: 06-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	84.6	50.0	42.3	ug/L	30-155
Chloromethane	82.4	50.0	41.2	ug/L	40-125
Vinyl Chloride	84.6	50.0	42.3	ug/L	50-145
Bromomethane	86.8	50.0	43.4	ug/L	30-145
Chloroethane	90.8	50.0	45.4	ug/L	60-135
Trichlorofluoromethane	91.4	50.0	45.7	ug/L	60-145
1,1-Dichloroethene	101.	50.0	50.5	ug/L	70-130
Carbon Disulfide	107.	50.0	53.4	ug/L	35-160
Freon-113	100.	50.0	50.1	ug/L	73-126
Methylene Chloride	95.4	50.0	47.7	ug/L	55-140
Acetone	130.	50.0	65.1	ug/L	40-140
trans-1,2-Dichloroethene	94.8	50.0	47.4	ug/L	60-140
Methyl tert-butyl Ether	105.	100.	105.	ug/L	65-125
1,1-Dichloroethane	101.	50.0	50.4	ug/L	70-135
cis-1,2-Dichloroethene	101.	50.0	50.5	ug/L	70-125
Chloroform	102.	50.0	51.0	ug/L	65-135
1,1,1-Trichloroethane	102.	50.0	51.2	ug/L	65-130
2-Butanone	115.	50.0	57.4	ug/L	30-150
Cyclohexane	103.	50.0	51.4	ug/L	71-133
Carbon Tetrachloride	103.	50.0	51.4	ug/L	65-140
Benzene	101.	50.0	50.5	ug/L	80-120
1,2-Dichloroethane	99.2	50.0	49.6	ug/L	70-130
Trichloroethene	105.	50.0	52.3	ug/L	70-125
1,2-Dichloropropane	110.	50.0	55.2	ug/L	75-125
Bromodichloromethane	108.	50.0	54.0	ug/L	75-120
cis-1,3-Dichloropropene	102.	50.0	51.2	ug/L	70-130
Toluene	101.	50.0	50.4	ug/L	75-120
4-Methyl-2-Pentanone	108.	50.0	54.2	ug/L	60-135
trans-1,3-Dichloropropene	107.	50.0	53.3	ug/L	55-140
1,1,2-Trichloroethane	100.	50.0	50.2	ug/L	75-125
Tetrachloroethene	107.	50.0	53.5	ug/L	45-150
Dibromochloromethane	106.	50.0	53.0	ug/L	60-135
2-Hexanone	117.	50.0	58.3	ug/L	55-130
Chlorobenzene	109.	50.0	54.6	ug/L	80-120
Ethylbenzene	101.	50.0	50.7	ug/L	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG160815-8
Client ID: LCS
Project:
SDG: SI2008
LCS File ID: C2122.D

Sample Date:
Received Date:
Extract Date: 06-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160815

Analysis Date: 06-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Xylenes (total)	109.	150.	163.	ug/L	89-116
Styrene	108.	50.0	53.8	ug/L	65-135
Bromoform	107.	50.0	53.4	ug/L	70-130
Isopropylbenzene	109.	50.0	54.6	ug/L	75-125
1,1,2,2-Tetrachloroethane	95.8	50.0	47.9	ug/L	65-130
1,3-Dichlorobenzene	104.	50.0	52.1	ug/L	75-125
1,4-Dichlorobenzene	94.0	50.0	47.0	ug/L	75-125
1,2-Dichlorobenzene	103.	50.0	51.4	ug/L	70-120
1,2,4-Trichlorobenzene	96.8	50.0	48.4	ug/L	65-135
Methyl Acetate	94.4	50.0	47.2	ug/L	70-132
Methylcyclohexane	101.	50.0	50.6	ug/L	73-125
o-Xylene	112.	50.0	55.9	ug/L	80-120
M+P-Xylenes	107.	100.	107.	ug/L	75-130
1,2-Dichloroethylene (Total)	97.8	100.	97.8	ug/L	84-121
1,2-Dibromoethane	99.4	50.0	49.7	ug/L	80-120
1,2-Dibromo-3-Chloropropane	92.0	50.0	46.0	ug/L	50-130
P-Bromofluorobenzene	103.				75-120
Toluene-d8	* 122.				85-120
1,2-Dichloroethane-d4	113.				70-120
Dibromofluoromethane	106.				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122.D
Report Date: 13-Apr-2015 14:16

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2122.D
Lab Smp Id: WG160815-8 Client Smp ID: WG160815-LCS
Inj Date : 06-APR-2015 17:30 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-8,SI2008
Misc Info : WG160815,WG160815-4,SI2008-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 15:49 Cal File: C2120.D
Als bottle: 10 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.993	1.990	(0.248)	197759	42.3375	42.3	
2 Chloromethane	50	2.222	2.219	(0.276)	295449	41.1858	41.2	
3 Vinyl chloride	62	2.329	2.326	(0.290)	242110	42.2851	42.3	
4 Bromomethane	94	2.729	2.726	(0.339)	145933	43.4237	43.4	
5 Chloroethane	64	2.886	2.891	(0.359)	147303	45.4563	45.4	
6 Trichlorofluoromethane	101	3.065	3.062	(0.381)	336008	45.6802	45.7	
7 Diethyl Ether	59	3.487	3.484	(0.434)	151470	50.1527	50.2	
8 Tertiary-butyl alcohol	59	5.331	5.335	(0.663)	44631	133.430	133	
9 1,1-Dichloroethene	96	3.751	3.755	(0.467)	201848	50.4743	50.5	
10 Carbon Disulfide	76	3.787	3.784	(0.471)	601999	53.3820	53.4	
11 Freon-113	151	3.816	3.813	(0.475)	142749	50.0752	50.1	
12 Iodomethane	142	3.959	3.956	(0.492)	235472	54.4580	54.4	
13 Acrolein	56	4.266	4.263	(0.531)	68763	245.900	246	
14 Methylene Chloride	84	4.652	4.649	(0.579)	223486	47.7212	47.7	
15 Acetone	43	4.752	4.742	(0.591)	50762	65.1430	65.1	
16 Isobutyl Alcohol	43	8.247	8.252	(1.026)	62628	575.079	575	
17 trans-1,2-Dichloroethene	96	4.916	4.913	(0.612)	219066	47.3597	47.4	
18 Allyl Chloride	41	4.473	4.477	(0.556)	231630	48.7656	48.8	
19 Methyl tert-butyl ether	73	5.124	5.121	(0.637)	775552	104.696	105	
20 Acetonitrile	39	5.545	5.542	(0.690)	23055	342.912	343	
21 Di-isopropyl ether	45	5.774	5.778	(0.718)	644829	52.8020	52.8	
22 Chloroprene	53	5.910	5.907	(0.735)	353859	50.3113	50.3	
23 Propionitrile	54	7.962	7.958	(0.990)	146990	421.170	421	
24 Methacrylonitrile	41	7.983	7.987	(0.993)	599798	496.137	496	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122.D
Report Date: 13-Apr-2015 14:16

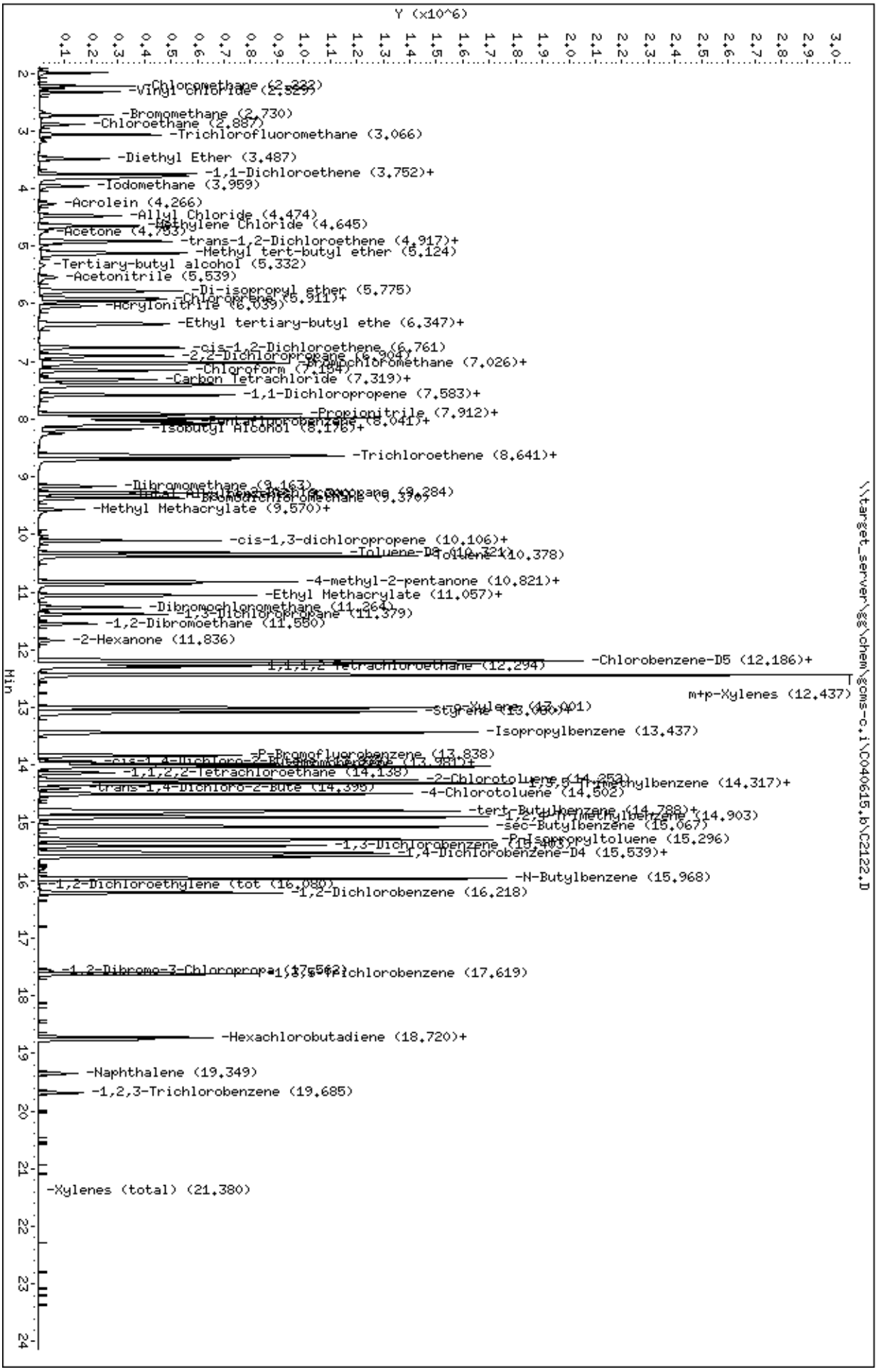
		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	25	1,1-Dichloroethane	63	5.946	5.950	(0.740)	466551	50.4155	50.4	
	26	Acrylonitrile	52	6.039	6.036	(0.751)	158827	239.299	239	
	27	Ethyl tertiary-butyl ether	59	6.346	6.343	(0.789)	535038	49.9701	50.0	
	28	Vinyl Acetate	43	6.368	6.372	(0.732)	329349	50.8991	50.9	
	29	cis-1,2-Dichloroethene	96	6.761	6.758	(0.841)	244241	50.4757	50.5	
M	30	1,2-Dichloroethylene (total)	96				463307	97.8355	97.8	
	31	Methyl Methacrylate	41	9.563	9.567	(1.099)	83023	47.4014	47.4	
	32	2,2-Dichloropropane	77	6.904	6.908	(0.859)	407394	51.9344	51.9	
	33	Bromochloromethane	128	7.039	7.036	(0.876)	92406	52.0196	52.0	
	34	Chloroform	83	7.154	7.151	(0.890)	478952	51.0521	51.0	
	35	Carbon Tetrachloride	117	7.318	7.315	(0.841)	308793	51.4001	51.4	
	36	Tetrahydrofuran	42	7.368	7.358	(0.916)	26505	48.3275	48.3	
$	37	Dibromofluoromethane	113	7.397	7.401	(0.920)	188387	53.1641	53.2	
	38	1,1,1-Trichloroethane	97	7.411	7.415	(0.922)	439900	51.1782	51.2	
	39	1,1-Dichloropropene	75	7.583	7.580	(0.872)	353519	54.5669	54.6	
	40	2-Butanone	43	7.583	7.580	(0.943)	48147	57.4545	57.4	
	41	Benzene	78	7.911	7.908	(0.910)	830073	50.5380	50.5	
*	42	Pentafluorobenzene	168	8.040	8.037	(1.000)	315956	50.0000		
	43	Cyclohexane	56	7.025	7.022	(0.874)	395406	51.3788	51.4	
	44	Ethyl Methacrylate	69	11.057	11.054	(1.271)	141429	47.0828	47.1	
$	45	1,2-Dichloroethane-D4	65	8.090	8.087	(1.006)	226681	56.6626	56.7	
	46	Tertiary-amyl methyl ether	73	8.076	8.073	(1.004)	362968	47.5535	47.6	
	47	1,2-Dichloroethane	62	8.176	8.173	(0.940)	321455	49.6472	49.6	
	48	Trichloroethene	95	8.648	8.651	(0.994)	251748	52.3353	52.3	
*	49	1,4-Difluorobenzene	114	8.698	8.702	(1.000)	521841	50.0000		
	50	Dibromomethane	93	9.162	9.166	(1.053)	108114	49.8687	49.9	
	51	1,2-Dichloropropane	63	9.284	9.281	(1.067)	224353	55.1709	55.2	
	52	Bromodichloromethane	83	9.370	9.367	(1.077)	353510	53.9797	54.0	
	53	cis-1,3-dichloropropene	75	10.106	10.110	(1.162)	356966	51.1991	51.2	
	54	1,4-Dioxane	88	9.606	9.610	(1.104)	18380	386.122	386	
$	55	Toluene-D8	98	10.320	10.317	(1.187)	675764	61.1281	61.1	
	56	2-Chloroethylvinylether	63	10.049	10.046	(1.155)	5387	34.0894	34.1	
	57	Toluene	92	10.378	10.374	(1.193)	546310	50.3795	50.4	
	58	4-methyl-2-pentanone	43	10.828	10.825	(1.245)	89246	54.2130	54.2	
	59	Tetrachloroethene	164	10.821	10.818	(0.888)	184945	53.5110	53.5	
	60	trans-1,3-Dichloropropene	75	10.871	10.868	(1.250)	306718	53.2923	53.3	
	61	1,1,2-Trichloroethane	83	11.057	11.054	(1.271)	122771	50.2450	50.2	
	62	Dibromochloromethane	129	11.264	11.268	(0.924)	200527	53.0118	53.0	
	63	1,3-Dichloropropane	76	11.378	11.382	(0.934)	284038	51.0481	51.0	
	64	1,2-Dibromoethane	107	11.550	11.554	(1.328)	150290	49.7050	49.7	
	65	2-Hexanone	43	11.836	11.833	(0.971)	65525	58.3357	58.3	
*	66	Chlorobenzene-D5	117	12.186	12.190	(1.000)	515096	50.0000		
	67	Chlorobenzene	112	12.207	12.212	(1.002)	629373	54.6357	54.6	
	152	1-Chlorohexane	91	12.179	12.183	(0.999)	374973	53.9538	54.0	
	68	Ethylbenzene	106	12.243	12.247	(1.005)	340587	50.6859	50.7	
	69	1,1,1,2-Tetrachloroethane	131	12.293	12.290	(1.009)	230748	51.9715	52.0	
M	70	Xylenes (total)	106				1272216	163.301	163	
	71	m+p-Xylenes	106	12.436	12.433	(1.021)	851389	107.437	107	
	72	o-Xylene	106	13.008	13.005	(1.067)	420827	55.8645	55.9	
	73	Styrene	104	13.079	13.076	(1.073)	680528	53.7916	53.8	
	74	Bromoform	173	13.115	13.112	(1.076)	97637	53.3905	53.4	
	75	Isopropylbenzene	105	13.437	13.434	(0.866)	1200448	54.6092	54.6	
$	76	P-Bromofluorobenzene	95	13.837	13.834	(1.591)	308278	51.4146	51.4	
	77	cis-1,4-Dichloro-2-Butene	53	13.937	13.934	(0.898)	53755	45.0132	45.0	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122.D
Report Date: 13-Apr-2015 14:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.399	(0.928)	40742	45.4391	45.4	
	79 Bromobenzene	156	13.987	13.984	(0.901)	251991	49.9834	50.0	
	80 N-Propylbenzene	91	14.023	14.027	(0.904)	1470168	54.6625	54.7	
	81 1,1,2,2-Tetrachloroethane	83	14.137	14.134	(0.911)	160239	47.9149	47.9	
	82 1,3,5-Trimethylbenzene	105	14.316	14.320	(0.923)	1014633	48.8350	48.8	
	83 2-Chlorotoluene	91	14.252	14.256	(0.918)	912102	52.8679	52.9	
	84 1,2,3-Trichloropropane	75	14.330	14.334	(0.924)	135721	48.8594	48.8	
	85 4-Chlorotoluene	91	14.502	14.499	(0.935)	947271	53.8890	53.9	
	86 tert-Butylbenzene	119	14.795	14.792	(0.953)	961951	51.8366	51.8	
	87 Pentachloroethane	117	14.824	14.821	(0.955)	182462	49.1477	49.1	
	88 1,2,4-Trimethylbenzene	105	14.902	14.899	(0.960)	1038833	51.5391	51.5	
	89 P-Isopropyltoluene	119	15.295	15.292	(0.986)	1091249	55.4761	55.5	
	90 1,3-Dichlorobenzene	146	15.403	15.400	(0.993)	480751	52.1467	52.1	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.514	(1.000)	303603	50.0000		
	92 1,4-Dichlorobenzene	146	15.538	15.542	(1.001)	461446	46.9772	47.0	
	93 N-Butylbenzene	91	15.967	15.964	(1.029)	1091601	53.0965	53.1	
	94 sec-Butylbenzene	105	15.067	15.064	(0.971)	1313658	54.4565	54.4	
	95 1,2-Dichlorobenzene	146	16.217	16.213	(1.045)	402287	51.4400	51.4	
	96 1,2-Dibromo-3-Chloropropane	75	17.568	17.565	(1.132)	18632	45.9517	46.0	
	97 1,3,5-Trichlorobenzene	180	17.618	17.623	(1.135)	284675	49.9677	50.0	
	98 Hexachlorobutadiene	225	18.726	18.723	(1.207)	149223	52.7486	52.7	
	99 1,2,4-Trichlorobenzene	180	18.762	18.759	(1.209)	144047	48.3527	48.4	
	100 1,2,3-Trimethylbenzene	105	15.581	15.585	(1.004)	896758	47.1818	47.2	
	101 Naphthalene	128	19.348	19.352	(1.247)	125779	42.8107	42.8	
	102 1,2,3-Trichlorobenzene	180	19.684	19.681	(1.269)	58032	40.9553	41.0	
	103 Methyl Acetate	43	4.974	4.971	(0.619)	73168	47.2400	47.2	
	104 Methylcyclohexane	83	8.626	8.630	(1.073)	389558	50.6422	50.6	
M	153 Total Alkylbenzenes	100				7982093	369.902	370	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2122.D
Date : 06-APR-2015 17:30
Client ID: WG160815-LCS
Sample Info: WG160815-8,SI2008
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG161013-1
Client ID: LCS
Project:
SDG: SI2008
LCS File ID: C2230.D

Sample Date:
Received Date:
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	79.0	50.0	39.5	ug/L	30-155
Chloromethane	84.0	50.0	42.0	ug/L	40-125
Vinyl Chloride	87.8	50.0	43.9	ug/L	50-145
Bromomethane	103.	50.0	51.3	ug/L	30-145
Chloroethane	104.	50.0	52.2	ug/L	60-135
Trichlorofluoromethane	86.8	50.0	43.4	ug/L	60-145
1,1-Dichloroethene	102.	50.0	50.9	ug/L	70-130
Carbon Disulfide	105.	50.0	52.7	ug/L	35-160
Freon-113	95.0	50.0	47.5	ug/L	73-126
Methylene Chloride	100.	50.0	50.1	ug/L	55-140
Acetone	128.	50.0	63.8	ug/L	40-140
trans-1,2-Dichloroethene	95.6	50.0	47.8	ug/L	60-140
Methyl tert-butyl Ether	112.	100.	112.	ug/L	65-125
1,1-Dichloroethane	104.	50.0	51.8	ug/L	70-135
cis-1,2-Dichloroethene	101.	50.0	50.5	ug/L	70-125
Chloroform	100.	50.0	50.1	ug/L	65-135
1,1,1-Trichloroethane	98.0	50.0	49.0	ug/L	65-130
2-Butanone	104.	50.0	52.0	ug/L	30-150
Cyclohexane	97.0	50.0	48.5	ug/L	71-133
Carbon Tetrachloride	105.	50.0	52.4	ug/L	65-140
Benzene	99.6	50.0	49.8	ug/L	80-120
1,2-Dichloroethane	92.6	50.0	46.3	ug/L	70-130
Trichloroethene	95.0	50.0	47.5	ug/L	70-125
1,2-Dichloropropane	101.	50.0	50.7	ug/L	75-125
Bromodichloromethane	106.	50.0	53.1	ug/L	75-120
cis-1,3-Dichloropropene	106.	50.0	53.0	ug/L	70-130
Toluene	98.8	50.0	49.4	ug/L	75-120
4-Methyl-2-Pentanone	116.	50.0	58.2	ug/L	60-135
trans-1,3-Dichloropropene	108.	50.0	54.0	ug/L	55-140
1,1,2-Trichloroethane	96.6	50.0	48.3	ug/L	75-125
Tetrachloroethene	96.8	50.0	48.4	ug/L	45-150
Dibromochloromethane	96.6	50.0	48.3	ug/L	60-135
2-Hexanone	104.	50.0	51.8	ug/L	55-130
Chlorobenzene	104.	50.0	52.1	ug/L	80-120
Ethylbenzene	98.6	50.0	49.3	ug/L	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG161013-1
Client ID: LCS
Project:
SDG: SI2008
LCS File ID: C2230.D

Sample Date:
Received Date:
Extract Date: 10-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG161013

Analysis Date: 10-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 13-APR-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Xylenes (total)	107.	150.	161.	ug/L	89-116
Styrene	106.	50.0	52.9	ug/L	65-135
Bromoform	95.2	50.0	47.6	ug/L	70-130
Isopropylbenzene	110.	50.0	55.1	ug/L	75-125
1,1,2,2-Tetrachloroethane	101.	50.0	50.6	ug/L	65-130
1,3-Dichlorobenzene	105.	50.0	52.3	ug/L	75-125
1,4-Dichlorobenzene	95.0	50.0	47.5	ug/L	75-125
1,2-Dichlorobenzene	106.	50.0	52.9	ug/L	70-120
1,2,4-Trichlorobenzene	103.	50.0	51.7	ug/L	65-135
Methyl Acetate	111.	50.0	55.6	ug/L	70-132
Methylcyclohexane	101.	50.0	50.5	ug/L	73-125
o-Xylene	115.	50.0	57.6	ug/L	80-120
M+P-Xylenes	104.	100.	104.	ug/L	75-130
1,2-Dichloroethylene (Total)	98.3	100.	98.3	ug/L	84-121
1,2-Dibromoethane	99.2	50.0	49.6	ug/L	80-120
1,2-Dibromo-3-Chloropropane	95.8	50.0	47.9	ug/L	50-130
P-Bromofluorobenzene	92.2				75-120
Toluene-d8	104.				85-120
1,2-Dichloroethane-d4	94.5				70-120
Dibromofluoromethane	92.0				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2230.D
Report Date: 13-Apr-2015 14:22

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C041015.b\C2230.D
Lab Smp Id: WG161013-1 Client Smp ID: WG161013-LCS
Inj Date : 10-APR-2015 09:36 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG161013-1,SI2008
Misc Info : WG161013,WG160924-4,SI2008-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C041015.b\C826A36.m
Meth Date : 13-Apr-2015 14:13 gcms-c.i Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.993	1.986	(0.248)	246431	39.4748	39.5	
2 Chloromethane	50	2.229	2.229	(0.277)	343502	41.9803	42.0	
3 Vinyl chloride	62	2.329	2.322	(0.290)	264222	43.8903	43.9	
4 Bromomethane	94	2.729	2.730	(0.339)	154803	51.2965	51.3	
5 Chloroethane	64	2.879	2.880	(0.358)	124070	52.2017	52.2	
6 Trichlorofluoromethane	101	3.058	3.051	(0.380)	315651	43.4357	43.4	
7 Diethyl Ether	59	3.494	3.487	(0.435)	203848	49.6591	49.6	
8 Tertiary-butyl alcohol	59	5.345	5.353	(0.665)	128956	266.977	267	
9 1,1-Dichloroethene	96	3.751	3.745	(0.467)	215481	50.9432	50.9	
10 Carbon Disulfide	76	3.787	3.780	(0.471)	633322	52.6687	52.7	
11 Freon-113	151	3.816	3.809	(0.475)	138067	47.5229	47.5	
12 Iodomethane	142	3.959	3.952	(0.492)	231528	48.3249	48.3	
13 Acrolein	56	4.266	4.267	(0.531)	169045	264.739	265	
14 Methylene Chloride	84	4.652	4.645	(0.579)	248905	50.1175	50.1	
15 Acetone	43	4.759	4.753	(0.592)	97181	63.7505	63.8	
16 Isobutyl Alcohol	43	8.255	8.255	(1.027)	206065	1176.49	1180	
17 trans-1,2-Dichloroethene	96	4.916	4.917	(0.612)	228288	47.8108	47.8	
18 Allyl Chloride	41	4.473	4.474	(0.556)	233560	51.3425	51.3	
19 Methyl tert-butyl ether	73	5.124	5.124	(0.637)	1192039	112.579	112	
20 Acetonitrile	39	5.545	5.546	(0.690)	60220	503.384	503	
21 Di-isopropyl ether	45	5.781	5.782	(0.719)	735251	54.7777	54.8	
22 Chloroprene	53	5.910	5.911	(0.735)	369389	52.5514	52.6	
23 Propionitrile	54	7.961	7.962	(0.990)	369497	511.867	512	
24 Methacrylonitrile	41	7.990	7.984	(0.994)	1342502	516.942	517	

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2230.D
Report Date: 13-Apr-2015 14:22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.946	5.946	(0.740)	479775	51.7916	51.8	
	26 Acrylonitrile	52	6.046	6.039	(0.752)	423163	261.469	261	
	27 Ethyl tertiary-butyl ether	59	6.346	6.347	(0.789)	673291	55.4403	55.4	
	28 Vinyl Acetate	43	6.367	6.368	(0.731)	550844	55.1907	55.2	
	29 cis-1,2-Dichloroethene	96	6.761	6.761	(0.841)	248661	50.4714	50.5	
M	30 1,2-Dichloroethylene (total)	96				476949	98.2822	98.3	
	31 Methyl Methacrylate	41	9.570	9.563	(1.099)	182648	50.2379	50.2	
	32 2,2-Dichloropropane	77	6.904	6.904	(0.859)	421536	54.6631	54.7	
	33 Bromochloromethane	128	7.039	7.033	(0.876)	100403	50.8801	50.9	
	34 Chloroform	83	7.154	7.154	(0.890)	482190	50.1071	50.1	
	35 Carbon Tetrachloride	117	7.318	7.312	(0.841)	306295	52.3877	52.4	
	36 Tetrahydrofuran	42	7.368	7.362	(0.916)	67682	51.9309	51.9	
$	37 Dibromofluoromethane	113	7.404	7.405	(0.921)	165740	45.9784	46.0	
	38 1,1,1-Trichloroethane	97	7.418	7.412	(0.923)	446190	49.0494	49.0	
	39 1,1-Dichloropropene	75	7.583	7.583	(0.871)	362259	52.3809	52.4	
	40 2-Butanone	43	7.583	7.583	(0.943)	118393	52.0111	52.0	
	41 Benzene	78	7.911	7.905	(0.909)	865807	49.8020	49.8	
*	42 Pentafluorobenzene	168	8.040	8.041	(1.000)	359328	50.0000		
	43 Cyclohexane	56	7.018	7.019	(0.873)	381276	48.4936	48.5	
	44 Ethyl Methacrylate	69	11.057	11.057	(1.270)	254718	54.2354	54.2	
$	45 1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	227843	47.2413	47.2	
	46 Tertiary-amyl methyl ether	73	8.076	8.076	(1.004)	515729	55.6228	55.6	
	47 1,2-Dichloroethane	62	8.176	8.177	(0.939)	382287	46.2678	46.3	
	48 Trichloroethene	95	8.655	8.648	(0.994)	251302	47.4999	47.5	
*	49 1,4-Difluorobenzene	114	8.705	8.698	(1.000)	616957	50.0000		
	50 Dibromomethane	93	9.162	9.163	(1.053)	145996	47.3675	47.4	
	51 1,2-Dichloropropane	63	9.284	9.284	(1.067)	231383	50.7325	50.7	
	52 Bromodichloromethane	83	9.370	9.370	(1.076)	364258	53.0659	53.1	
	53 cis-1,3-dichloropropene	75	10.113	10.106	(1.162)	389874	52.9934	53.0	
	54 1,4-Dioxane	88	9.613	9.606	(1.104)	48188	669.382	669	
$	55 Toluene-D8	98	10.320	10.321	(1.186)	586504	51.8390	51.8	
	56 2-Chloroethylvinylether	63	10.042	10.049	(1.154)	14245	130.937	131(R)	
	57 Toluene	92	10.377	10.378	(1.192)	555930	49.3729	49.4	
	58 4-methyl-2-pentanone	43	10.828	10.828	(1.244)	229096	58.1729	58.2	
	59 Tetrachloroethene	164	10.821	10.821	(0.887)	181997	48.3519	48.4	
	60 trans-1,3-Dichloropropene	75	10.871	10.871	(1.249)	372663	54.0187	54.0	
	61 1,1,2-Trichloroethane	83	11.057	11.057	(1.270)	167087	48.2950	48.3	
	62 Dibromochloromethane	129	11.271	11.264	(0.924)	244237	48.3207	48.3	
	63 1,3-Dichloropropane	76	11.385	11.379	(0.934)	373705	49.5294	49.5	
	64 1,2-Dibromoethane	107	11.557	11.550	(1.328)	223223	49.5890	49.6	
	65 2-Hexanone	43	11.836	11.836	(0.971)	174282	51.7984	51.8	
*	66 Chlorobenzene-D5	117	12.193	12.187	(1.000)	589632	50.0000		
	67 Chlorobenzene	112	12.214	12.208	(1.002)	628465	52.0987	52.1	
	152 1-Chlorohexane	91	12.186	12.179	(0.999)	363845	52.4357	52.4	
	68 Ethylbenzene	106	12.250	12.244	(1.005)	337390	49.3171	49.3	
	69 1,1,1,2-Tetrachloroethane	131	12.293	12.294	(1.008)	237731	52.2294	52.2	
M	70 Xylenes (total)	106				1245745	161.144	161	
	71 m+p-Xylenes	106	12.436	12.437	(1.020)	825805	103.509	104	
	72 o-Xylene	106	13.008	13.001	(1.067)	419940	57.6347	57.6	
	73 Styrene	104	13.079	13.080	(1.073)	689461	52.9431	52.9	
	74 Bromoform	173	13.115	13.116	(1.076)	152888	47.5749	47.6	
	75 Isopropylbenzene	105	13.437	13.437	(0.866)	1180477	55.0707	55.1	
$	76 P-Bromofluorobenzene	95	13.837	13.838	(1.590)	274503	46.1107	46.1	
	77 cis-1,4-Dichloro-2-Butene	53	13.937	13.938	(0.898)	116654	50.2405	50.2	

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2230.D
Report Date: 13-Apr-2015 14:22

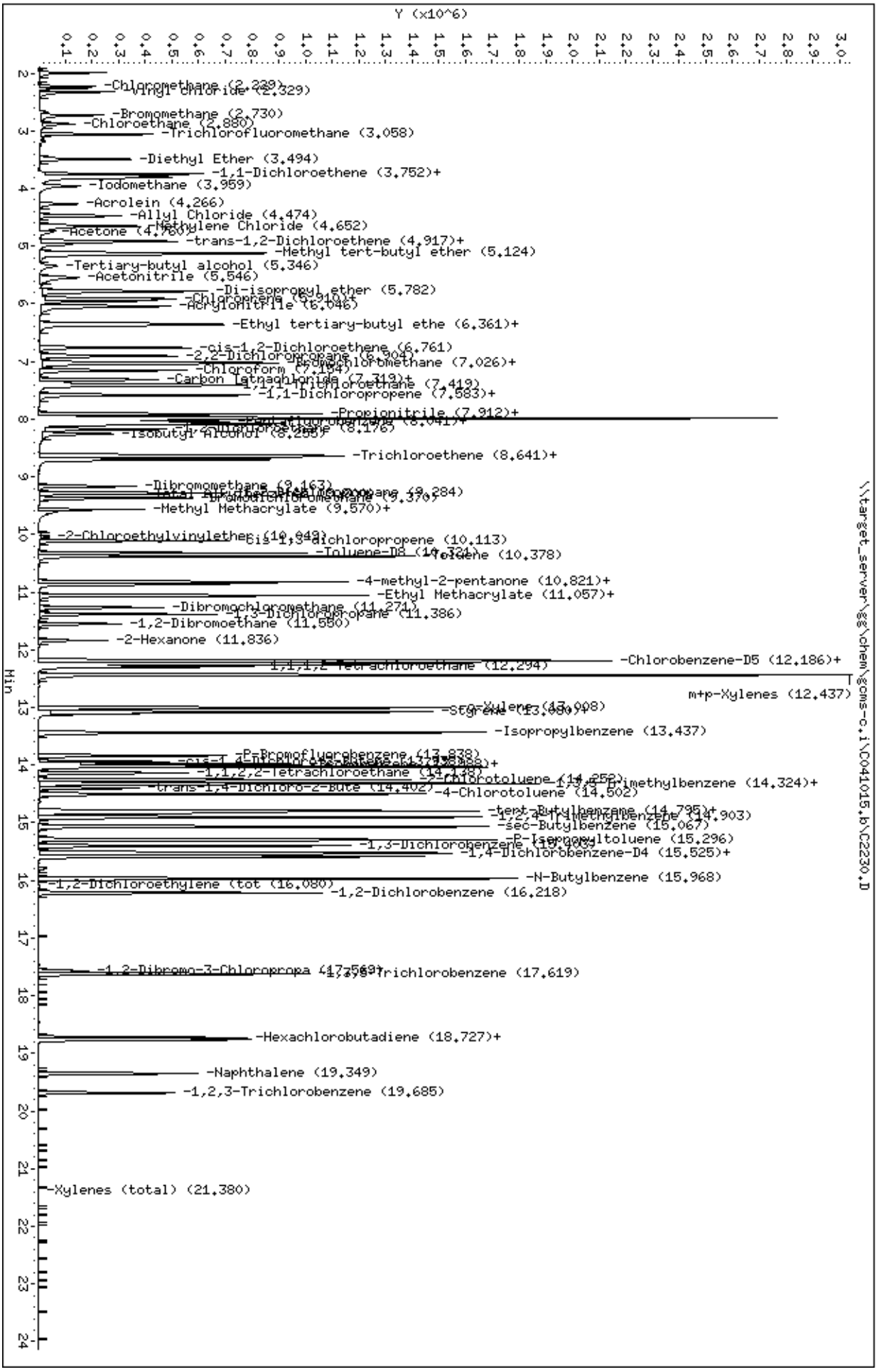
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	78 trans-1,4-Dichloro-2-Butene	53	14.402	14.395	(0.928)	93645	49.8552	49.8	
	79 Bromobenzene	156	13.987	13.981	(0.901)	265607	50.7424	50.7	
	80 N-Propylbenzene	91	14.030	14.024	(0.904)	1457235	55.7194	55.7	
	81 1,1,2,2-Tetrachloroethane	83	14.137	14.131	(0.911)	303538	50.5559	50.6	
	82 1,3,5-Trimethylbenzene	105	14.316	14.317	(0.923)	1006700	49.4039	49.4	
	83 2-Chlorotoluene	91	14.252	14.252	(0.918)	907672	52.8814	52.9	
	84 1,2,3-Trichloropropane	75	14.330	14.331	(0.924)	262570	48.9851	49.0	
	85 4-Chlorotoluene	91	14.502	14.502	(0.935)	944159	54.2561	54.2	
	86 tert-Butylbenzene	119	14.795	14.788	(0.953)	984167	55.0809	55.1	
	87 Pentachloroethane	117	14.824	14.824	(0.955)	197146	53.4988	53.5	
	88 1,2,4-Trimethylbenzene	105	14.902	14.903	(0.960)	1011304	50.6504	50.6	
	89 P-Isopropyltoluene	119	15.295	15.296	(0.986)	1082923	55.6735	55.7	
	90 1,3-Dichlorobenzene	146	15.402	15.396	(0.993)	494229	52.3020	52.3	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	364711	50.0000		
	92 1,4-Dichlorobenzene	146	15.545	15.539	(1.002)	488000	47.5035	47.5	
	93 N-Butylbenzene	91	15.967	15.968	(1.029)	1110678	54.5254	54.5	
	94 sec-Butylbenzene	105	15.067	15.067	(0.971)	1305340	54.8015	54.8	
	95 1,2-Dichlorobenzene	146	16.217	16.218	(1.045)	452289	52.8931	52.9	
	96 1,2-Dibromo-3-Chloropropane	75	17.568	17.562	(1.132)	58517	47.8843	47.9	
	97 1,3,5-Trichlorobenzene	180	17.618	17.619	(1.135)	344644	53.1461	53.1	
	98 Hexachlorobutadiene	225	18.726	18.720	(1.207)	175335	54.2090	54.2	
	99 1,2,4-Trichlorobenzene	180	18.762	18.763	(1.209)	266353	51.7461	51.7	
	100 1,2,3-Trimethylbenzene	105	15.588	15.582	(1.005)	949409	50.6707	50.7	
	101 Naphthalene	128	19.348	19.349	(1.247)	507334	48.3841	48.4	
	102 1,2,3-Trichlorobenzene	180	19.684	19.685	(1.269)	169850	50.9335	50.9	
	103 Methyl Acetate	43	4.974	4.967	(0.619)	200857	55.5560	55.6	
	104 Methylcyclohexane	83	8.626	8.627	(1.073)	389586	50.5144	50.5	
M	153 Total Alkylbenzenes	100				7958347	375.855	376	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-c.i\C041015.b\C2230.D
Date : 10-APR-2015 09:36
Client ID: WG161013-LCS
Sample Info: WG161013-1,SI2008
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG160815-11
MSD ID: WG160815-12
Sample ID: SI2008-1
Client ID: MW-09-GW-033115
Project:
SDG: SI2008
MS File ID: C2127.D

Received Date:
Extract Date: 06-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160815
Report Date: 13-APR-15
MSD File ID: C2128.D

Analysis Date: 06-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Dichlorodifluoromethane	50.0	50.0	ug/L	U1.0	39.6	38.2	79.2	76.4	4	30	30-155
Chloromethane	50.0	50.0	ug/L	U1.0	41.0	41.2	82.0	82.4	0	30	40-125
Vinyl Chloride	50.0	50.0	ug/L	U1.0	45.8	46.7	91.6	93.4	2	30	50-145
Bromomethane	50.0	50.0	ug/L	U1.0	46.9	47.7	93.8	95.4	2	30	30-145
Chloroethane	50.0	50.0	ug/L	U1.0	51.7	51.4	103.	103.	0	30	60-135
Trichlorofluoromethane	50.0	50.0	ug/L	U1.0	55.5	53.8	111.	108.	3	30	60-145
1,1-Dichloroethene	50.0	50.0	ug/L	U0.50	56.7	58.2	113.	116.	3	30	70-130
Carbon Disulfide	50.0	50.0	ug/L	U0.50	60.6	61.0	121.	122.	1	30	35-160
Freon-113	50.0	50.0	ug/L	U0.50	59.3	60.5	119.	121.	2	30	73-126
Methylene Chloride	50.0	50.0	ug/L	U2.5	53.4	55.9	107.	112.	4	30	55-140
Acetone	50.0	50.0	ug/L	U2.5	44.0	54.6	88.0	109.	22	30	40-140
trans-1,2-Dichloroethene	50.0	50.0	ug/L	U0.50	54.5	55.6	109.	111.	2	30	60-140
Methyl tert-butyl Ether	100.	100.	ug/L	U0.50	112.	114.	112.	114.	2	30	65-125
1,1-Dichloroethane	50.0	50.0	ug/L	U0.50	57.6	58.5	115.	117.	2	30	70-135
cis-1,2-Dichloroethene	50.0	50.0	ug/L	U0.50	56.8	56.9	114.	114.	0	30	70-125
Chloroform	50.0	50.0	ug/L	U0.50	58.8	58.5	118.	117.	0	30	65-135
1,1,1-Trichloroethane	50.0	50.0	ug/L	J0.36	60.5	59.4	120.	118.	2	30	65-130
2-Butanone	50.0	50.0	ug/L	U2.5	43.2	51.7	86.4	103.	18	30	30-150
Cyclohexane	50.0	50.0	ug/L	U0.50	60.8	62.1	122.	124.	2	30	71-133
Carbon Tetrachloride	50.0	50.0	ug/L	U0.50	62.3	59.2	125.	118.	5	30	65-140
Benzene	50.0	50.0	ug/L	U0.50	56.5	56.1	113.	112.	1	30	80-120
1,2-Dichloroethane	50.0	50.0	ug/L	U0.50	56.2	53.6	112.	107.	5	30	70-130
Trichloroethene	50.0	50.0	ug/L	M4.6	69.6	62.6	130.*	116.	10	30	70-125
1,2-Dichloropropane	50.0	50.0	ug/L	U0.50	61.1	60.1	122.	120.	2	30	75-125
Bromodichloromethane	50.0	50.0	ug/L	JMM0.50	62.2	59.8	124.*	120.*	4	30	75-120
cis-1,3-Dichloropropene	50.0	50.0	ug/L	U0.50	55.8	53.3	112.	107.	4	30	70-130
Toluene	50.0	50.0	ug/L	U0.50	59.0	56.2	118.	112.	5	30	75-120
4-Methyl-2-Pentanone	50.0	50.0	ug/L	UM2.5	56.3	54.0	113.	108.	4	30	60-135
trans-1,3-Dichloropropene	50.0	50.0	ug/L	U0.50	58.7	56.9	117.	114.	3	30	55-140
1,1,2-Trichloroethane	50.0	50.0	ug/L	U0.50	56.6	56.6	113.	113.	0	30	75-125
Tetrachloroethene	50.0	50.0	ug/L	U0.50	59.2	60.6	118.	121.	2	30	45-150
Dibromochloromethane	50.0	50.0	ug/L	U0.50	58.4	60.0	117.	120.	3	30	60-135
2-Hexanone	50.0	50.0	ug/L	U2.5	49.9	53.8	99.8	108.	8	30	55-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG160815-11
MSD ID: WG160815-12
Sample ID: SI2008-1
Client ID: MW-09-GW-033115
Project:
SDG: SI2008
MS File ID: C2127.D

Received Date:
Extract Date: 06-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160815
Report Date: 13-APR-15
MSD File ID: C2128.D

Analysis Date: 06-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Chlorobenzene	50.0	50.0	ug/L	JMM0.50	60.9	61.7	122.*	123.*	1	30	80-120
Ethylbenzene	50.0	50.0	ug/L	U0.50	57.1	56.8	114.	114.	0	30	75-125
Xylenes (total)	150.	150.	ug/L	UMM1.5	180.	181.	120.*	121.*	0	30	89-116
Styrene	50.0	50.0	ug/L	U0.50	59.8	60.1	120.	120.	0	30	65-135
Bromoform	50.0	50.0	ug/L	U0.50	58.1	59.4	116.	119.	2	30	70-130
Isopropylbenzene	50.0	50.0	ug/L	U0.50	61.4	61.2	123.	122.	0	30	75-125
1,1,2,2-Tetrachloroethane	50.0	50.0	ug/L	U0.50	51.4	52.9	103.	106.	3	30	65-130
1,3-Dichlorobenzene	50.0	50.0	ug/L	U0.50	59.0	58.8	118.	118.	0	30	75-125
1,4-Dichlorobenzene	50.0	50.0	ug/L	U0.50	52.7	53.6	105.	107.	2	30	75-125
1,2-Dichlorobenzene	50.0	50.0	ug/L	U0.50	57.2	57.0	114.	114.	0	30	70-120
1,2,4-Trichlorobenzene	50.0	50.0	ug/L	U0.50	49.3	54.6	98.6	109.	10	30	65-135
Methyl Acetate	50.0	50.0	ug/L	U0.75	47.4	51.2	94.8	102.	8	30	70-132
Methylcyclohexane	50.0	50.0	ug/L	U0.50	61.3	60.7	123.	121.	1	30	73-125
o-Xylene	50.0	50.0	ug/L	JMM0.50	62.1	63.2	124.*	126.*	2	30	80-120
M+P-Xylenes	100.	100.	ug/L	U1.0	118.	118.	118.	118.	0	30	75-130
1,2-Dichloroethylene (Total)	100.	100.	ug/L	U1.0	111.	113.	111.	113.	2	30	84-121
1,2-Dibromoethane	50.0	50.0	ug/L	U0.50	54.9	53.3	110.	107.	3	30	80-120
1,2-Dibromo-3-Chloropropane	50.0	50.0	ug/L	U0.75	43.0	48.1	86.0	96.2	11	30	50-130
P-Bromofluorobenzene							104.	100.			75-120
Toluene-d8							122.*	119.			85-120
1,2-Dichloroethane-d4							113.	112.			70-120
Dibromofluoromethane							109.	107.			85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2127.D
Report Date: 13-Apr-2015 14:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2127.D
Lab Smp Id: WG160815-11 Client Smp ID: MW-09-GW-033115MS
Inj Date : 06-APR-2015 20:30 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-11,SI2008
Misc Info : WG160815,WG160815-4,SI2008-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 15:49 Cal File: C2120.D
Als bottle: 15 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.987	1.990	(0.247)	169059	39.5862	39.6	
2 Chloromethane	50	2.222	2.219	(0.276)	268582	40.9504	41.0	
3 Vinyl chloride	62	2.330	2.326	(0.290)	239864	45.8201	45.8	
4 Bromomethane	94	2.723	2.726	(0.339)	144109	46.9009	46.9	
5 Chloroethane	64	2.887	2.891	(0.359)	153277	51.7340	51.7	
6 Trichlorofluoromethane	101	3.066	3.062	(0.381)	373187	55.4908	55.5	
7 Diethyl Ether	59	3.480	3.484	(0.433)	147861	53.5473	53.5	
8 Tertiary-butyl alcohol	59	5.325	5.335	(0.662)	21702	70.9635	71.0	
9 1,1-Dichloroethene	96	3.752	3.755	(0.467)	207366	56.7153	56.7	
10 Carbon Disulfide	76	3.781	3.784	(0.470)	623480	60.5917	60.6	
11 Freon-113	151	3.816	3.813	(0.475)	154516	59.2843	59.3	
12 Iodomethane	142	3.959	3.956	(0.492)	222343	56.1852	56.2	
13 Acrolein	56	4.260	4.263	(0.530)	64541	252.439	252	
14 Methylene Chloride	84	4.646	4.649	(0.578)	228444	53.4508	53.4	
15 Acetone	43	4.746	4.742	(0.590)	31356	44.0115	44.0	
16 Isobutyl Alcohol	43	8.248	8.252	(1.026)	24047	241.511	242	
17 trans-1,2-Dichloroethene	96	4.917	4.913	(0.612)	230356	54.4691	54.5	
18 Allyl Chloride	41	4.474	4.477	(0.556)	245885	56.6197	56.6	
19 Methyl tert-butyl ether	73	5.117	5.121	(0.636)	761770	112.476	112	
20 Acetonitrile	39	5.532	5.542	(0.688)	16264	264.583	264(R)	
21 Di-isopropyl ether	45	5.775	5.778	(0.718)	638702	57.2032	57.2	
22 Chloroprene	53	5.911	5.907	(0.735)	375240	58.3528	58.4	
23 Propionitrile	54	7.962	7.958	(0.990)	107627	337.294	337(R)	
24 Methacrylonitrile	41	7.984	7.987	(0.993)	589279	533.132	533	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2127.D
Report Date: 13-Apr-2015 14:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.947	5.950	(0.740)	487007	57.5595	57.6	
	26 Acrylonitrile	52	6.032	6.036	(0.750)	147932	243.778	244	
	27 Ethyl tertiary-butyl ether	59	6.347	6.343	(0.789)	520231	53.1421	53.1	
	28 Vinyl Acetate	43	6.368	6.372	(0.732)	323125	54.6748	54.7	
	29 cis-1,2-Dichloroethene	96	6.754	6.758	(0.840)	251518	56.8525	56.8	
M	30 1,2-Dichloroethylene (total)	96				481874	111.322	111	
	31 Methyl Methacrylate	41	9.563	9.567	(1.099)	83060	51.9323	51.9	
	32 2,2-Dichloropropane	77	6.904	6.908	(0.859)	414881	57.8470	57.8	
	33 Bromochloromethane	128	7.033	7.036	(0.875)	94267	58.0421	58.0	
	34 Chloroform	83	7.155	7.151	(0.890)	504126	58.7729	58.8	
	35 Carbon Tetrachloride	117	7.312	7.315	(0.841)	341864	62.3164	62.3	
	36 Tetrahydrofuran	42	7.362	7.358	(0.916)	21296	42.4699	42.5	
$	37 Dibromofluoromethane	113	7.398	7.401	(0.920)	177255	54.7121	54.7	
	38 1,1,1-Trichloroethane	97	7.412	7.415	(0.922)	475232	60.4719	60.5	
	39 1,1-Dichloropropene	75	7.583	7.580	(0.872)	381687	64.5173	64.5	
	40 2-Butanone	43	7.583	7.580	(0.943)	33111	43.2159	43.2	
	41 Benzene	78	7.905	7.908	(0.909)	847815	56.5270	56.5	
*	42 Pentafluorobenzene	168	8.041	8.037	(1.000)	288875	50.0000		
	43 Cyclohexane	56	7.019	7.022	(0.873)	427842	60.8052	60.8	
	44 Ethyl Methacrylate	69	11.057	11.054	(1.271)	141995	51.7689	51.8	
$	45 1,2-Dichloroethane-D4	65	8.084	8.087	(1.005)	207246	56.6610	56.7	
	46 Tertiary-amyl methyl ether	73	8.077	8.073	(1.004)	353407	50.6414	50.6	
	47 1,2-Dichloroethane	62	8.170	8.173	(0.939)	332106	56.1700	56.2	
	48 Trichloroethene	95	8.648	8.651	(0.994)	305573	69.5658	69.6(R)	
*	49 1,4-Difluorobenzene	114	8.699	8.702	(1.000)	476525	50.0000		
	50 Dibromomethane	93	9.163	9.166	(1.053)	115242	58.3076	58.3	
	51 1,2-Dichloropropane	63	9.285	9.281	(1.067)	226790	61.0737	61.1	
	52 Bromodichloromethane	83	9.363	9.367	(1.076)	372315	62.2575	62.2(R)	
	53 cis-1,3-dichloropropene	75	10.107	10.110	(1.162)	355641	55.8599	55.8	
	54 1,4-Dioxane	88	9.606	9.610	(1.104)	4523	104.054	104	
$	55 Toluene-D8	98	10.321	10.317	(1.187)	617484	61.1680	61.2	
	57 Toluene	92	10.378	10.374	(1.193)	584689	59.0462	59.0	
	58 4-methyl-2-pentanone	43	10.829	10.825	(1.245)	84708	56.3497	56.3(M)	M6
	59 Tetrachloroethene	164	10.821	10.818	(0.888)	190916	59.1825	59.2	
	60 trans-1,3-Dichloropropene	75	10.864	10.868	(1.249)	308310	58.6631	58.7	
	61 1,1,2-Trichloroethane	83	11.050	11.054	(1.270)	126263	56.5882	56.6	
	62 Dibromochloromethane	129	11.265	11.268	(0.924)	206399	58.4599	58.4	
	63 1,3-Dichloropropane	76	11.379	11.382	(0.934)	296558	57.1036	57.1	
	64 1,2-Dibromoethane	107	11.551	11.554	(1.328)	151558	54.8911	54.9	
	65 2-Hexanone	43	11.837	11.833	(0.971)	52344	49.9281	49.9	
*	66 Chlorobenzene-D5	117	12.187	12.190	(1.000)	480770	50.0000		
	67 Chlorobenzene	112	12.208	12.212	(1.002)	654751	60.8970	60.9(R)	
	152 1-Chlorohexane	91	12.180	12.183	(0.999)	397485	61.2765	61.3(R)	
	68 Ethylbenzene	106	12.244	12.247	(1.005)	358365	57.1394	57.1	
	69 1,1,1,2-Tetrachloroethane	131	12.294	12.290	(1.009)	243135	58.6713	58.7	
M	70 Xylenes (total)	106				1310637	180.265	180(R)	
	71 m+p-Xylenes	106	12.430	12.433	(1.020)	874156	118.186	118	
	72 o-Xylene	106	13.002	13.005	(1.067)	436481	62.0795	62.1(R)	
	73 Styrene	104	13.073	13.076	(1.073)	706017	59.7908	59.8	
	74 Bromoform	173	13.116	13.112	(1.076)	99158	58.0936	58.1	
	75 Isopropylbenzene	105	13.431	13.434	(0.865)	1250693	61.3825	61.4	
$	76 P-Bromofluorobenzene	95	13.831	13.834	(1.590)	285537	52.1505	52.2	
	77 cis-1,4-Dichloro-2-Butene	53	13.938	13.934	(0.898)	52381	47.3069	47.3	
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.399	(0.928)	38786	46.6567	46.6	

WAS

2:59 pm, Apr 13, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2127.D
Report Date: 13-Apr-2015 14:54

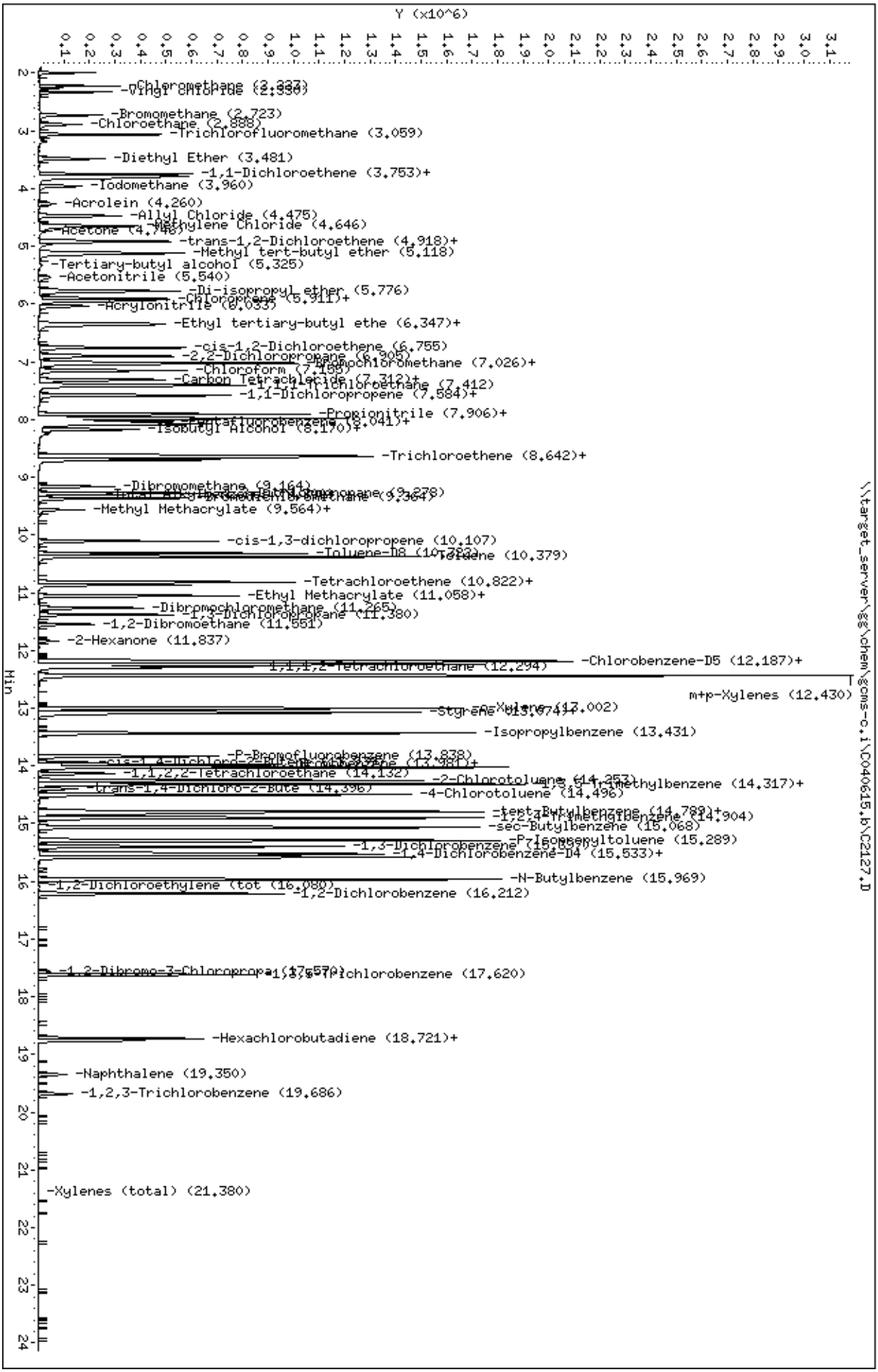
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	79 Bromobenzene	156	13.981	13.984	(0.901)	259330	55.4964	55.5	
	80 N-Propylbenzene	91	14.024	14.027	(0.904)	1552265	62.2672	62.3	
	81 1,1,2,2-Tetrachloroethane	83	14.131	14.134	(0.911)	159250	51.3751	51.4	
	82 1,3,5-Trimethylbenzene	105	14.317	14.320	(0.923)	1070023	55.5631	55.6	
	83 2-Chlorotoluene	91	14.253	14.256	(0.918)	964017	60.2843	60.3	
	84 1,2,3-Trichloropropane	75	14.331	14.334	(0.924)	136712	53.0980	53.1	
	85 4-Chlorotoluene	91	14.496	14.499	(0.934)	988106	60.6458	60.6	
	86 tert-Butylbenzene	119	14.789	14.792	(0.953)	1020943	59.3548	59.4	
	87 Pentachloroethane	117	14.817	14.821	(0.955)	190167	55.2633	55.3	
	88 1,2,4-Trimethylbenzene	105	14.903	14.899	(0.960)	1090602	58.3753	58.4	
	89 P-Isopropyltoluene	119	15.289	15.292	(0.985)	1144855	62.7919	62.8	
	90 1,3-Dichlorobenzene	146	15.396	15.400	(0.992)	504463	59.0346	59.0	
*	91 1,4-Dichlorobenzene-D4	152	15.518	15.514	(1.000)	281407	50.0000		
	92 1,4-Dichlorobenzene	146	15.539	15.542	(1.001)	479569	52.6730	52.7	
	93 N-Butylbenzene	91	15.968	15.964	(1.029)	1131054	59.3548	59.4	
	94 sec-Butylbenzene	105	15.067	15.064	(0.971)	1383773	61.8875	61.9	
	95 1,2-Dichlorobenzene	146	16.211	16.213	(1.045)	414916	57.2395	57.2	
	96 1,2-Dibromo-3-Chloropropane	75	17.569	17.565	(1.132)	16168	43.0100	43.0	
	97 1,3,5-Trichlorobenzene	180	17.619	17.623	(1.135)	277605	52.5791	52.6	
	98 Hexachlorobutadiene	225	18.727	18.723	(1.207)	144849	55.3274	55.3	
	99 1,2,4-Trichlorobenzene	180	18.763	18.759	(1.209)	136188	49.3026	49.3	
	100 1,2,3-Trimethylbenzene	105	15.582	15.585	(1.004)	922658	52.3734	52.4	
	101 Naphthalene	128	19.349	19.352	(1.247)	97603	36.0927	36.1	
	102 1,2,3-Trichlorobenzene	180	19.685	19.681	(1.269)	45245	34.2091	34.2	
	103 Methyl Acetate	43	4.967	4.971	(0.618)	67109	47.3899	47.4	
	104 Methylcyclohexane	83	8.627	8.630	(1.073)	431385	61.3369	61.3	
M	153 Total Alkylbenzenes	100				8393515	419.595	420(R)	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2127.D
Date : 06-APR-2015 20:30
Client ID: MW-09-GW-033115MS
Sample Info: WG160815-11,SI2008
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2128.D
Report Date: 13-Apr-2015 14:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040615.b\C2128.D
Lab Smp Id: WG160815-12 Client Smp ID: MW-09-GW-033115MSD
Inj Date : 06-APR-2015 21:05 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160815-12,SI2008
Misc Info : WG160815,WG160815-4,SI2008-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040615.b\C826A35.m
Meth Date : 06-Apr-2015 16:30 rcrocker Quant Type: ISTD
Cal Date : 06-APR-2015 15:49 Cal File: C2120.D
Als bottle: 16 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.989	1.990	(0.248)	167577	38.2272	38.2	
2 Chloromethane	50	2.217	2.219	(0.276)	277326	41.1930	41.2	
3 Vinyl chloride	62	2.324	2.326	(0.289)	250990	46.7089	46.7	
4 Bromomethane	94	2.725	2.726	(0.339)	150482	47.7118	47.7	
5 Chloroethane	64	2.889	2.891	(0.360)	156220	51.3674	51.4	
6 Trichlorofluoromethane	101	3.061	3.062	(0.381)	371457	53.8090	53.8	
7 Diethyl Ether	59	3.482	3.484	(0.433)	155380	54.8190	54.8	
8 Tertiary-butyl alcohol	59	5.327	5.335	(0.663)	42718	136.081	136	
9 1,1-Dichloroethene	96	3.747	3.755	(0.466)	218396	58.1914	58.2	
10 Carbon Disulfide	76	3.783	3.784	(0.471)	644438	61.0195	61.0	
11 Freon-113	151	3.811	3.813	(0.474)	161771	60.4670	60.5	
12 Iodomethane	142	3.954	3.956	(0.492)	245221	60.2383	60.2	
13 Acrolein	56	4.262	4.263	(0.530)	66694	254.131	254	
14 Methylene Chloride	84	4.648	4.649	(0.578)	245094	55.9049	55.9	
15 Acetone	43	4.740	4.742	(0.590)	39937	54.6100	54.6	
16 Isobutyl Alcohol	43	8.250	8.252	(1.027)	59811	585.206	585	
17 trans-1,2-Dichloroethene	96	4.912	4.913	(0.611)	241605	55.6555	55.6	
18 Allyl Chloride	41	4.469	4.477	(0.556)	248556	55.7585	55.8	
19 Methyl tert-butyl ether	73	5.119	5.121	(0.637)	790655	113.730	114	
20 Acetonitrile	39	5.541	5.542	(0.690)	26040	412.693	413	
21 Di-isopropyl ether	45	5.777	5.778	(0.719)	662879	57.8373	57.8	
22 Chloroprene	53	5.906	5.907	(0.735)	386971	58.6249	58.6	
23 Propionitrile	54	7.957	7.958	(0.990)	145630	444.620	445	
24 Methacrylonitrile	41	7.979	7.987	(0.993)	620865	547.220	547	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2128.D
Report Date: 13-Apr-2015 14:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.941	5.950	(0.739)	508174	58.5121	58.5	
	26 Acrylonitrile	52	6.034	6.036	(0.751)	160587	257.807	258	
	27 Ethyl tertiary-butyl ether	59	6.342	6.343	(0.789)	545049	54.2412	54.2	
	28 Vinyl Acetate	43	6.363	6.372	(0.731)	327147	51.9418	51.9	
	29 cis-1,2-Dichloroethene	96	6.756	6.758	(0.841)	258605	56.9468	56.9	
M	30 1,2-Dichloroethylene (total)	96				500210	112.602	113	
	31 Methyl Methacrylate	41	9.565	9.567	(1.099)	83364	48.9010	48.9	
	32 2,2-Dichloropropane	77	6.906	6.908	(0.859)	416928	56.6331	56.6	
	33 Bromochloromethane	128	7.035	7.036	(0.875)	98211	58.9108	58.9	
	34 Chloroform	83	7.149	7.151	(0.890)	515012	58.4935	58.5	
	35 Carbon Tetrachloride	117	7.314	7.315	(0.841)	346462	59.2514	59.2	
	36 Tetrahydrofuran	42	7.357	7.358	(0.916)	26603	51.6851	51.7	
$	37 Dibromofluoromethane	113	7.400	7.401	(0.921)	178126	53.5628	53.6	
	38 1,1,1-Trichloroethane	97	7.414	7.415	(0.923)	479447	59.4347	59.4	
	39 1,1-Dichloropropene	75	7.578	7.580	(0.871)	386509	61.2946	61.3	
	40 2-Butanone	43	7.585	7.580	(0.944)	40651	51.6885	51.7	
	41 Benzene	78	7.907	7.908	(0.909)	897248	56.1256	56.1	
*	42 Pentafluorobenzene	168	8.036	8.037	(1.000)	296523	50.0000		
	43 Cyclohexane	56	7.021	7.022	(0.874)	448813	62.1405	62.1	
	44 Ethyl Methacrylate	69	11.052	11.054	(1.270)	149736	51.2169	51.2	
$	45 1,2-Dichloroethane-D4	65	8.086	8.087	(1.006)	210538	56.0764	56.1	
	46 Tertiary-amyl methyl ether	73	8.071	8.073	(1.004)	372919	52.0591	52.0	
	47 1,2-Dichloroethane	62	8.172	8.173	(0.939)	337724	53.5899	53.6	
	48 Trichloroethene	95	8.650	8.651	(0.994)	292915	62.5628	62.6(R)	
*	49 1,4-Difluorobenzene	114	8.700	8.702	(1.000)	507916	50.0000		
	50 Dibromomethane	93	9.158	9.166	(1.053)	114433	54.2807	54.3	
	51 1,2-Dichloropropane	63	9.279	9.281	(1.067)	238023	60.1372	60.1	
	52 Bromodichloromethane	83	9.365	9.367	(1.076)	380908	59.7579	59.8	
	53 cis-1,3-dichloropropene	75	10.109	10.110	(1.162)	361829	53.3194	53.3	
	54 1,4-Dioxane	88	9.608	9.610	(1.104)	16116	347.842	348	
$	55 Toluene-D8	98	10.316	10.317	(1.186)	639835	59.4649	59.5	
	57 Toluene	92	10.373	10.374	(1.192)	593140	56.1977	56.2	
	58 4-methyl-2-pentanone	43	10.823	10.825	(1.244)	86504	53.9880	54.0	
	59 Tetrachloroethene	164	10.816	10.818	(0.887)	200554	60.6457	60.6	
	60 trans-1,3-Dichloropropene	75	10.866	10.868	(1.249)	318568	56.8687	56.9	
	61 1,1,2-Trichloroethane	83	11.052	11.054	(1.270)	134613	56.6018	56.6	
	62 Dibromochloromethane	129	11.267	11.268	(0.924)	217332	60.0471	60.0	
	63 1,3-Dichloropropane	76	11.381	11.382	(0.934)	302546	56.8280	56.8	
	64 1,2-Dibromoethane	107	11.553	11.554	(1.328)	156948	53.3301	53.3	
	65 2-Hexanone	43	11.838	11.833	(0.971)	57773	53.7552	53.8	
*	66 Chlorobenzene-D5	117	12.189	12.190	(1.000)	492856	50.0000		
	67 Chlorobenzene	112	12.210	12.212	(1.002)	680168	61.7097	61.7(R)	
	152 1-Chlorohexane	91	12.182	12.183	(0.999)	409049	61.5128	61.5(R)	
	68 Ethylbenzene	106	12.246	12.247	(1.005)	365377	56.8288	56.8	
	69 1,1,1,2-Tetrachloroethane	131	12.296	12.290	(1.009)	247240	58.1988	58.2	
M	70 Xylenes (total)	106				1352194	181.459	181(R)	
	71 m+p-Xylenes	106	12.432	12.433	(1.020)	896233	118.199	118	
	72 o-Xylene	106	13.004	13.005	(1.067)	455961	63.2598	63.2(R)	
	73 Styrene	104	13.075	13.076	(1.073)	727611	60.1085	60.1	
	74 Bromoform	173	13.111	13.112	(1.076)	103999	59.4356	59.4	
	75 Isopropylbenzene	105	13.432	13.434	(0.866)	1284944	61.1601	61.2	
$	76 P-Bromofluorobenzene	95	13.833	13.834	(1.590)	291945	50.0255	50.0	
	77 cis-1,4-Dichloro-2-Butene	53	13.933	13.934	(0.898)	55531	48.6296	48.6	
	78 trans-1,4-Dichloro-2-Butene	53	14.397	14.399	(0.928)	38721	45.1878	45.2	

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2128.D
Report Date: 13-Apr-2015 14:54

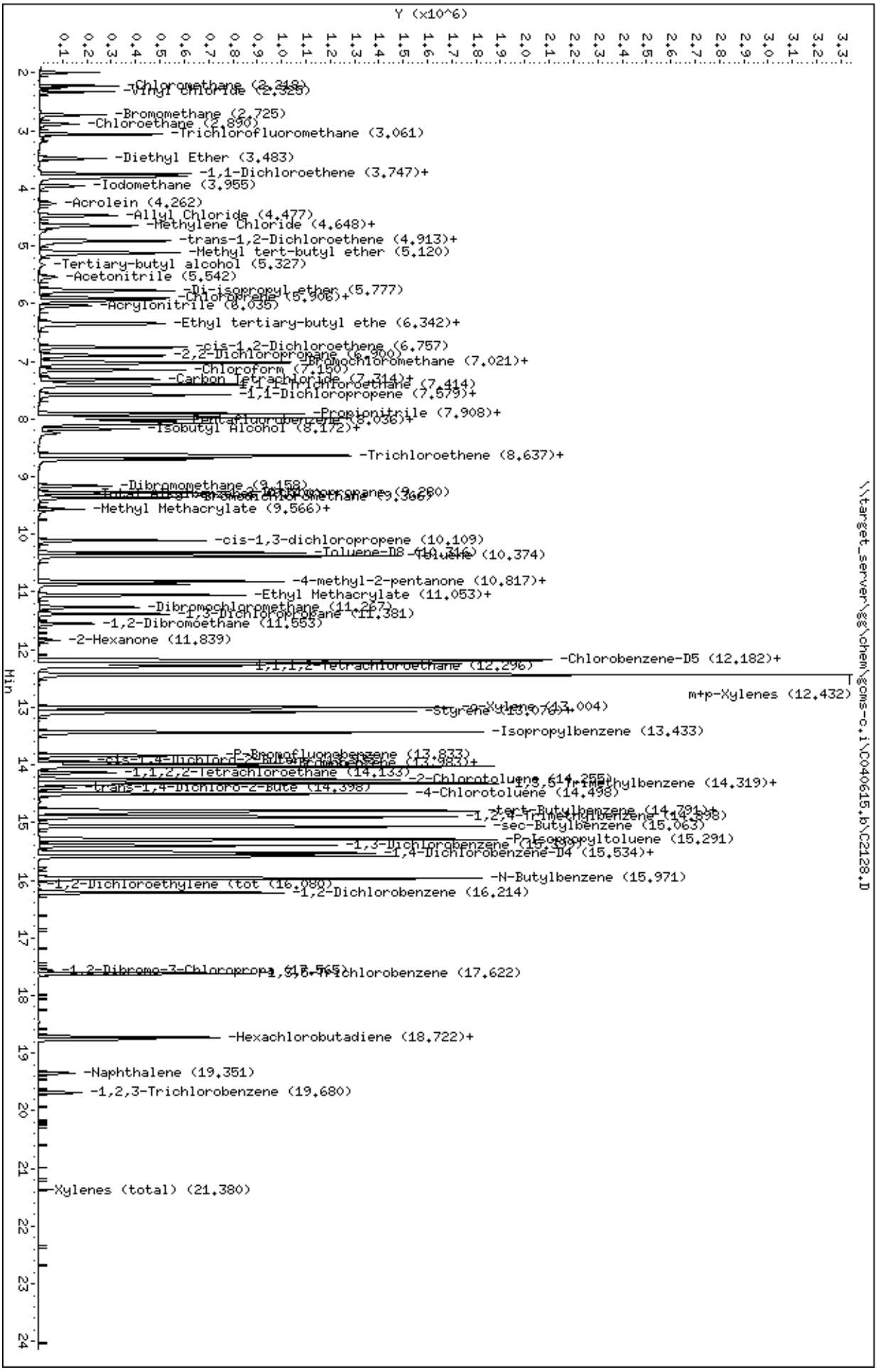
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
79 Bromobenzene	156	13.983	13.984	(0.901)	270237	56.0850	56.1	
80 N-Propylbenzene	91	14.026	14.027	(0.904)	1592650	61.9589	62.0	
81 1,1,2,2-Tetrachloroethane	83	14.133	14.134	(0.911)	169043	52.8884	52.9	
82 1,3,5-Trimethylbenzene	105	14.319	14.320	(0.923)	1083181	54.5487	54.5	
83 2-Chlorotoluene	91	14.254	14.256	(0.918)	981616	59.5321	59.5	
84 1,2,3-Trichloropropane	75	14.333	14.334	(0.924)	140969	53.0989	53.1	
85 4-Chlorotoluene	91	14.498	14.499	(0.934)	1005740	59.8650	59.9	
86 tert-Butylbenzene	119	14.791	14.792	(0.953)	1048329	59.1074	59.1	
87 Pentachloroethane	117	14.819	14.821	(0.955)	192597	54.2801	54.3	
88 1,2,4-Trimethylbenzene	105	14.898	14.899	(0.960)	1100540	57.1292	57.1	
89 P-Isopropyltoluene	119	15.291	15.292	(0.985)	1189646	63.2791	63.3	
90 1,3-Dichlorobenzene	146	15.398	15.400	(0.992)	518549	58.8514	58.8	
* 91 1,4-Dichlorobenzene-D4	152	15.520	15.514	(1.000)	290165	50.0000		
92 1,4-Dichlorobenzene	146	15.541	15.542	(1.001)	502772	53.5547	53.6	
93 N-Butylbenzene	91	15.970	15.964	(1.029)	1180841	60.0972	60.1	
94 sec-Butylbenzene	105	15.062	15.064	(0.971)	1427900	61.9336	61.9	
95 1,2-Dichlorobenzene	146	16.213	16.213	(1.045)	426356	57.0425	57.0	
96 1,2-Dibromo-3-Chloropropane	75	17.564	17.565	(1.132)	18622	48.0611	48.1	
97 1,3,5-Trichlorobenzene	180	17.621	17.623	(1.135)	301231	55.3410	55.3	
98 Hexachlorobutadiene	225	18.722	18.723	(1.206)	168299	62.5760	62.6	
99 1,2,4-Trichlorobenzene	180	18.758	18.759	(1.209)	155852	54.6203	54.6	
100 1,2,3-Trimethylbenzene	105	15.584	15.585	(1.004)	951451	52.3777	52.4	
101 Naphthalene	128	19.351	19.352	(1.247)	132084	46.8859	46.9	
102 1,2,3-Trichlorobenzene	180	19.687	19.681	(1.269)	62424	46.4843	46.5	
103 Methyl Acetate	43	4.969	4.971	(0.618)	74431	51.2048	51.2	
104 Methylcyclohexane	83	8.629	8.630	(1.074)	438033	60.6758	60.7	
M 153 Total Alkylbenzenes	100				8623087	418.054	418(R)	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2128.D
Date : 06-APR-2015 21:05
Client ID: MW-09-GW-033115MSD
Sample Info: WG160815-12,SI2008
Purge Volume: 5.0
Column phase: RTX-VMS

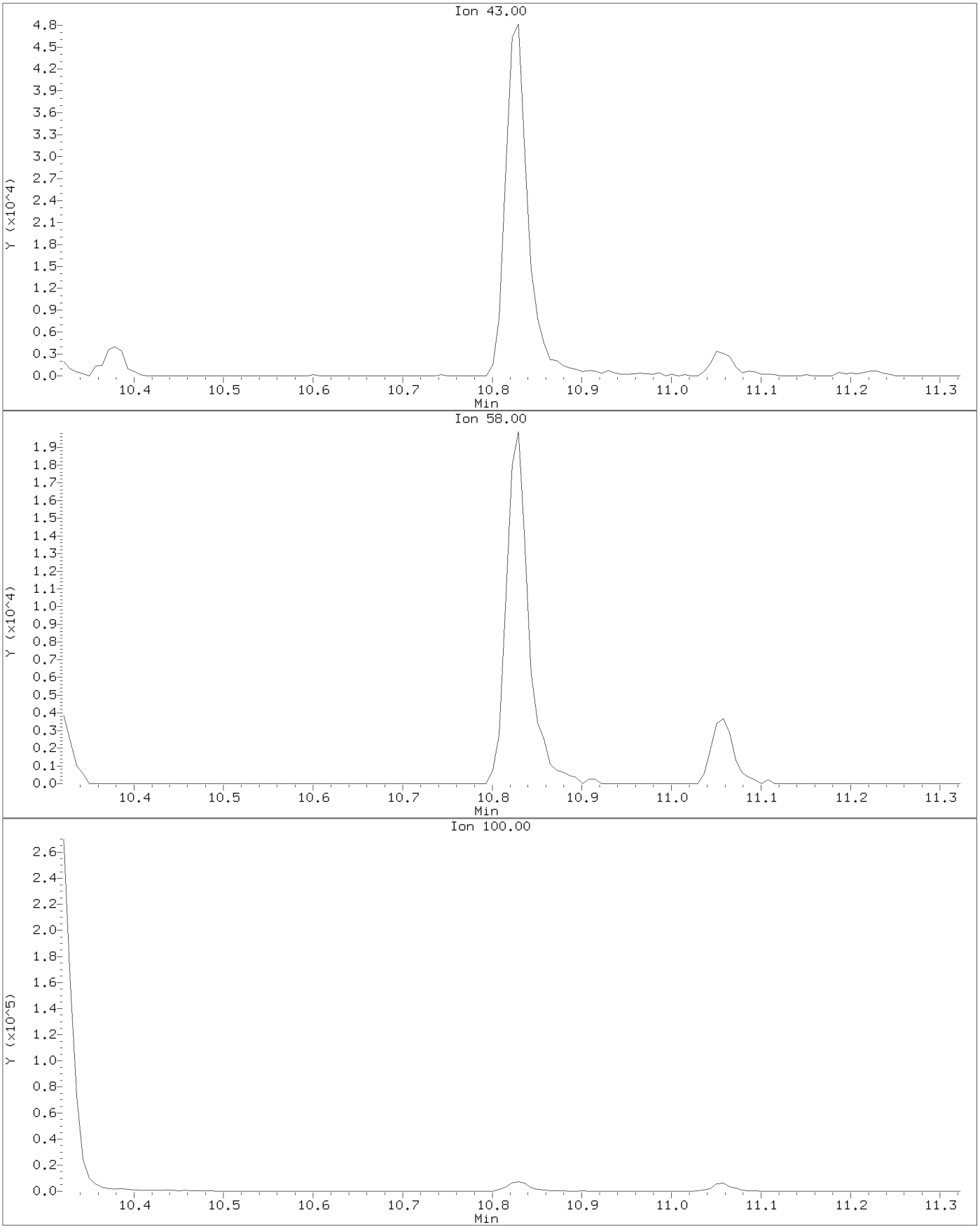
Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2127.D
Injection Date: 06-APR-2015 20:30
Instrument: gcms-c.i
Client Sample ID: MW-09-GW-033115MS

Compound: 4-methyl-2-pentanone
CAS Number: 108-10-1

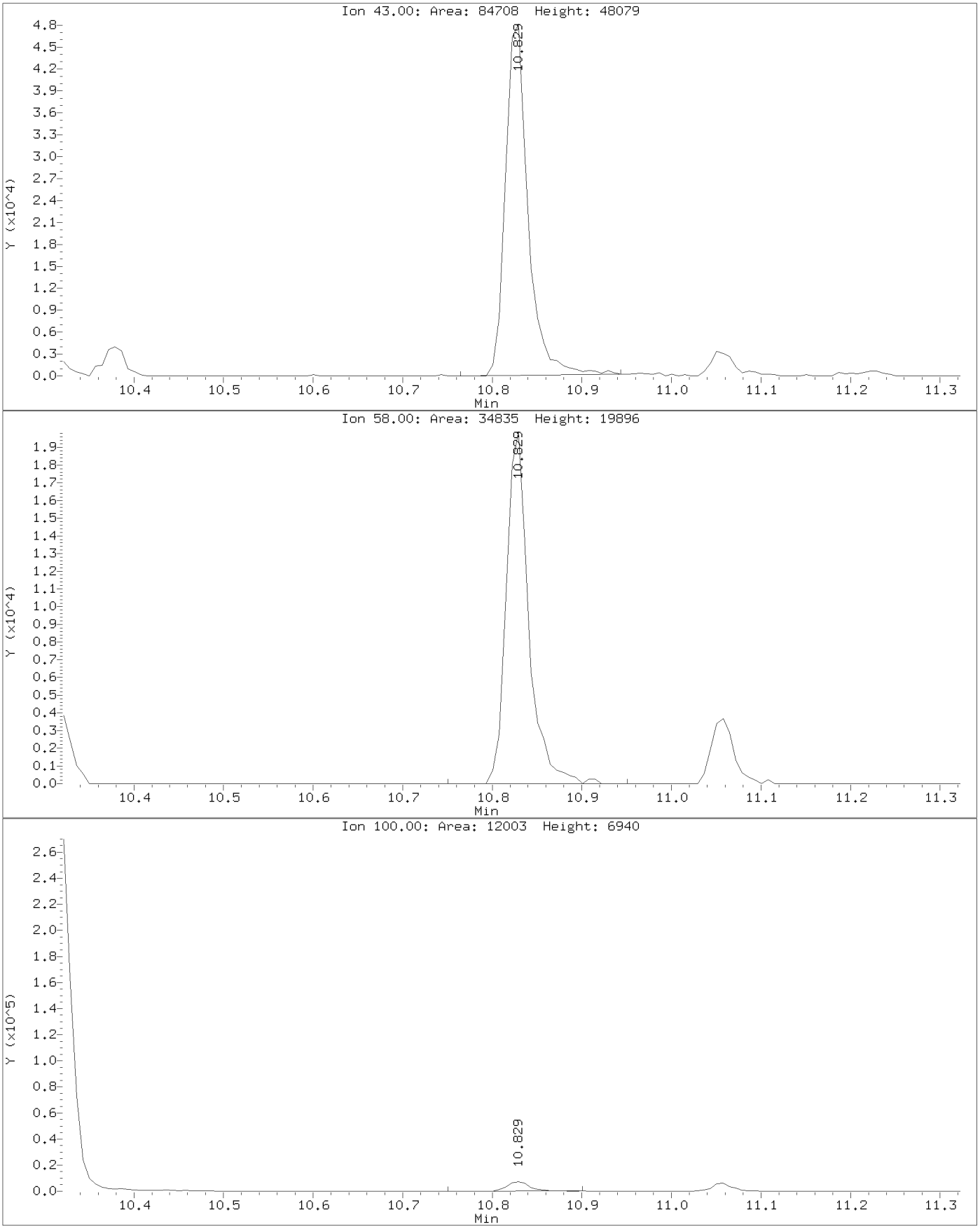
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040615.b\C2127.D
Injection Date: 06-APR-2015 20:30
Instrument: gcms-c.i
Client Sample ID: MW-09-GW-033115MS

Compound: 4-methyl-2-pentanone
CAS Number: 108-10-1

AFTER MANUAL INTEGRATION



Logbooks and Supporting Documents

GCMS-C INSTRUMENT RUNLOG

KATAHDIN ANALYTICAL SERVICES

DATE/TIME OF BFB INJECTION: 02/28/15 B

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	MCP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ⑧	CB045	1	-1	VOABFBAQ							Y	REC		WG60458
VST0050C28C ④	C1957	1	1	C826A34							Y			
020C28A ③	58	1	2								Y			
005C28A ②	59	1	3								Y			
001C28A ①	60	1	4								Y			
001C26B	61	1	5								N			Curve passes
200C28A ⑥	62	1	6								Y			
100C28A ⑤	63	1	7								Y			
LCSA IND	64	1	8								Y			CS_2 PT
LCSB	65	1	9								N			
Rinse	66	1	10								N			
Rinse	67	1	11								N			
Rinse	68	1	12								N			
Rinse	69	1	13								N			

03/30/15 REC

STANDARD	CODE
BFB	V9754
CAL. STD.	V9771 V9772
LCS/MS MIX	V9770
EXTRAS MIX	V9761

STANDARD	CODE
IS MIX	V9763
SS MIX	V9764

Circle Methods:

SW846 8260 (circled)
SW846 8260 SIM
SW846 8260 SIM (heated purge)
OLM 04.2
OLC 03.2
EPA 624
EPA 524

VOA-002 - Revision 1 - 11/06/2009

QAMS560

0000088

0000352

KATAHDIN ANALYTICAL SERVICES

GCMS-C INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 04-03-15 9:30

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	MCP	Y/N	ANALYST	PH	COMMENTS
50ng BFB ③	CB050	1	-1	VOABFBAQ							Y	EME		
04/03/15 REC VSTD050C03 A ②	C2066	1	1	C826A34							N			
↓ B ④	67	1	2								N			High Bias
LCS A ①	68	1	3								Y			WG160723
VBLK A	69	1	4								N			
B	70	1	5								N			
↓ C ②	71	1	6								Y			04/03/15 REC 2SST ~~CS20 for~~ no hits
SI1843-1DL C	72	10	7		X				X		Y		<2	4→40ml 2SST
-2DL B	73	10	8		X				X		Y		<2	2SST
-3DL B	74	10	9		X				X		Y		<2	2SST
-9DL C	75	10	10		X				X		Y		<2	↓ 2SST
-10DL C	76	40	11		X				X		Y		<2	1→40ml 2SST
-12DL B	77	10	12		X				X		Y		<2	4→40ml 2SST
SI1876-1DL B	78	20	13		X				X		Y		<2	2→40ml 2SST
-2DL B	79	10	14		X				X		Y		<2	4→40ml 2SST
-6DL B	80	20	15		X				X		Y		<2	2→40ml 2SST
SI2008-6DL B	81	20	16		X				X		Y		<2	↓ 2SST
-7 B	82	1	17		X				X		Y		<2	2SST
-8 A	83	1	18		X				X		Y		<2	2SST no hits
SI1843-10DLMS E ⑤	84	40	19		X				X		N		<2	1→40ml not ang
-10DLMSD ⑥	85	40	20		X				X		Y		<2	↓
Rinse	86	1	21								N			
Rinse	87	1	22								N			
														04/03/15 REC

STANDARD	CODE
BFB	V9754
CAL. STD.	V9771, V9772
LCS/MS MIX	V9770
EXTRAS MIX	V9761

STANDARD	CODE
IS MIX	V9763
SS MIX	V9764

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

KATAHDIN ANALYTICAL SERVICES

GCMS-C INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 04-06-15 11:15

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	MCP	Y/N	ANALYST	PH	COMMENTS
50ng BFB (10)	CB054	1	-1	VOABFBAQ							Y	EME	7	
VSTD050C06A (4)	C2113	1	1	C826A35							Y			
VSTD020C06A (3)	14	1	2								Y			
VSTD005C06A (2)	15	1	3								Y			
VSTD001C06A (1)	16	1	4								N			
VSTD200C06A (6)	17	1	5								Y			curve
VSTD100C06A (5)	18	1	6								Y			okay
04/06/15 REC VSTD001C06AB	19	1	7								N			
VSTD001C06C (1)	20	1	8								Y			
LCSA	21	1	9								N			SS↓
LCSB WG168815-(8)	22	1	10								Y			IND (7) ISS↑
VBLKA	23	1	11								N			
VBLKB	24	1	12								N			
VBLKC (9)	25	1	13								Y		2	ISS↑ no hits
SI2008-6DL2	26	2	14		X				X		Y		<2	20mL→40mL ISS↑
CI2008-1MS -11	27	1	15								Y		<2	ISS↑
1 -1MSD -12	28	1	16								Y		<2	IS 04/07/15 REC
SI1876-2MS -13	29	20	17								Y		<2	ISS↑
1 -2MSD -14	30	20	18								Y		<2	ISS↑
SI1873-10MS -15	31	40	19								Y		<2	ISS↑
1 -10MSD -16	32	40	20								Y		<2	23:24 acc 9 min
Rinse	33	1	21								N			
Rinse	34	1	22								N		7	
Rinse	35	1	23								N			
Rinse	36	1	24								N		7	

04/07/15 REC

STANDARD	CODE
BFB	V9754
CAL. STD.	V9786, V9770
LCS/MS MIX	V9770
EXTRAS MIX	V9785

STANDARD	CODE
IS MIX	V9780
SS MIX	V9781

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

KATAHDIN ANALYTICAL SERVICES

GCMS-C INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 04-08-15 10:19

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	MCP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB -10 (10)	CB057	1	-1	VOABFBAQ							Y	EME		
VSTD050C08A (4)	C2176A	1	1	C816A36							Y			W6160924-4
VSTD020C08A (3)	77A	1	2								Y			-3
VSTD005C08A (2)	78A	1	3								Y			Curve -2
VSTD001C08A (1)	79A	1	4								Y			Okay -1
VSTD200C08A (6)	80A	1	5								Y			-6
VSTD100C08A (5)	81A	1	6								Y			-5
LCSA (8)	82	1	7								Y			INN -7
LCS20A -8	83	1	8								Y			W6160927 -7 (62ng)
VBLK A	84	1	9								N			↳ ISA(DoD)
B	85	1	10								N			
C -9 (9)	86A	1	11								Y			
SI2070-3 B	87	1	12		X				X		Y		<2	
SI2069-1 C	88	1	13								Y		<2	
-2 C	89	1	14								Y		<2	
-3 C	90	1	15								Y		<2	
SI2069-4 C	91	1	16								Y		<2	
-5 C	92	1	17								Y		<2	20:36
Rinse	93	1	18								N			
Rinse	94	1	19								N			
Rinse	95	1	20								N			
SI2070-1DL C	96	4	21								Y		<2	10mL→40mL limited volume
-2 C	97	1	22								Y		<2	Decanted 'c' vial
SI2156-1 A+B	98	1	23								Y		<2	
-2 A+B	99	1	24								Y		<2	
Rinse x2	C20200-20201	1	25								N			

STANDARD	CODE
BFB	V9754
CAL. STD.	V9786, V9792
LCS/MS MIX	V9791
EXTRAS MIX	V9785

STANDARD	CODE
IS MIX	V9780
SS MIX	V9781

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

GCMS-C INSTRUMENT RUNLOG

KATAHDIN ANALYTICAL SERVICES

DATE/TIME OF BFB INJECTION: 04-10-15/ 8:25

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	MCP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ③	CB059	1	-1	VOABFBAQ							Y	EME		
VSTD050C10A ④	C2229	1	1	C826A36							Y			
LCS A(W0161013) ①	30	1	2								Y			
VBLKA	31	1	3								N			
VBLKB	32	1	4								N			
VBLKC ②	33	1	5								Y			
SI2157-1 A	34	1	6		X				X		Y		<2	
-6 A	35	1	7								Y		<2	
-7 A	36	1	8								Y		<2	
-2 A	37	1	9								Y		<2	
-3 CB+A	38	2	10								Y		<2	Decanted All 3 vials 20mL→40mL
-5 A	39	1	11								Y		<2	
-8 A	40	1	12								Y		<2	
SI2008-1RA D	41	1	13								Y		<2	
-2RA B	42	1	14								Y		<2	
-4RA B	43	1	15								Y		<2	
-5RA C	44	1	16								Y		<2	
-7RA C	45	1	17								Y		<2	17:46
Rinse	46	1	18								N		Z	
Rinse	47	1	19								N			
Rinse	48	1	20								N		Z	
Rinse	49	1	21								N			
														04/15/15 REC

STANDARD	CODE
BFB	V9754
CAL. STD.	V9786, V9792
LCS/MS MIX	V9791
EXTRAS MIX	V9785

STANDARD	CODE
IS MIX	V9780
SS MIX	V9781

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

KATAHDIN ANALYTICAL SERVICES

GCMS-C INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 04-02-15/0816

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	MCP	Y/N	ANALYST	PH	COMMENTS
50ng BFB -3	CB049	1	-1	VOABFBA02							Y	EME		
VSTD050C02A -4	C2041	1	1	CB26A34							Y			
CS2 TEST	42	1	2								Y			Confirms
LCS A WG160655-1	43	1	3								Y			
VBLKA	44	1	4								N			
VBLKB	45	1	5								N			
VBLKC -2	46	1	6								Y			
SI1908-5 A	47	1	7		X				X		Y		<2	
SI1949-3 A	48	1	8								N		<2	High SS
SI1876-3RA B	49	1	9								Y		<2	
-4RA B	50	1	10								N		<2	High SS
SI1908-1RA B	51	1	11								Y		<2	
-2RA B	52	1	12								N		<2	High SS
-3RA B	53	1	13								N		<2	High SS
-4 A	54	1	14								N		<2	High SS
SI1949-1 A+B	55	1	15								Y		<2	Decanted A+B vials
-2 A	56	1	16								N		<2	~~Low SS~~ Concentrations High SS
SI2008-1 A	57	1	17								N		<2	High SS
-2 A	58	1	18								N		<2	High SS
-3 A	59	1	19								N		<2	High SS
-4 A	60	1	20								N		<2	High SS
-5 A	61	1	21								N		<2	High SS OUT OF CAL
Rinse	62	1	22								N		Z	
Rinse	63	1	23								N		Z	
Rinse	64	1	24								N		Z	
Rinse	65	1	25								N		Z	

STANDARD	CODE
BFB	V9754
CAL. STD.	V9771, V9772
LCS/MS MIX	V9770
EXTRAS MIX	V9761

STANDARD	CODE
IS MIX	V9763
SS MIX	V9764

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

SIM DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE15-03-06 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI2008

Client Sample ID	Lab Sample ID	Col. ID	14D	#
RE108D1-GW-032715	SI2008-5REDL		102.	
RE108D2-GW-032715	SI2008-6RE		77.0	
Method Blank Sample	WG160715-1		82.4	
Laboratory Control S	WG160715-2		85.0	
Laboratory Control S	WG160715-3		67.0	

		QC Limits
14D	1,4-DIOXANE-D8	30-150

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
SDG : SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab Sample ID : WG160715-1
Lab File ID : G4586.D
Date Extracted : 03-APR-15
Instrument ID : GCMS-G
Date Analyzed : 07-APR-15
Matrix : AQ
Time Analyzed : 11:49

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG160715-2	G4587.D	04/07/15	12:16
Laboratory Control S	WG160715-3	G4588.D	04/07/15	12:44
RE108D2-GW-032715	SI2008-6RE	G4590.D	04/07/15	13:38
RE108D1-GW-032715	SI2008-5REDL	G4591.D	04/07/15	14:06

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Date Analyzed : 18-FEB-15
Lab File ID : GD563.D
Time Analyzed : 10:04
Instrument ID : GCMS-G

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	56.2		
68	Less than 2.0% of mass 69	0.3	0.71	1
69	Less than 100.0% of mass 198	44.3		
70	Less than 2.0% of mass 69	0.3	0.69	1
127	40.0 - 60.0% of mass 198	56.0		
197	Less than 1.0% of mass 198	0.1		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	19.6		
365	1.0 - 100.0% of mass 198	2.2		
441	0.0 - 100.0% of mass 443	9.7	66.41	2
442	40.0 - 100.0% of mass 198	73.0		
443	17.0 - 23.0% of mass 442	14.6	19.94	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG158285-4	G4254.D	02/18/15	10:22
Initial Calibration	WG158285-2	G4255.D	02/18/15	10:49
Initial Calibration	WG158285-3	G4256.D	02/18/15	11:17
Initial Calibration	WG158285-5	G4257.D	02/18/15	11:45
Initial Calibration	WG158285-6	G4258.D	02/18/15	12:13
Initial Calibration	WG158285-7	G4259.D	02/18/15	12:41
Independent Source	WG158285-8	G4260.D	02/18/15	14:39

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : GD588.D
Instrument ID : GCMS-G

SDG : SI2008
Date Analyzed : 07-APR-15
Time Analyzed : 11:01

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	57.5		
68	Less than 2.0% of mass 69	0.6	1.46	1
69	Less than 100.0% of mass 198	42.9		
70	Less than 2.0% of mass 69	0.2	0.51	1
127	40.0 - 60.0% of mass 198	58.7		
197	Less than 1.0% of mass 198	0.1		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	17.5		
365	1.0 - 100.0% of mass 198	1.7		
441	0.0 - 100.0% of mass 443	7.6	76.54	2
442	40.0 - 100.0% of mass 198	48.6		
443	17.0 - 23.0% of mass 442	9.9	20.45	3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG160772-2	G4585.D	04/07/15	11:21
Method Blank Sample	WG160715-1	G4586.D	04/07/15	11:49
Laboratory Control S	WG160715-2	G4587.D	04/07/15	12:16
Laboratory Control S	WG160715-3	G4588.D	04/07/15	12:44
RE108D2-GW-032715	SI2008-6RE	G4590.D	04/07/15	13:38
RE108D1-GW-032715	SI2008-5REDL	G4591.D	04/07/15	14:06

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG158285-4
Lab File ID : G4254.D

SDG: SI2008
Analytical Date: 02/18/15 10:22
Instrument ID: GCMS-G

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	85395		6.84	
	Upper Limit	170790		7.34	
	Lower Limit	42697.5		6.34	
Client Sample ID	Lab Sample ID				
Continuing Calibrati	WG160772-2	50628		6.64	
Method Blank Sample	WG160715-1	54011		6.64	
Laboratory Control S	WG160715-2	58137		6.64	
Laboratory Control S	WG160715-3	58458		6.64	
RE108D2-GW-032715	SI2008-6RE	53631		6.64	
RE108D1-GW-032715	SI2008-5REDL	53616		6.64	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-5REDL
Client ID: RE108D1-GW-032715
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: G4591.D

Sample Date: 27-MAR-15
Received Date: 01-APR-15
Extract Date: 03-APR-15
Extracted By: HG
Extraction Method: SW846 3520
Lab Prep Batch: WG160715

Analysis Date: 07-APR-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,4-Dioxane		9.7	ug/L	2	.25	0.48	0.16	0.34
1,4-Dioxane-D8		102.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4591.D
Report Date: 09-Apr-2015 13:05

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G040715.b\G4591.D
Lab Smp Id: SI2008-5REDL Client Smp ID: RE108D1-GW-032715
Inj Date : 07-APR-2015 14:06 MS Autotune Date: 20-DEC-2013 17:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : SI2008-5REDL
Misc Info : WG160772,WG160715,WG158285-4
Comment   :
Method   : \\target_server\gg\chem\gcms-g.i\G040715.b\GDIOXN52.m
Meth Date : 07-Apr-2015 11:45 cgomez Quant Type: ISTD
Cal Date : 18-FEB-2015 12:41 Cal File: G4259.D
Als bottle: 8
Dil Factor: 2.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

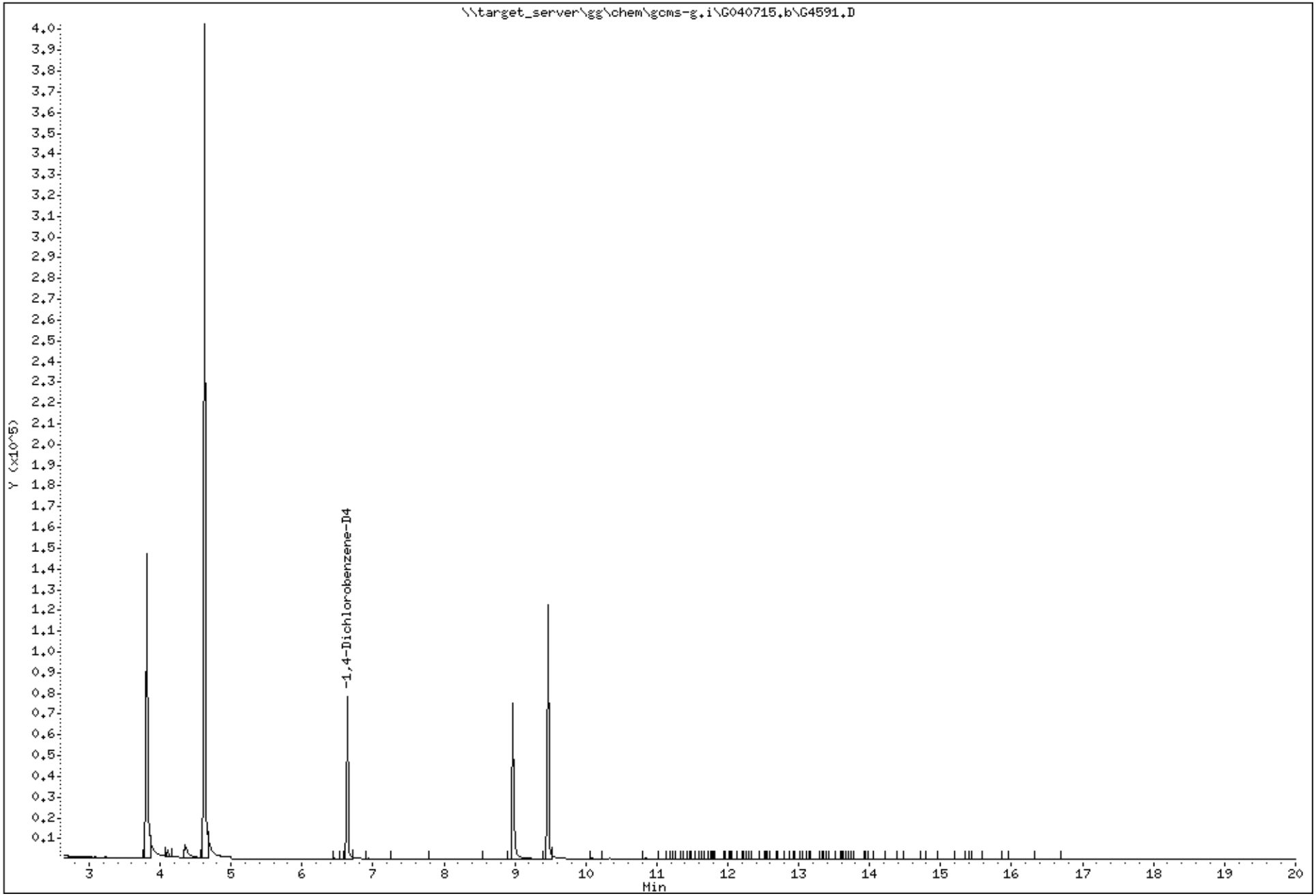
Name	Value	Description
DF	2.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.050	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
1 1,4-Dioxane	88	2.527	2.525	(0.381)	140288	5.10123	9.72	
$ 2 1,4-Dioxane-D8	96	2.499	2.496	(0.377)	24571	1.02406	1.95(Q)	
* 3 1,4-Dichlorobenzene-D4	150	6.635	6.636	(1.000)	53616	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4591.D
Date : 07-APR-2015 14:06
Client ID: RE108D1-GW-032715 Instrument: gcms-g.i
Sample Info: SI2008-5REDL



0000370

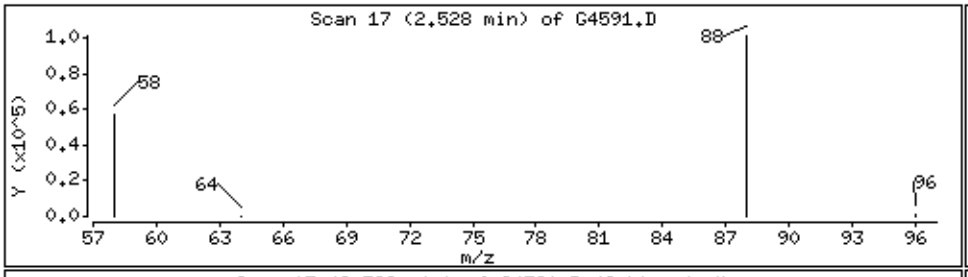
Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4591.D

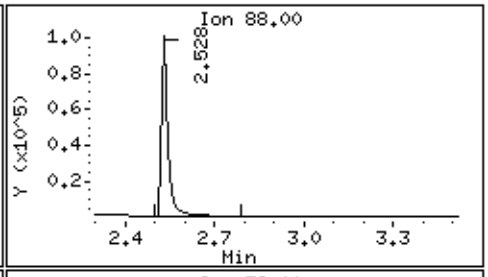
Date : 07-APR-2015 14:06

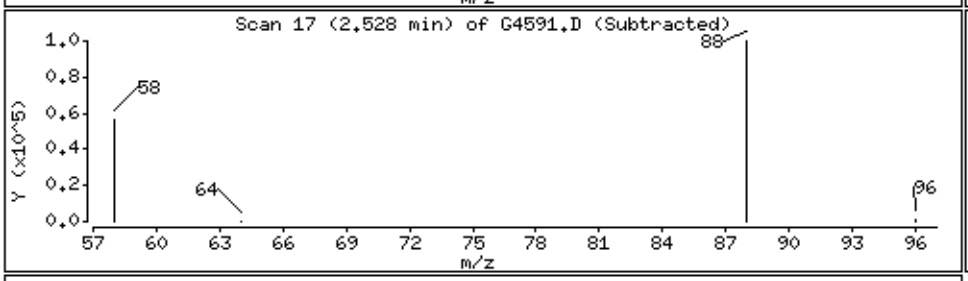
Client ID: RE108D1-GW-032715 Instrument: gcms-g.i

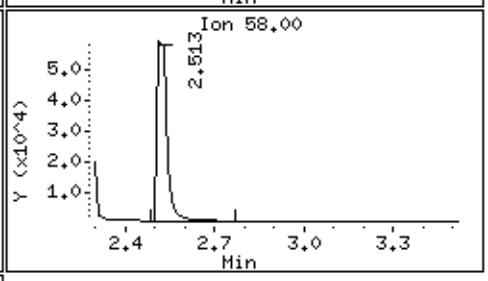
Sample Info: SI2008-5REDL

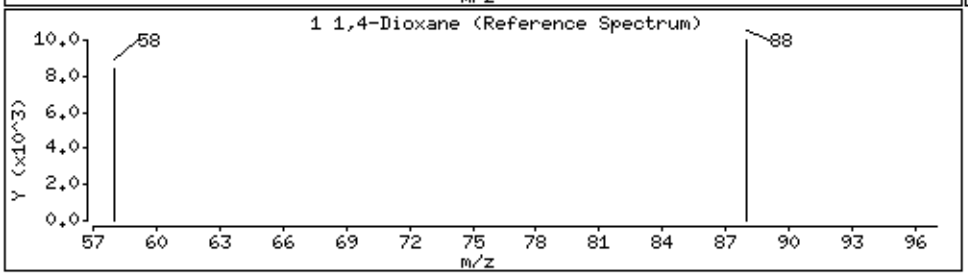
1 1,4-Dioxane Concentration: 9.72 ug/L











Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-6RE
Client ID: RE108D2-GW-032715
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: G4590.D

Sample Date: 27-MAR-15
Received Date: 01-APR-15
Extract Date: 03-APR-15
Extracted By: HG
Extraction Method: SW846 3520
Lab Prep Batch: WG160715

Analysis Date: 07-APR-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,4-Dioxane		9.2	ug/L	1	.25	0.24	0.082	0.17
1,4-Dioxane-D8		77.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4590.D
Report Date: 09-Apr-2015 13:05

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G040715.b\G4590.D
Lab Smp Id: SI2008-6RE Client Smp ID: RE108D2-GW-032715
Inj Date : 07-APR-2015 13:38 MS Autotune Date: 20-DEC-2013 17:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : SI2008-6RE
Misc Info : WG160772,WG160715,WG158285-4
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G040715.b\GDIOXN52.m
Meth Date : 07-Apr-2015 11:45 cgomez Quant Type: ISTD
Cal Date : 18-FEB-2015 12:41 Cal File: G4259.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: KATHADIN-50E985

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.030	Sample Volume (L)
Cpnd Variable		Local Compound Variable

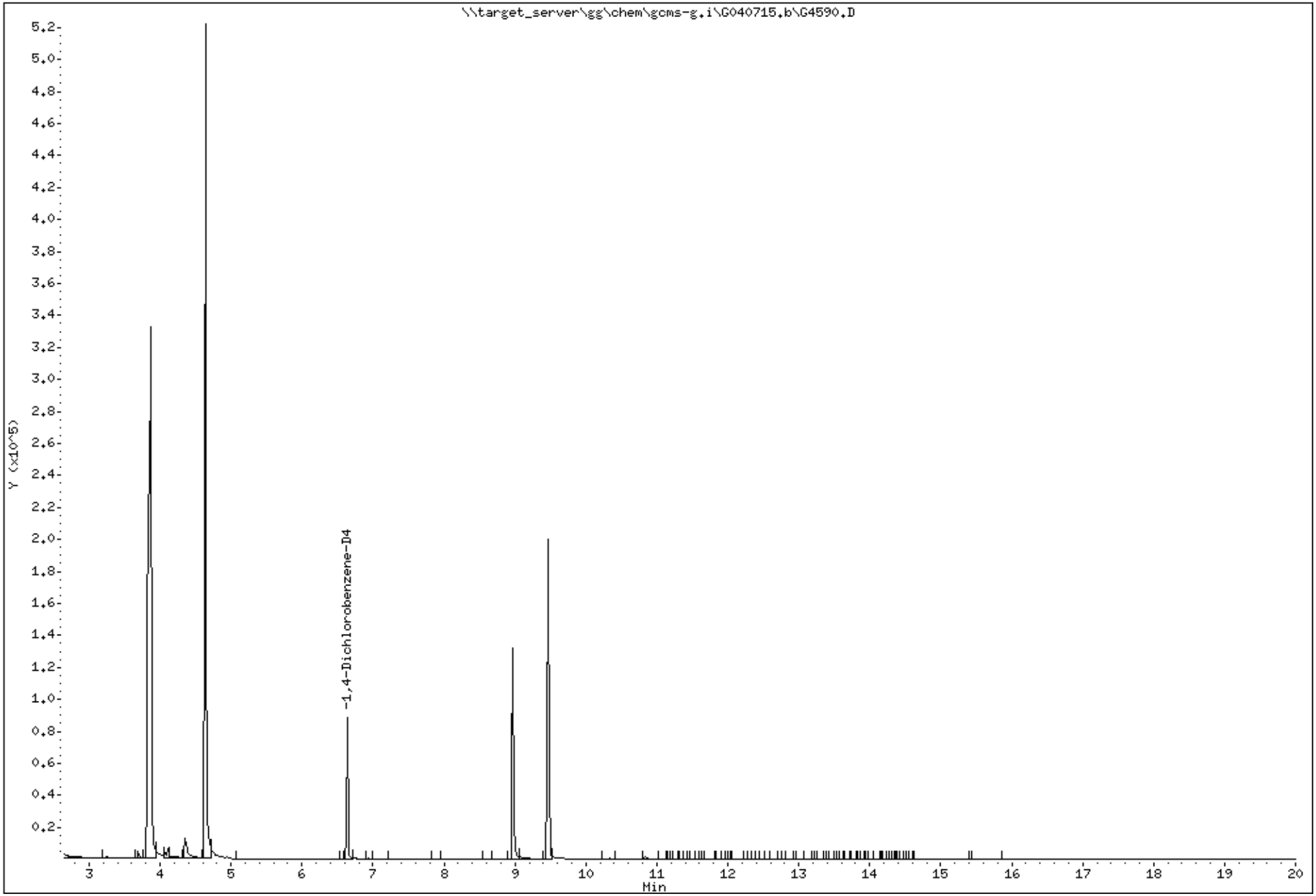
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
1 1,4-Dioxane	88	2.540	2.525	(0.383)	260100	9.45525	9.18	
$ 2 1,4-Dioxane-D8	96	2.512	2.496	(0.379)	36955	1.53977	1.49(QM)	M6
* 3 1,4-Dichlorobenzene-D4	150	6.635	6.636	(1.000)	53631	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

1:13 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4590.D
Date : 07-APR-2015 13:38
Client ID: RE108D2-GW-032715 Instrument: gcms-g.i
Sample Info: SI2008-6RE



0000374

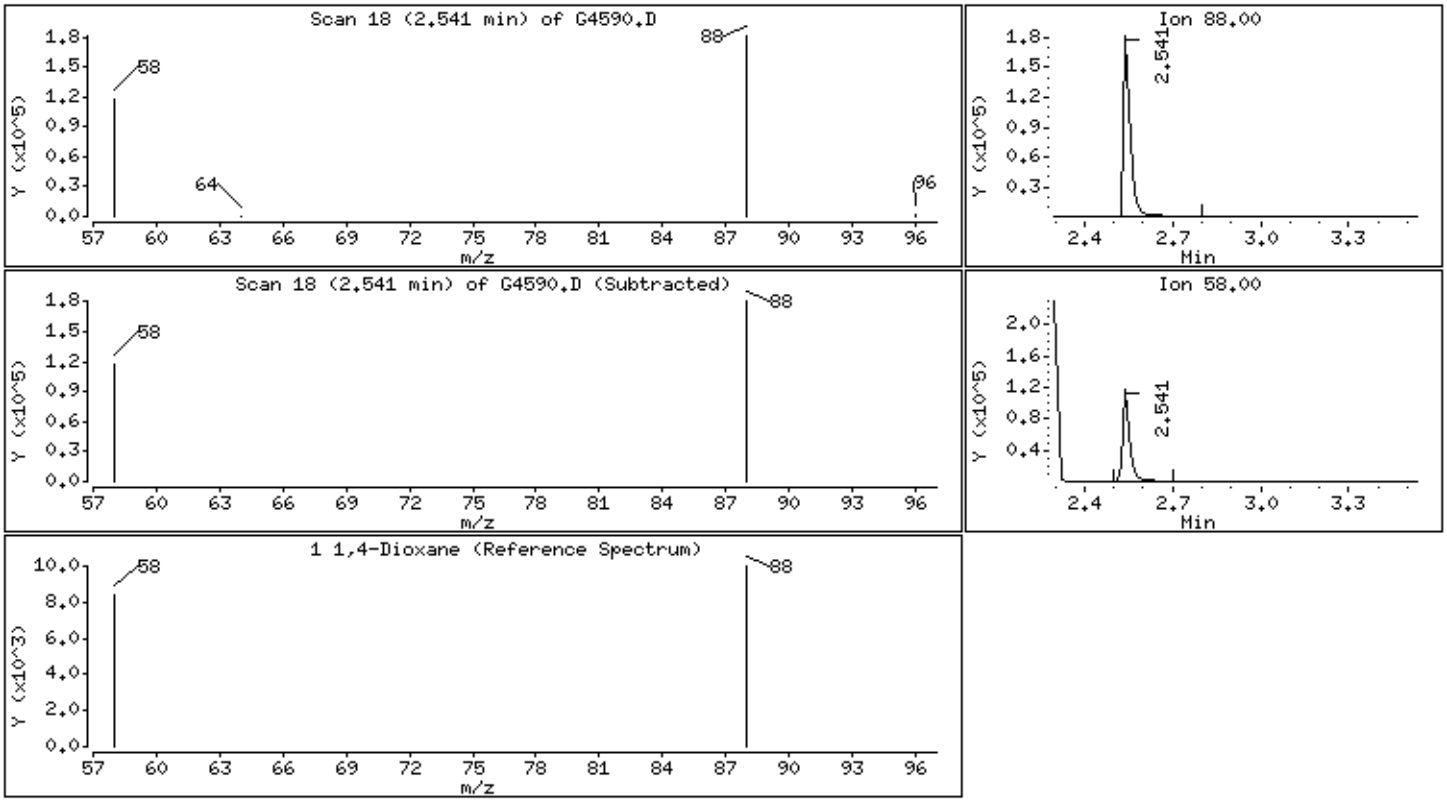
Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4590.D

Date : 07-APR-2015 13:38

Client ID: RE108D2-GW-032715 Instrument: gcms-g.i

Sample Info: SI2008-6RE

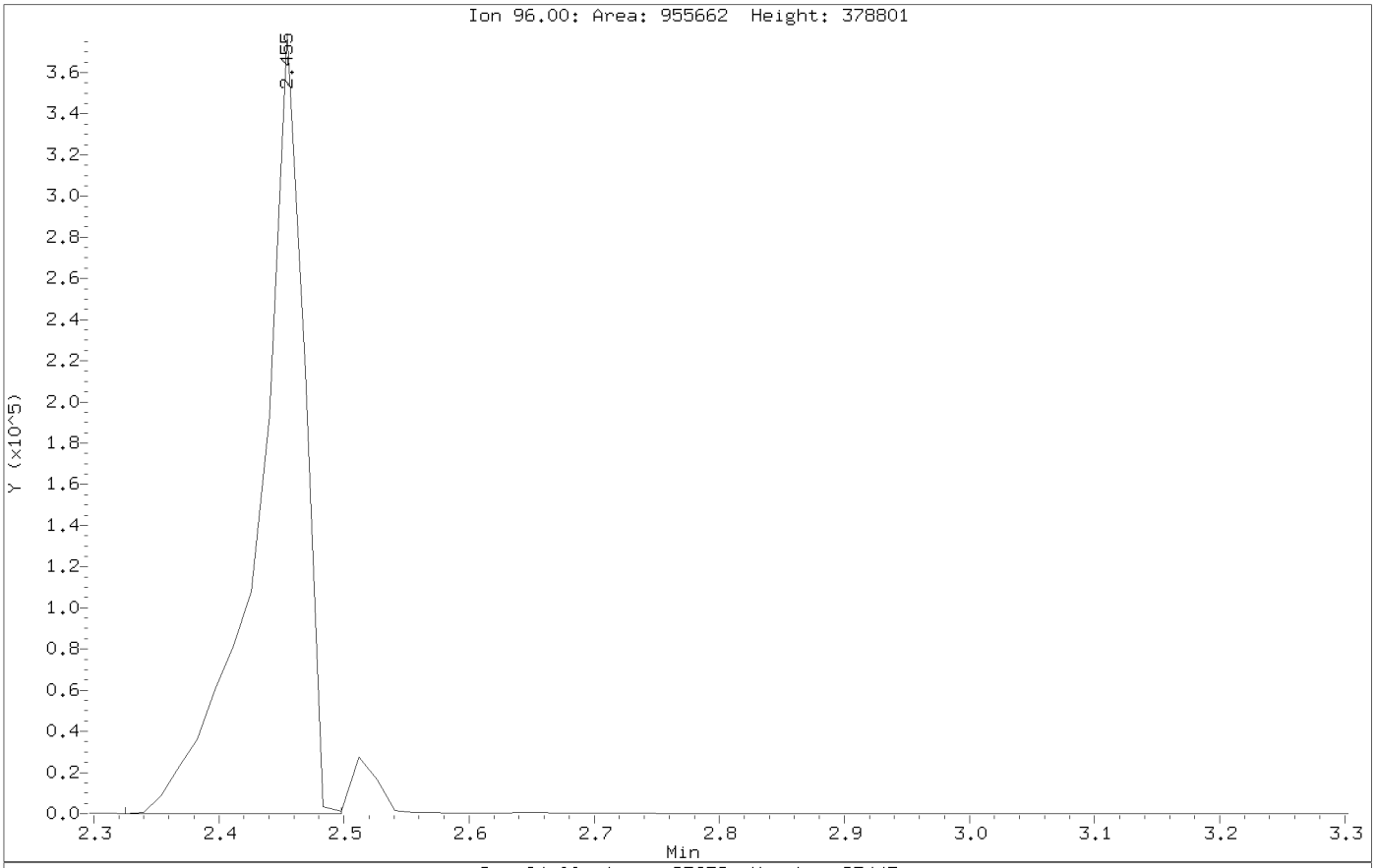
1 1,4-Dioxane Concentration: 9.18 ug/L

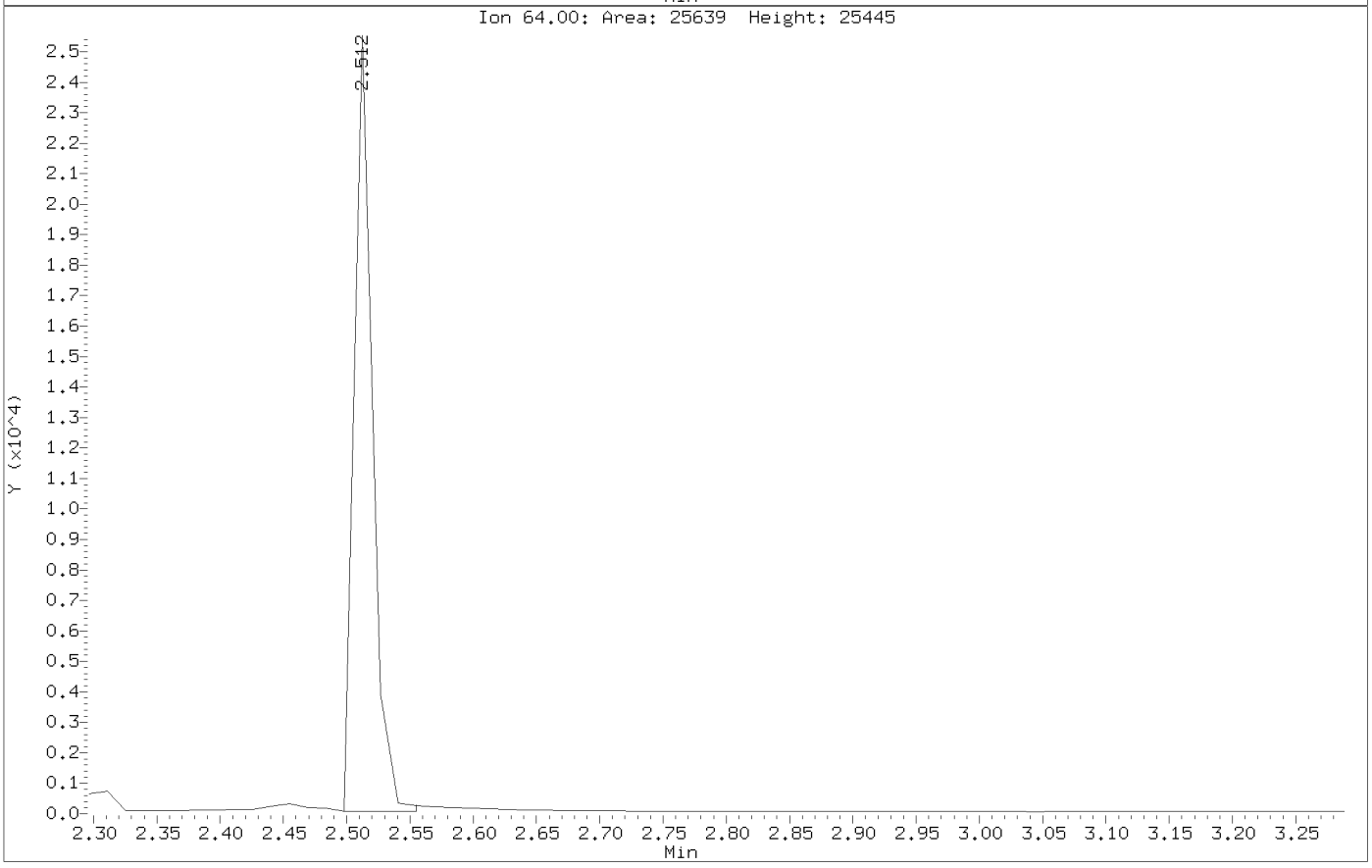


Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4590.D
Injection Date: 07-APR-2015 13:38
Instrument: gcms-g.i
Client Sample ID: RE108D2-GW-032715

BEFORE MANUAL INTEGRATION

Compound: 1,4-Dioxane-D8
CAS Number: 17647-74-4

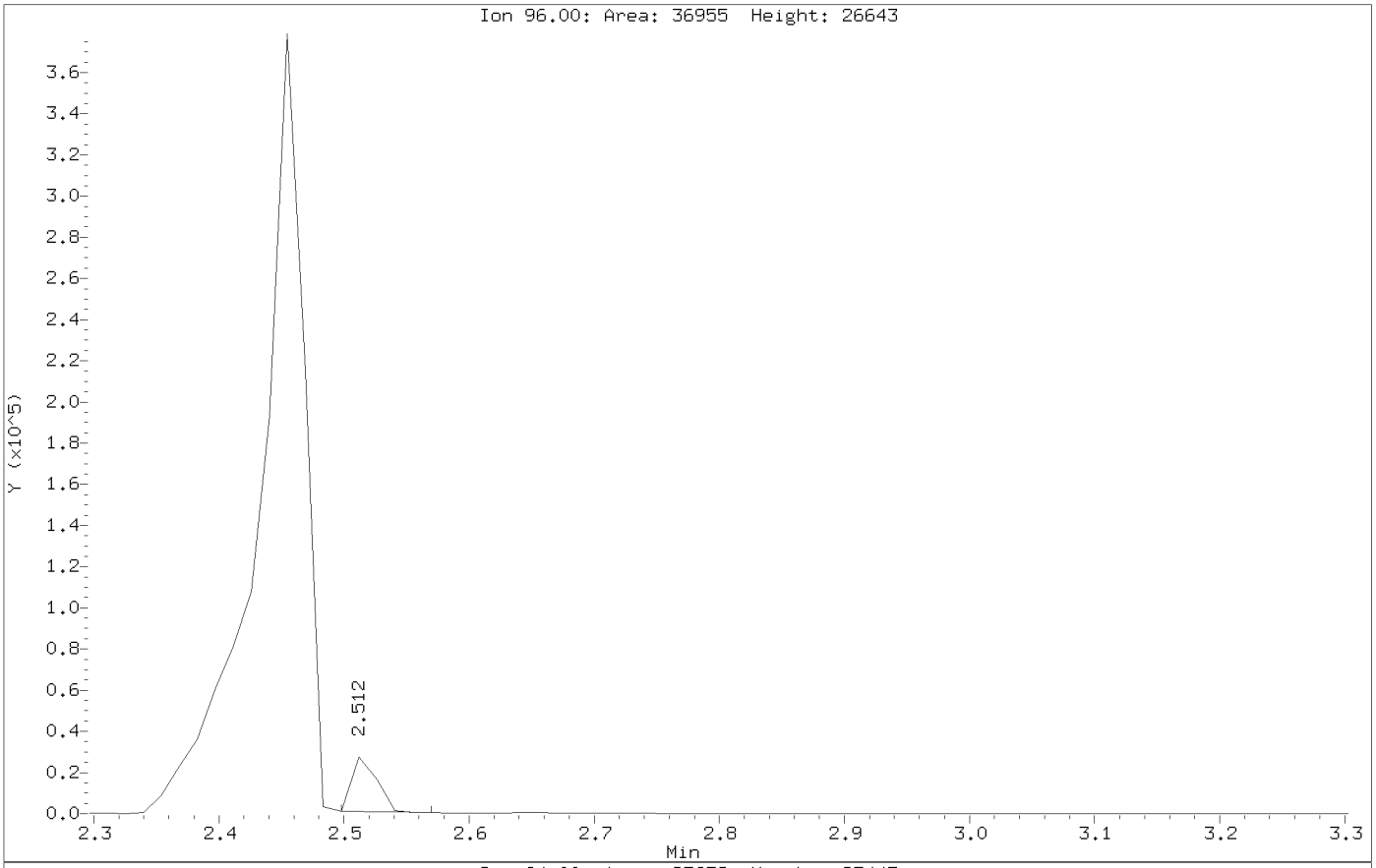


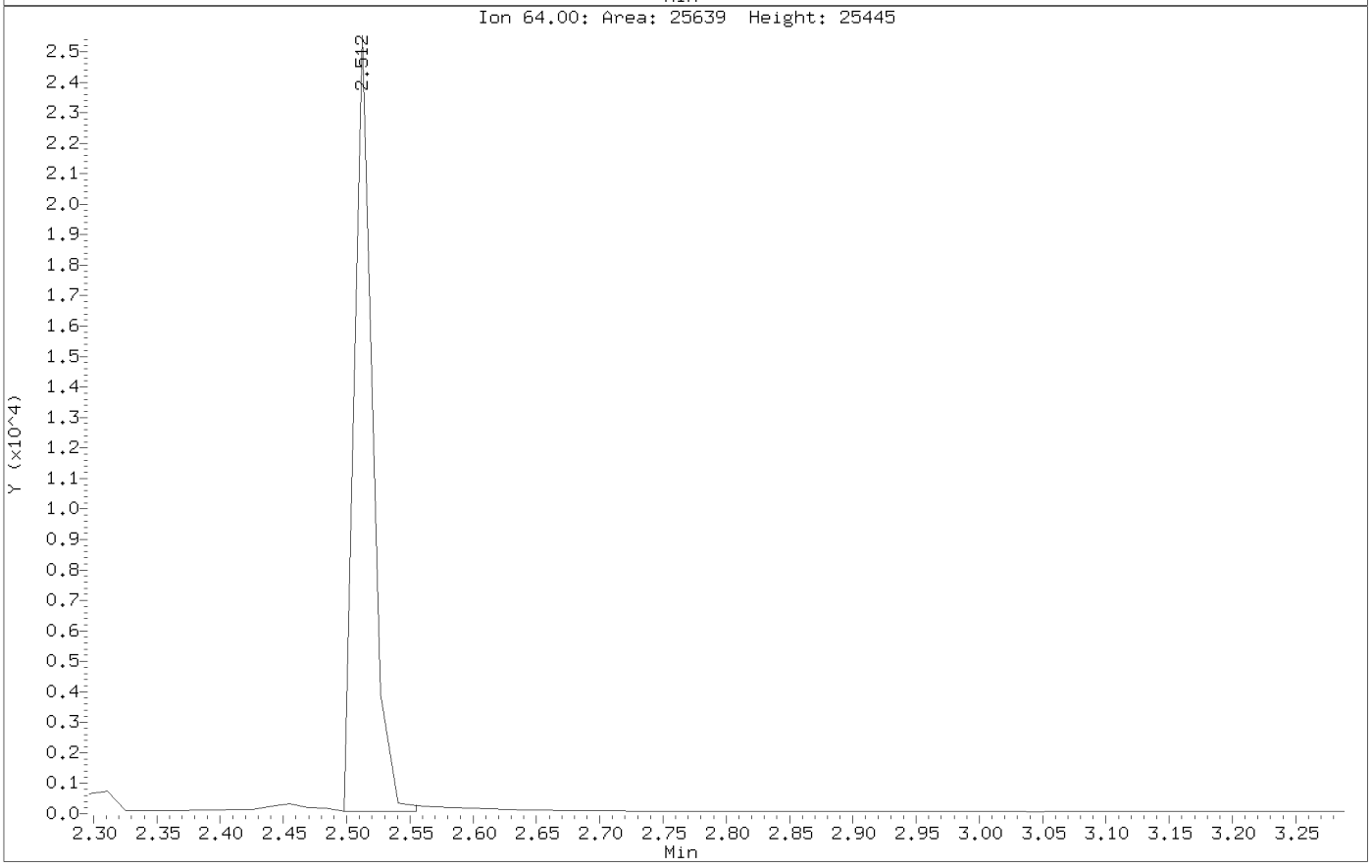


Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4590.D
Injection Date: 07-APR-2015 13:38
Instrument: gcms-g.i
Client Sample ID: RE108D2-GW-032715

AFTER MANUAL INTEGRATION

Compound: 1,4-Dioxane-D8
CAS Number: 17647-74-4





Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-G
Lab File IDs : G4255.D G4256.D G4254.D G4257.D G4258.D G4259.D **Column ID:**
Calibration Date(s): 18-FEB-15 10:22
18-FEB-15 12:41

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Crv					Max	
	0.250000(	0.500000(	1.0000	3.0000	7.0000	10.0000	New	b	m1	m2	%RSD	%RSD	
1,4-Dioxane	0.40647	0.40324	0.37575	0.45230	0.41500	0.40927	AVG		0.41034		6.01421	15.00000	O
1,4-Dioxane-D8	0.36582	0.30639	0.39407	0.37489	0.39220	0.31468	AVG		0.35801		10.71395	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4260.D
Report Date: 19-Feb-2015 08:11

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: WG158285-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: shawINDaq.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-g.i\G021815.b\gdioxn52.m
Misc Info: WG158285,WG158285,WG158285-4,SI0891-1

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 1,4-Dioxane	2.00	2.19	109.64	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 2 1,4-Dioxane-D8	4.00	0.000	*	30-150

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4254.D
Report Date: 19-Feb-2015 08:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G021815.b\G4254.D
Lab Smp Id: WG158285-4
Inj Date : 18-FEB-2015 10:22
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG158285-4
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G021815.b\gdioxn52.m
Meth Date : 18-Feb-2015 13:05 gcms-g.i Quant Type: ISTD
Cal Date : 23-DEC-2014 12:50 Cal File: G3945.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

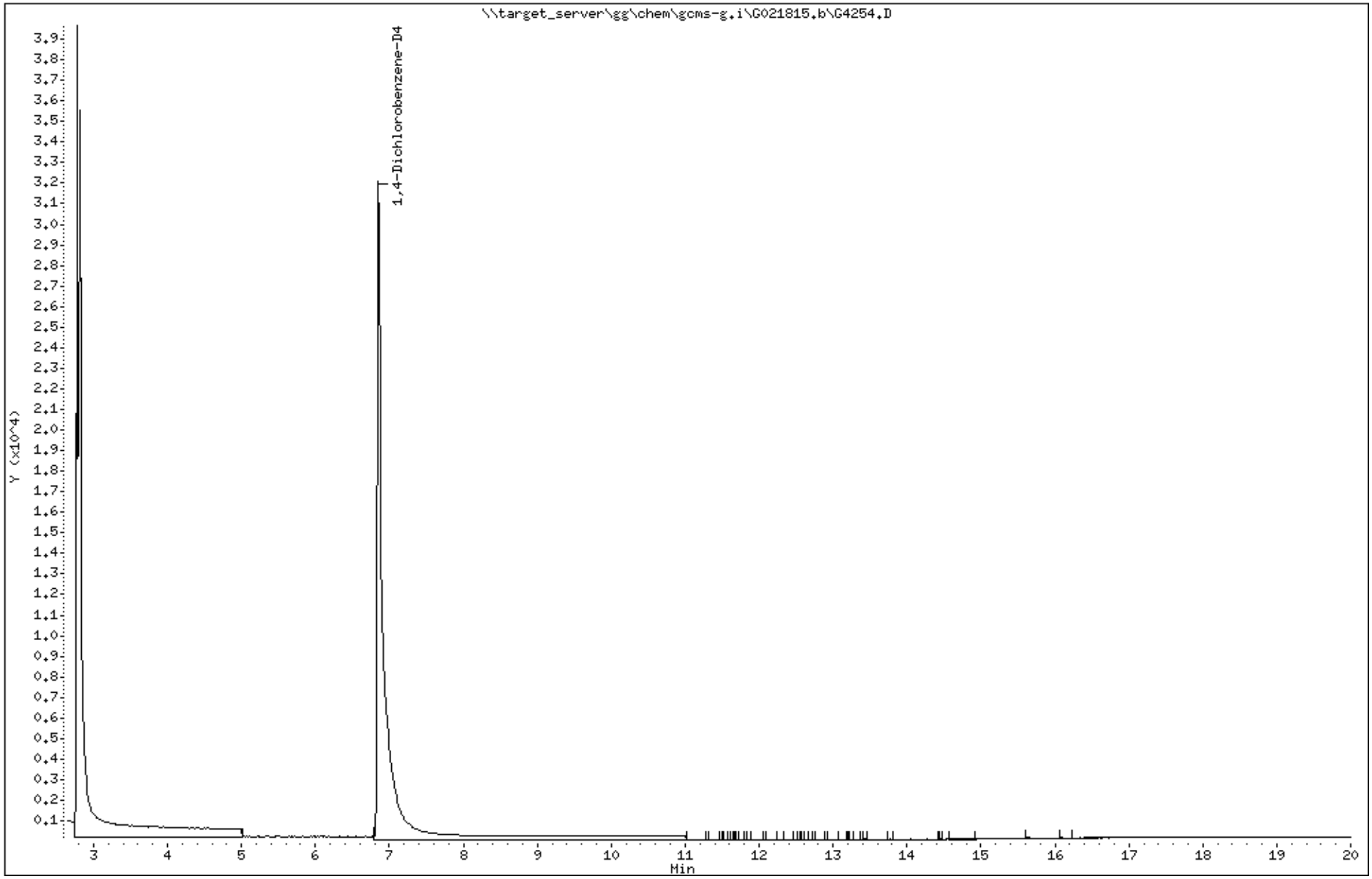
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	88	2.813	2.769	(0.411)	40109	1.00000	0.916	
$ 2 1,4-Dioxane-D8	96	2.770	2.740	(0.405)	42064	1.00000	1.10(Q)	
* 3 1,4-Dichlorobenzene-D4	150	6.840	6.857	(1.000)	85395	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4254.D
Date : 18-FEB-2015 10:22
Client ID:
Sample Info: WG158285-4
Purge Volume: 1.0
Column phase: RTX5-MS

Instrument: gcms-g.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4255.D
Report Date: 19-Feb-2015 08:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G021815.b\G4255.D
Lab Smp Id: WG158285-2
Inj Date : 18-FEB-2015 10:49 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG158285-2
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G021815.b\gdioxn52.m
Meth Date : 18-Feb-2015 13:05 gcms-g.i Quant Type: ISTD
Cal Date : 18-FEB-2015 10:49 Cal File: G4255.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

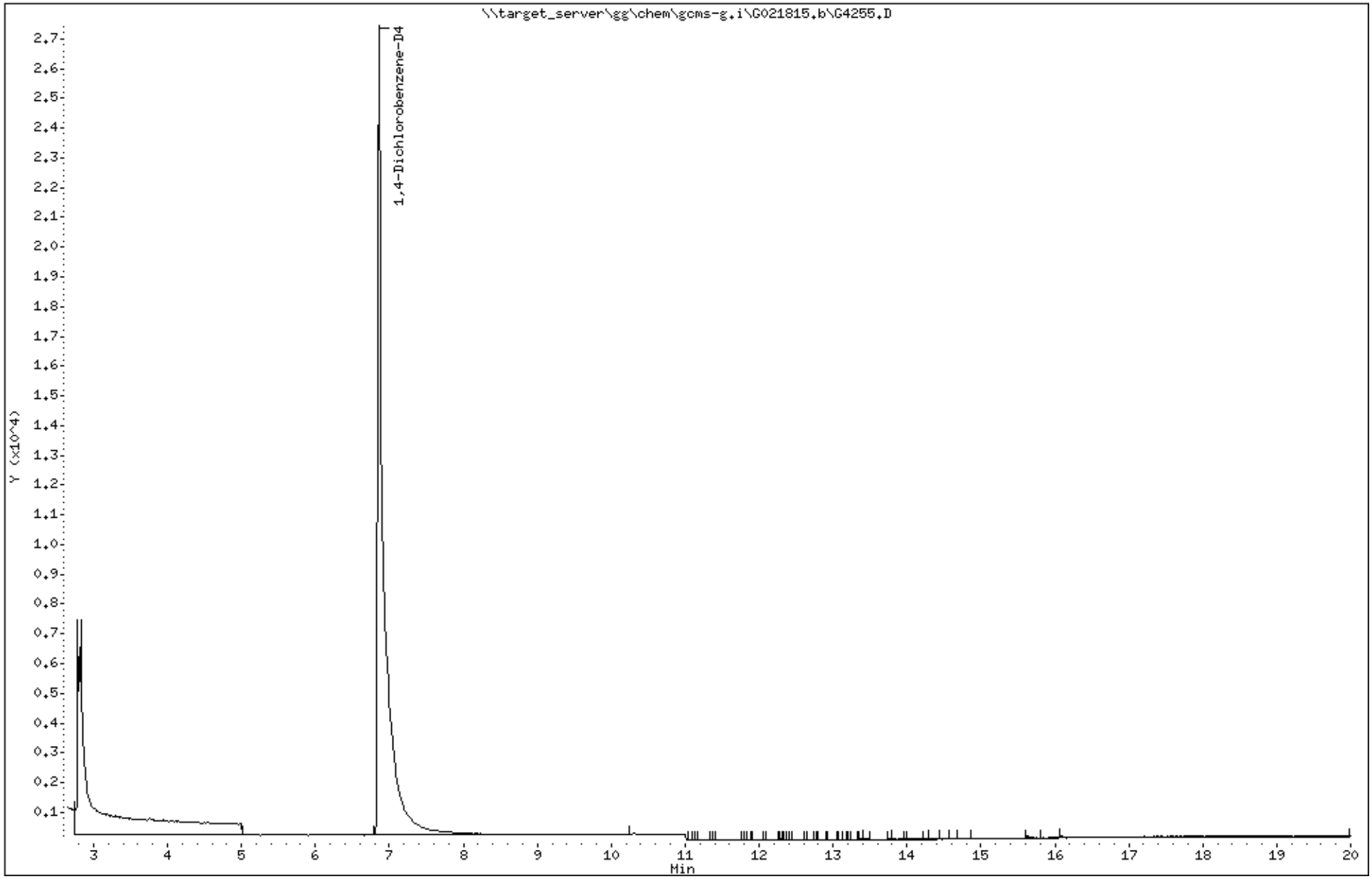
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	88	2.828	2.769	(0.412)	9908	0.25000	0.248(a)	
$ 2 1,4-Dioxane-D8	96	2.785	2.740	(0.406)	8917	0.25000	0.255	
* 3 1,4-Dichlorobenzene-D4	150	6.856	6.857	(1.000)	78002	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4255.D
Date : 18-FEB-2015 10:49
Client ID:
Sample Info: WG158285-2
Purge Volume: 1.0
Column phase: RTX5-MS

Instrument: gcms-g.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4256.D
Report Date: 19-Feb-2015 08:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G021815.b\G4256.D
Lab Smp Id: WG158285-3
Inj Date : 18-FEB-2015 11:17 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG158285-3
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G021815.b\gdioxn52.m
Meth Date : 18-Feb-2015 13:05 gcms-g.i Quant Type: ISTD
Cal Date : 18-FEB-2015 11:17 Cal File: G4256.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

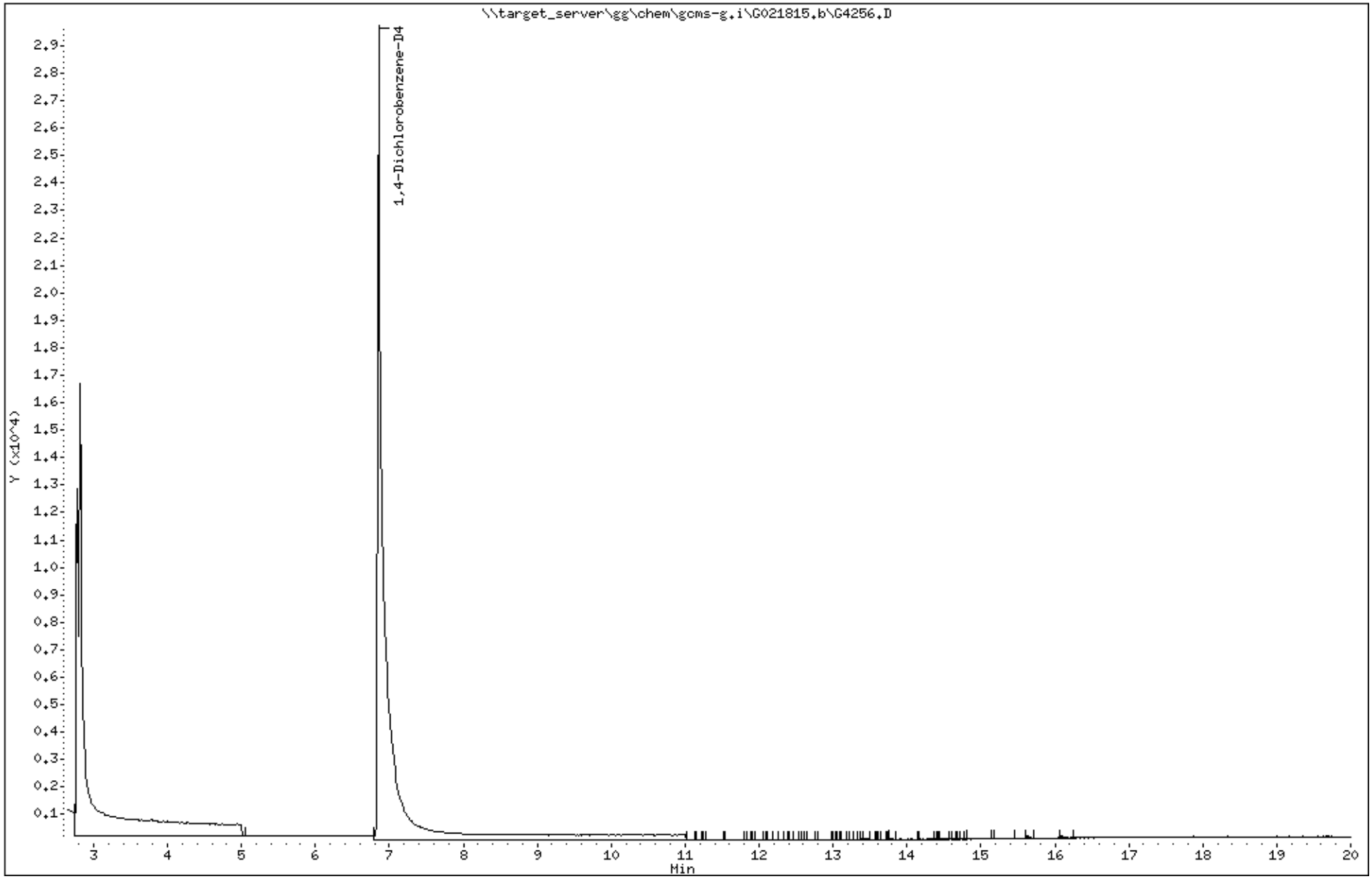
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	88	2.812	2.769	(0.410)	20573	0.50000	0.491	
$ 2 1,4-Dioxane-D8	96	2.784	2.740	(0.406)	15632	0.50000	0.428(Q)	
* 3 1,4-Dichlorobenzene-D4	150	6.855	6.857	(1.000)	81631	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4256.D
Date : 18-FEB-2015 11:17
Client ID:
Sample Info: WG158285-3
Purge Volume: 1.0
Column phase: RTX5-MS

Instrument: gcms-g.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4257.D
Report Date: 19-Feb-2015 08:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G021815.b\G4257.D
Lab Smp Id: WG158285-5
Inj Date : 18-FEB-2015 11:45 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG158285-5
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G021815.b\gdioxn52.m
Meth Date : 18-Feb-2015 13:05 gcms-g.i Quant Type: ISTD
Cal Date : 18-FEB-2015 11:45 Cal File: G4257.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

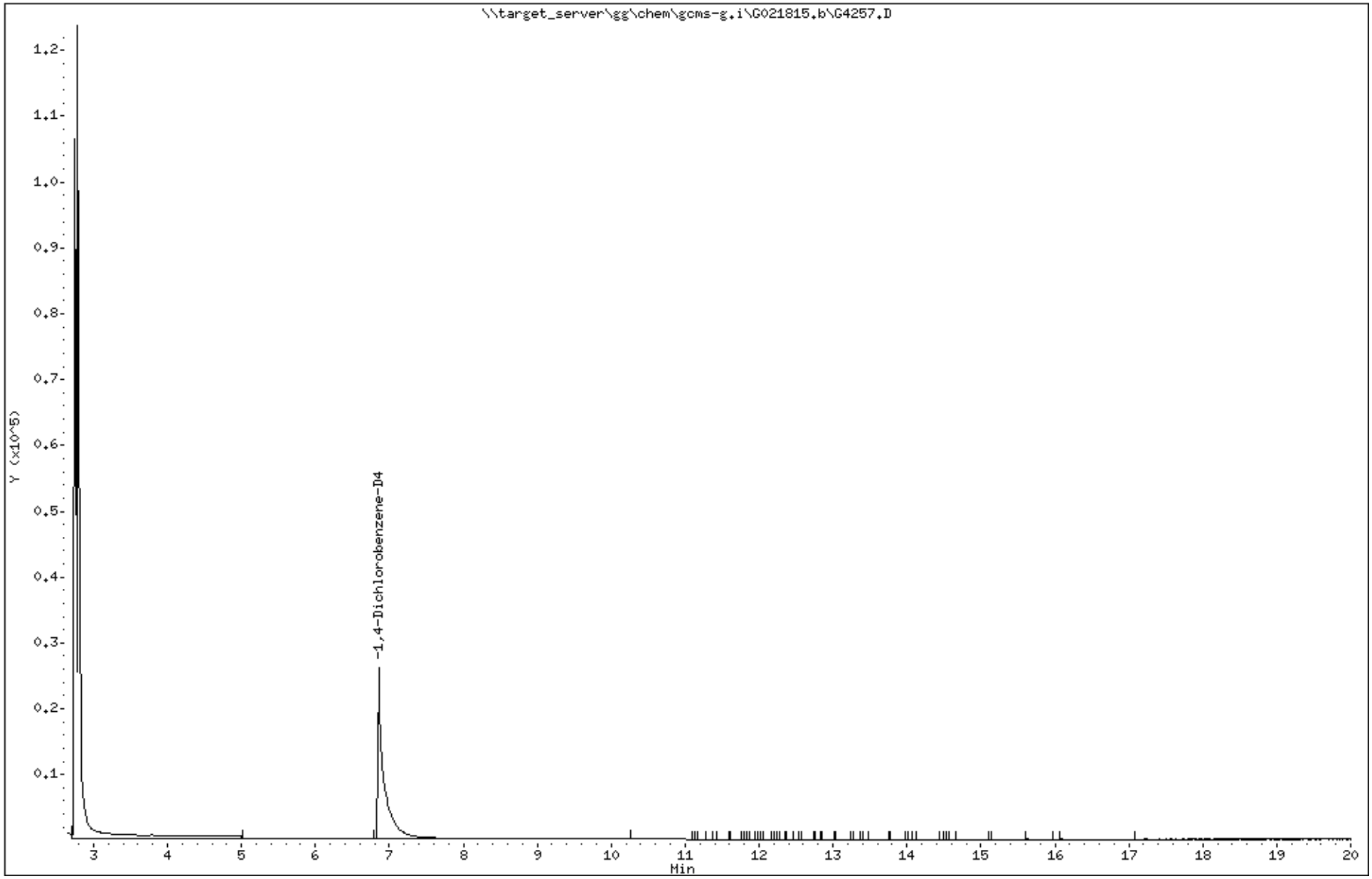
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	88	2.785	2.769	(0.406)	128240	3.00000	3.31	
$ 2 1,4-Dioxane-D8	96	2.757	2.740	(0.402)	106293	3.00000	3.14	
* 3 1,4-Dichlorobenzene-D4	150	6.855	6.857	(1.000)	75608	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4257.D
Date : 18-FEB-2015 11:45
Client ID:
Sample Info: WG158285-5
Purge Volume: 1.0
Column phase: RTX5-MS

Instrument: gcms-g.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4258.D
Report Date: 19-Feb-2015 08:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G021815.b\G4258.D
Lab Smp Id: WG158285-6
Inj Date : 18-FEB-2015 12:13 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG158285-6
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G021815.b\gdioxn52.m
Meth Date : 18-Feb-2015 13:05 gcms-g.i Quant Type: ISTD
Cal Date : 18-FEB-2015 12:13 Cal File: G4258.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

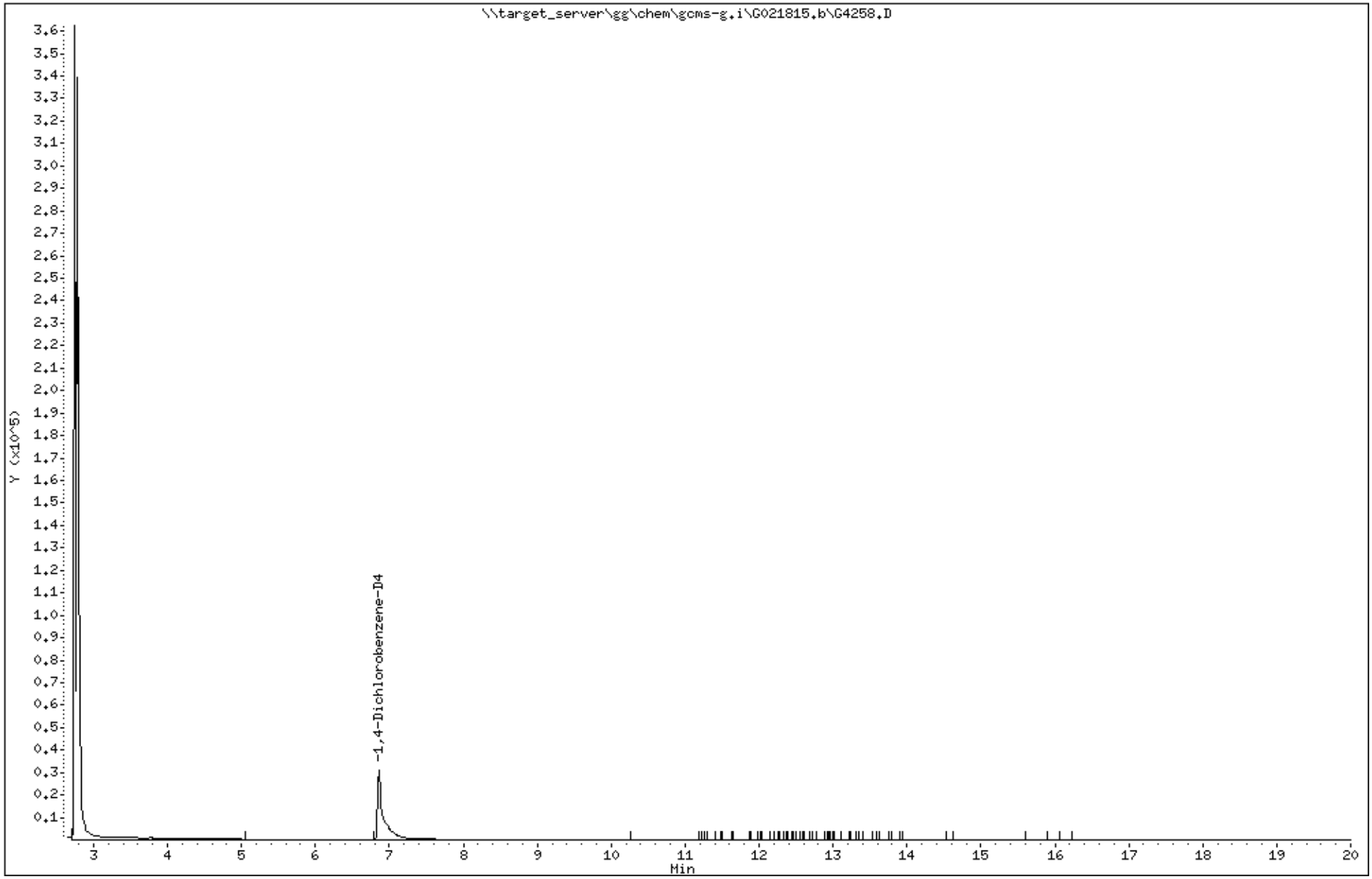
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	88	2.783	2.769	(0.406)	315556	7.00000	7.08	
$ 2 1,4-Dioxane-D8	96	2.740	2.740	(0.400)	298218	7.00000	7.67	
* 3 1,4-Dichlorobenzene-D4	150	6.856	6.857	(1.000)	86900	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4258.D
Date : 18-FEB-2015 12:13
Client ID:
Sample Info: WG158285-6
Purge Volume: 1.0
Column phase: RTX5-MS

Instrument: gcms-g.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4259.D
Report Date: 19-Feb-2015 08:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G021815.b\G4259.D
Lab Smp Id: WG158285-7
Inj Date : 18-FEB-2015 12:41 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG158285-7
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G021815.b\gdioxn52.m
Meth Date : 18-Feb-2015 13:05 gcms-g.i Quant Type: ISTD
Cal Date : 18-FEB-2015 12:41 Cal File: G4259.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

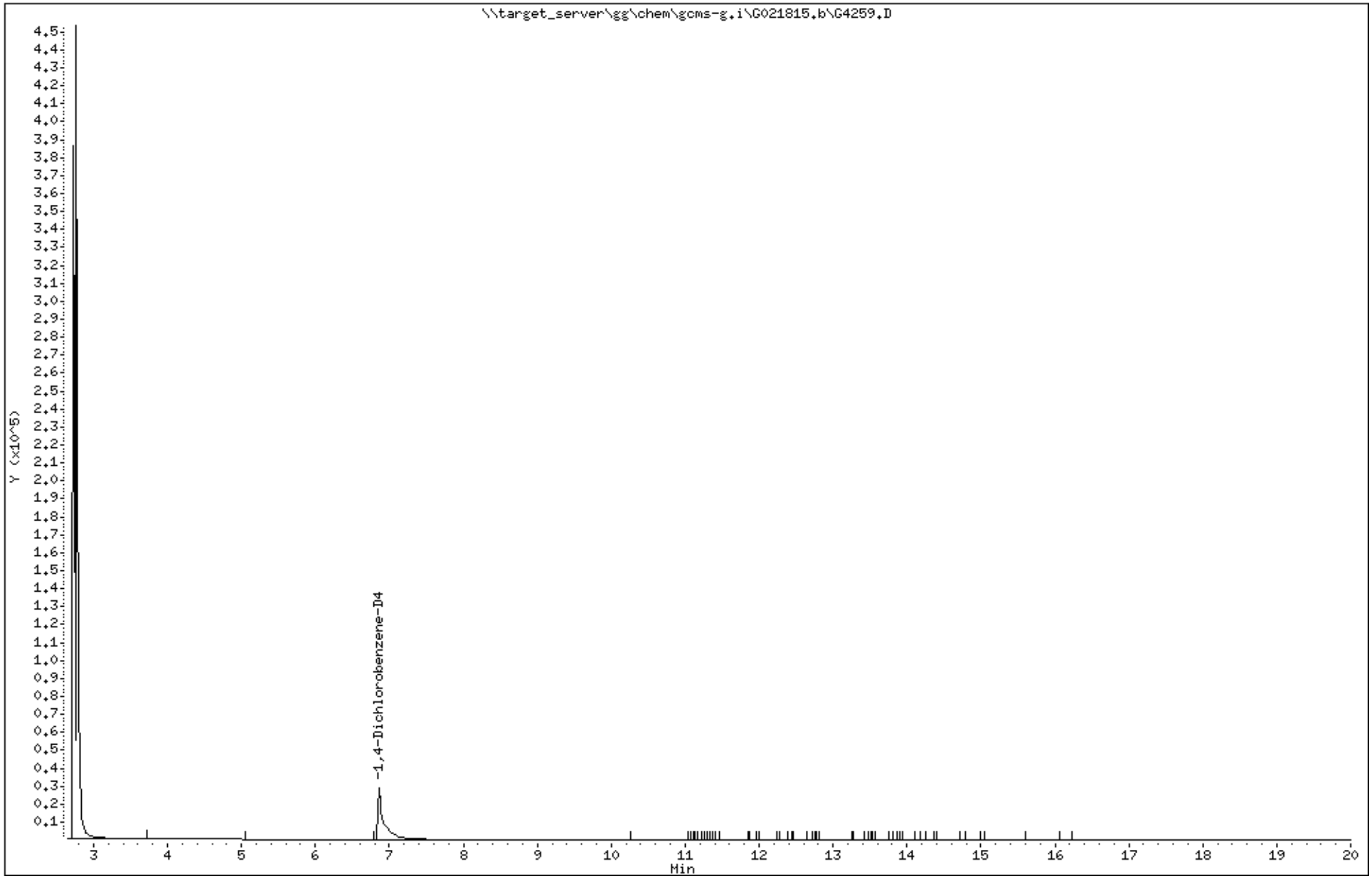
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	88	2.769	2.769	(0.404)	418778	10.0000	9.97	
$ 2 1,4-Dioxane-D8	96	2.740	2.740	(0.400)	321996	10.0000	8.79(Q)	
* 3 1,4-Dichlorobenzene-D4	150	6.857	6.857	(1.000)	81859	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4259.D
Date : 18-FEB-2015 12:41
Client ID:
Sample Info: WG158285-7
Purge Volume: 1.0
Column phase: RTX5-MS

Instrument: gcms-g.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4260.D
Report Date: 19-Feb-2015 08:11

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G021815.b\G4260.D
Lab Smp Id: WG158285-8
Inj Date : 18-FEB-2015 14:39 MS Autotune Date: 20-DEC-2013 16:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG158285-8,SI0891
Misc Info : WG158285,WG158285,WG158285-4,SI0891-1
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G021815.b\gdioxn52.m
Meth Date : 18-Feb-2015 13:05 gcms-g.i Quant Type: ISTD
Cal Date : 18-FEB-2015 12:41 Cal File: G4259.D
Als bottle: 8 QC Sample: INDCHECK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: KATHADIN-50E985

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

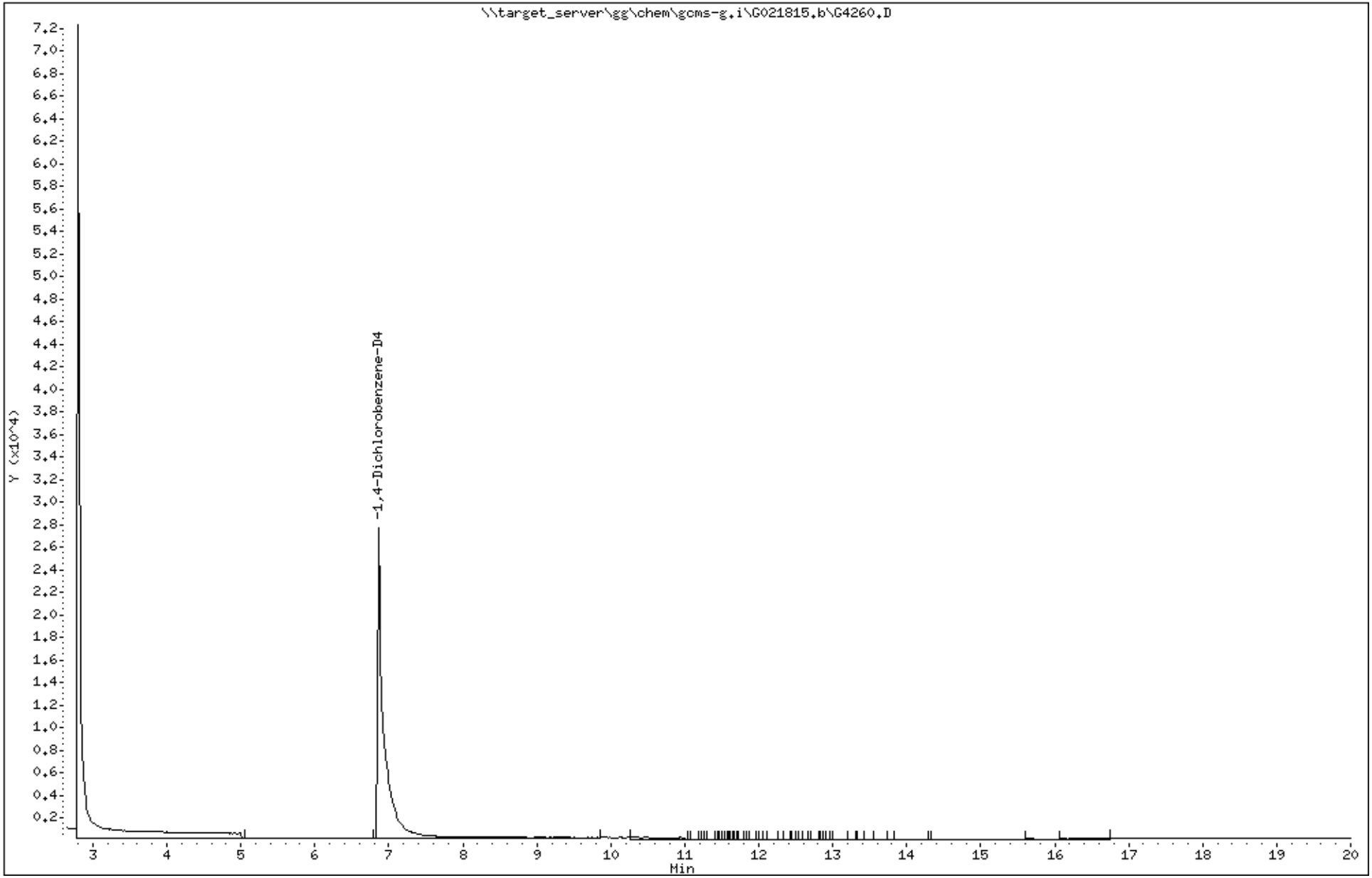
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
1 1,4-Dioxane	88	2.800	2.769	(0.408)	87728	2.19279	2.19	
* 3 1,4-Dichlorobenzene-D4	150	6.856	6.857	(1.000)	77999	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\G4260.D
Date : 18-FEB-2015 14:39
Client ID:
Sample Info: WG158285-8,SI0891
Purge Volume: 1.0
Column phase: RTX5-MS

Instrument: gcms-g.i
Operator: JCG
Column diameter: 0.25



0000394

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160772-2
Lab File ID : G4585.D
Initial Calibration Date(s): 02/18/15 10:22 02/18/15 12:41

SDG: SI2008
Analytical Date: 04/07/15 11:21
Instrument ID: GCMS-G
Column ID:

	Compound	RRF/Amount	RF1	Min RRF	%D/ %Drift	Max %D/ %Drift	Curve Type
1	1,4-Dioxane	0.41034	0.46332	0.010	12.91105	20.00000	Averaged
2	1,4-Dioxane-D8	0.35801	0.31417	0.010	-12.24610	20.00000	Averaged

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4585.D
Report Date: 09-Apr-2015 13:05

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G040715.b\G4585.D
Lab Smp Id: WG160772-2
Inj Date : 07-APR-2015 11:21 MS Autotune Date: 20-DEC-2013 17:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG160772-2,SI2008
Misc Info : WG160772,WG160772,WG158285-4,SI2008-5
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G040715.b\GDIOXN52.m
Meth Date : 07-Apr-2015 11:45 cgomez Quant Type: ISTD
Cal Date : 18-FEB-2015 12:41 Cal File: G4259.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: KATHADIN-50E985

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

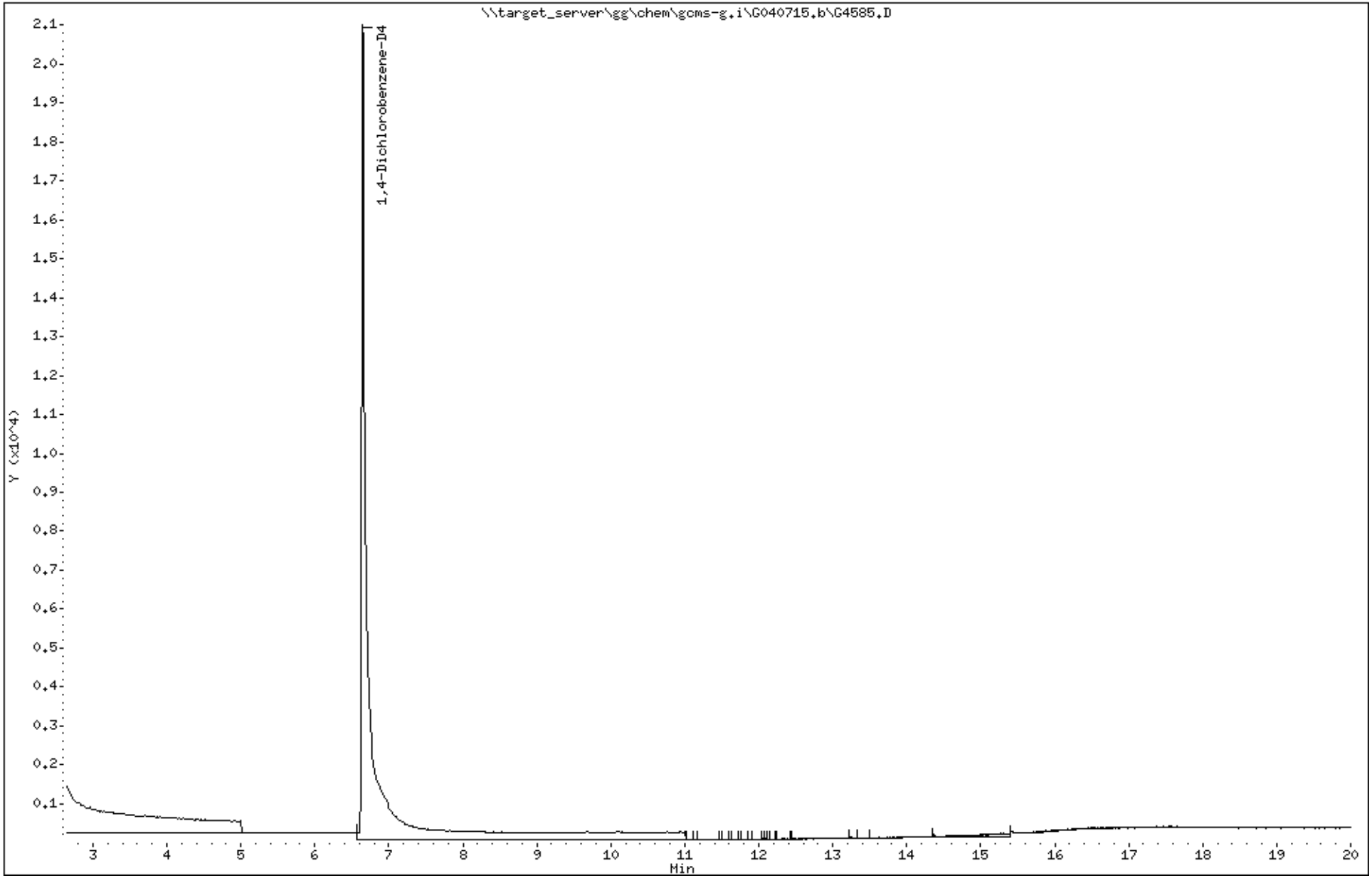
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	1 1,4-Dioxane	88	2.525	2.525	(0.381)	29321	1.00000	1.13	
$	2 1,4-Dioxane-D8	96	2.496	2.496	(0.376)	19882	1.00000	0.878	
*	3 1,4-Dichlorobenzene-D4	150	6.636	6.636	(1.000)	50628	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4585.D
Date : 07-APR-2015 11:21
Client ID:
Sample Info: WG160772-2,SI2008
Purge Volume: 1.0
Column phase: RTX5-MS

Instrument: gcms-g.i
Operator: JCG
Column diameter: 0.25



0000397

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\GD563.D

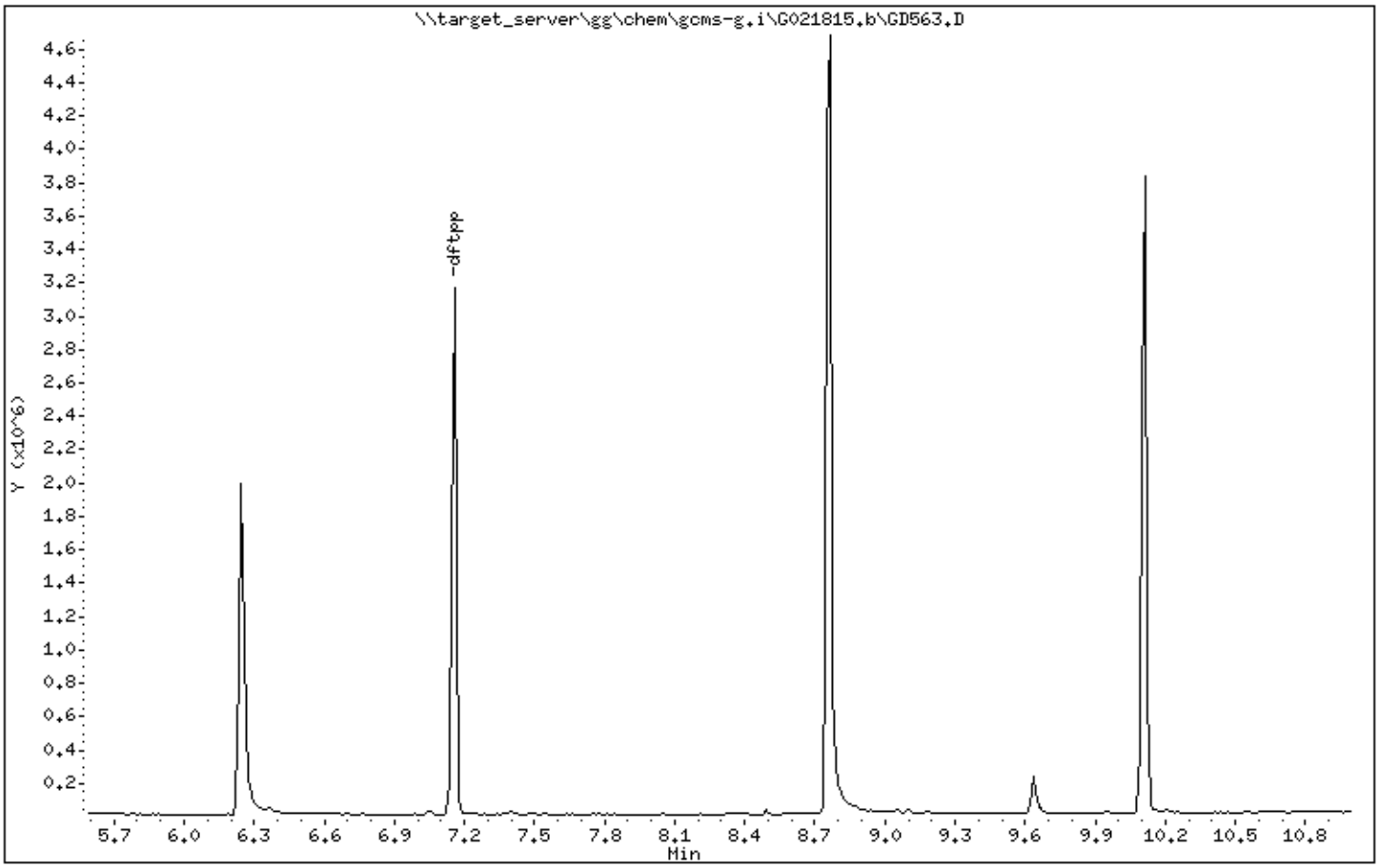
Date : 18-FEB-2015 10:04

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG158285-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\GD563.D

Date : 18-FEB-2015 10:04

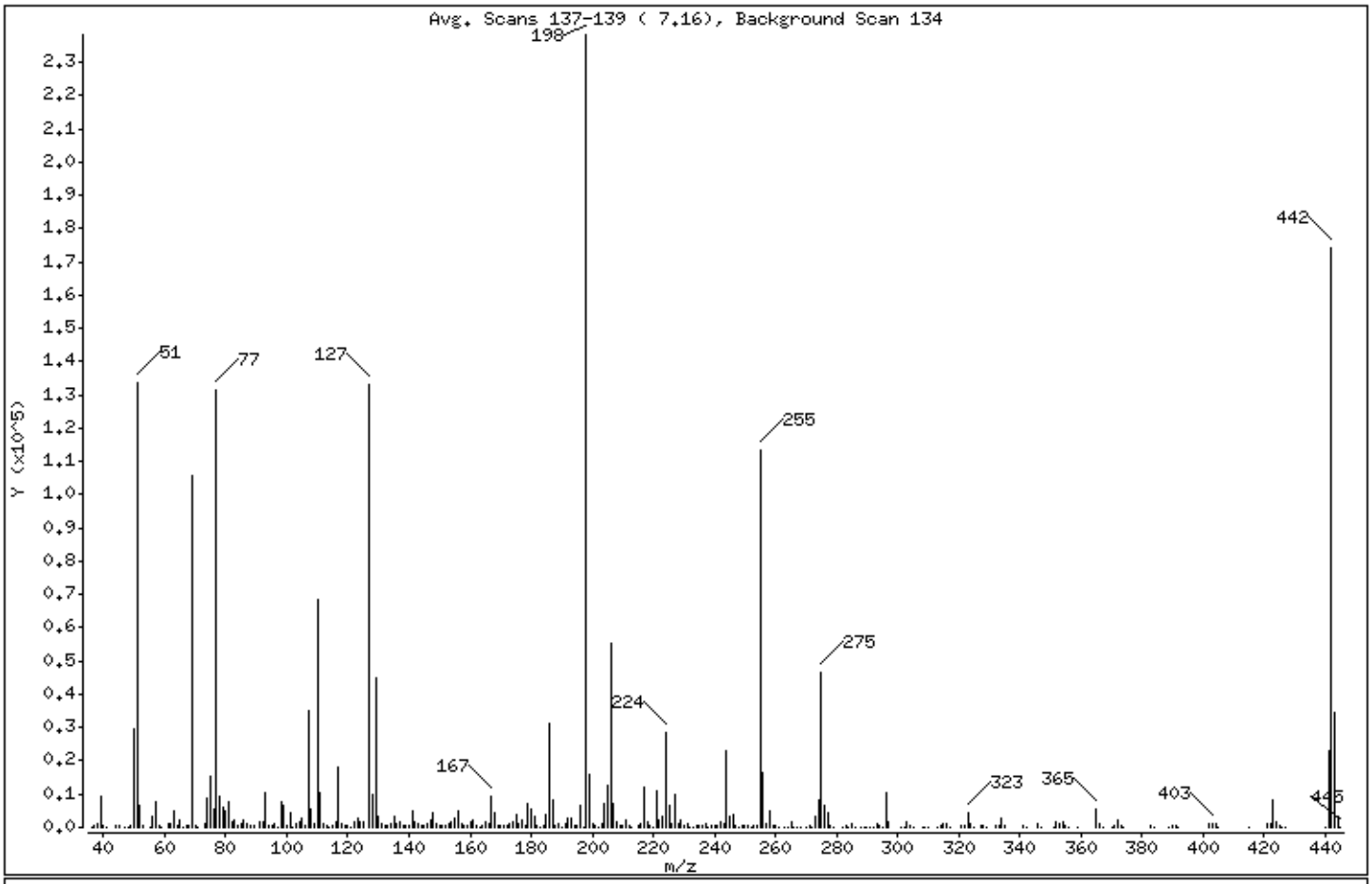
Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG158285-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	56.21
68	Less than 2.00% of mass 69	0.31 (0.71)
69	Less than 100.00% of mass 198	44.27
70	Less than 2.00% of mass 69	0.31 (0.69)
127	40.00 - 60.00% of mass 198	55.96
197	Less than 1.00% of mass 198	0.07
199	5.00 - 9.00% of mass 198	6.77
275	10.00 - 30.00% of mass 198	19.61
365	1.00 - 100.00% of mass 198	2.22
441	0.01 - 100.00% of mass 443	9.67 (66.41)
442	40.00 - 100.00% of mass 198	73.00
443	17.00 - 23.00% of mass 442	14.56 (19.94)

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\GD563.D

Date : 18-FEB-2015 10:04

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG158285-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD563.D
Spectrum: Avg. Scans 137-139 (7.16), Background Scan 134
Location of Maximum: 198.00
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	142	123.00	2938	204.00	7165	290.00	138
37.00	383	124.00	1410	205.00	12762	291.00	70
38.00	1316	125.00	1627	206.00	55536	292.00	212
39.00	9103	127.00	133312	207.00	7286	293.00	1010
40.00	399	128.00	10093	208.00	1771	294.00	315
41.00	16	129.00	44904	209.00	483	295.00	127
44.00	329	130.00	3550	210.00	322	296.00	10583
45.00	383	131.00	1102	211.00	2107	297.00	1888
47.00	102	132.00	423	212.00	283	301.00	76
48.00	79	133.00	300	213.00	109	302.00	198
49.00	650	134.00	1337	215.00	559	303.00	1553
50.00	29536	135.00	3374	216.00	913	304.00	475
51.00	133888	136.00	1258	217.00	11853	305.00	58
52.00	6615	137.00	1743	218.00	1447	308.00	190
53.00	447	138.00	406	219.00	289	309.00	52
55.00	161	139.00	351	220.00	65	310.00	146
56.00	3020	140.00	489	221.00	10882	313.00	140
57.00	7908	141.00	5113	222.00	2299	314.00	630
58.00	520	142.00	1843	223.00	3080	315.00	1320
59.00	151	143.00	1328	224.00	28296	316.00	986
61.00	1344	144.00	346	225.00	6821	317.00	159
62.00	1323	145.00	467	226.00	873	321.00	554
63.00	4817	146.00	835	227.00	10047	322.00	350
64.00	589	147.00	2257	228.00	1309	323.00	4214
65.00	2215	148.00	4308	229.00	2186	324.00	991
66.00	64	149.00	1098	230.00	319	325.00	192
67.00	339	150.00	421	231.00	875	327.00	762
68.00	750	151.00	624	232.00	251	328.00	498
69.00	105448	152.00	568	233.00	119	329.00	175
70.00	731	153.00	1361	234.00	616	332.00	341
71.00	136	154.00	1398	235.00	718	333.00	372
73.00	919	155.00	2926	236.00	651	334.00	2738
74.00	8783	156.00	4771	237.00	1038	335.00	761
75.00	15209	157.00	1201	238.00	116	341.00	453
76.00	5312	158.00	498	239.00	470	342.00	272

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\GD563.D

Date : 18-FEB-2015 10:04

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG158285-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD563.D
Spectrum: Avg. Scans 137-139 (7.16), Background Scan 134
Location of Maximum: 198.00
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	131456	159.00	688	240.00	473	346.00	826
78.00	9307	160.00	1466	241.00	556	347.00	159
79.00	6052	161.00	2449	242.00	1592	351.00	82
80.00	4854	162.00	640	243.00	1275	352.00	1449
81.00	7444	163.00	58	244.00	22856	353.00	823
82.00	1861	164.00	427	245.00	3300	354.00	1671
83.00	2127	165.00	1757	246.00	3615	355.00	368
84.00	364	166.00	1246	247.00	523	356.00	53
85.00	1100	167.00	9546	248.00	254	359.00	198
86.00	2092	168.00	4225	249.00	794	365.00	5285
87.00	1142	169.00	758	250.00	287	366.00	906
88.00	493	170.00	467	251.00	425	367.00	70
89.00	310	171.00	567	252.00	115	370.00	212
91.00	1488	172.00	815	253.00	392	371.00	440
92.00	1600	173.00	1066	254.00	279	372.00	2287
93.00	10671	174.00	1724	255.00	113608	373.00	816
94.00	532	175.00	4055	256.00	16236	374.00	74
95.00	299	176.00	1337	257.00	1158	383.00	617
96.00	860	177.00	2096	258.00	5050	384.00	154
97.00	72	178.00	549	259.00	742	389.00	58
98.00	7683	179.00	6919	260.00	299	390.00	342
99.00	6691	180.00	5391	261.00	157	391.00	369
100.00	559	181.00	3246	263.00	74	392.00	65
101.00	4439	182.00	489	264.00	239	402.00	1269
102.00	216	183.00	234	265.00	1721	403.00	1284
103.00	899	184.00	644	266.00	59	404.00	865
104.00	1897	185.00	3644	267.00	51	405.00	61
105.00	2475	186.00	31168	268.00	207	415.00	221
106.00	287	187.00	8468	270.00	168	421.00	1157
107.00	35056	188.00	751	271.00	290	422.00	1044
108.00	5466	189.00	1328	272.00	266	423.00	8045
109.00	955	190.00	218	273.00	3262	424.00	1661
110.00	68376	191.00	971	274.00	8001	425.00	369
111.00	10278	192.00	2474	275.00	46720	426.00	58
112.00	1097	193.00	2764	276.00	6408	427.00	115

Data File: \\target_server\gg\chem\gcms-g.i\G021815.b\GD563.D

Date : 18-FEB-2015 10:04

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG158285-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD563.D
Spectrum: Avg. Scans 137-139 (7.16), Background Scan 134
Location of Maximum: 198.00
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	682	194.00	552	277.00	4285	440.00	60
114.00	225	195.00	377	278.00	697	441.00	23032
115.00	277	196.00	6528	279.00	221	442.00	173888
116.00	1572	197.00	178	282.00	76	443.00	34680
117.00	18168	198.00	238208	283.00	304	444.00	3021
118.00	1342	199.00	16132	284.00	247	445.00	205
119.00	312	200.00	943	285.00	1139		
120.00	512	201.00	812	286.00	74		
121.00	53	202.00	267	288.00	58		
122.00	1558	203.00	1310	289.00	144		

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\GD588.D

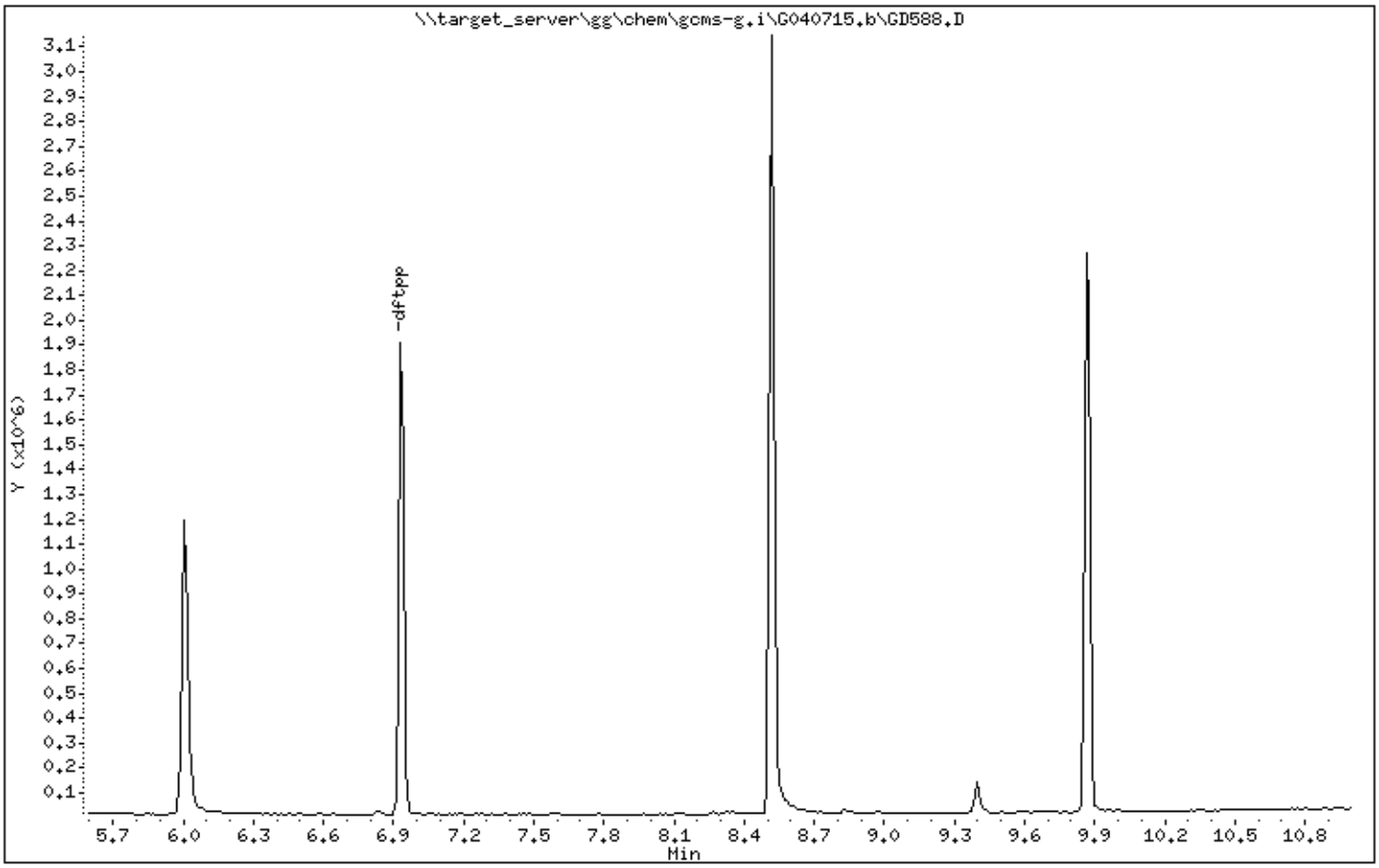
Date : 07-APR-2015 11:01

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG160772-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\GD588.D

Date : 07-APR-2015 11:01

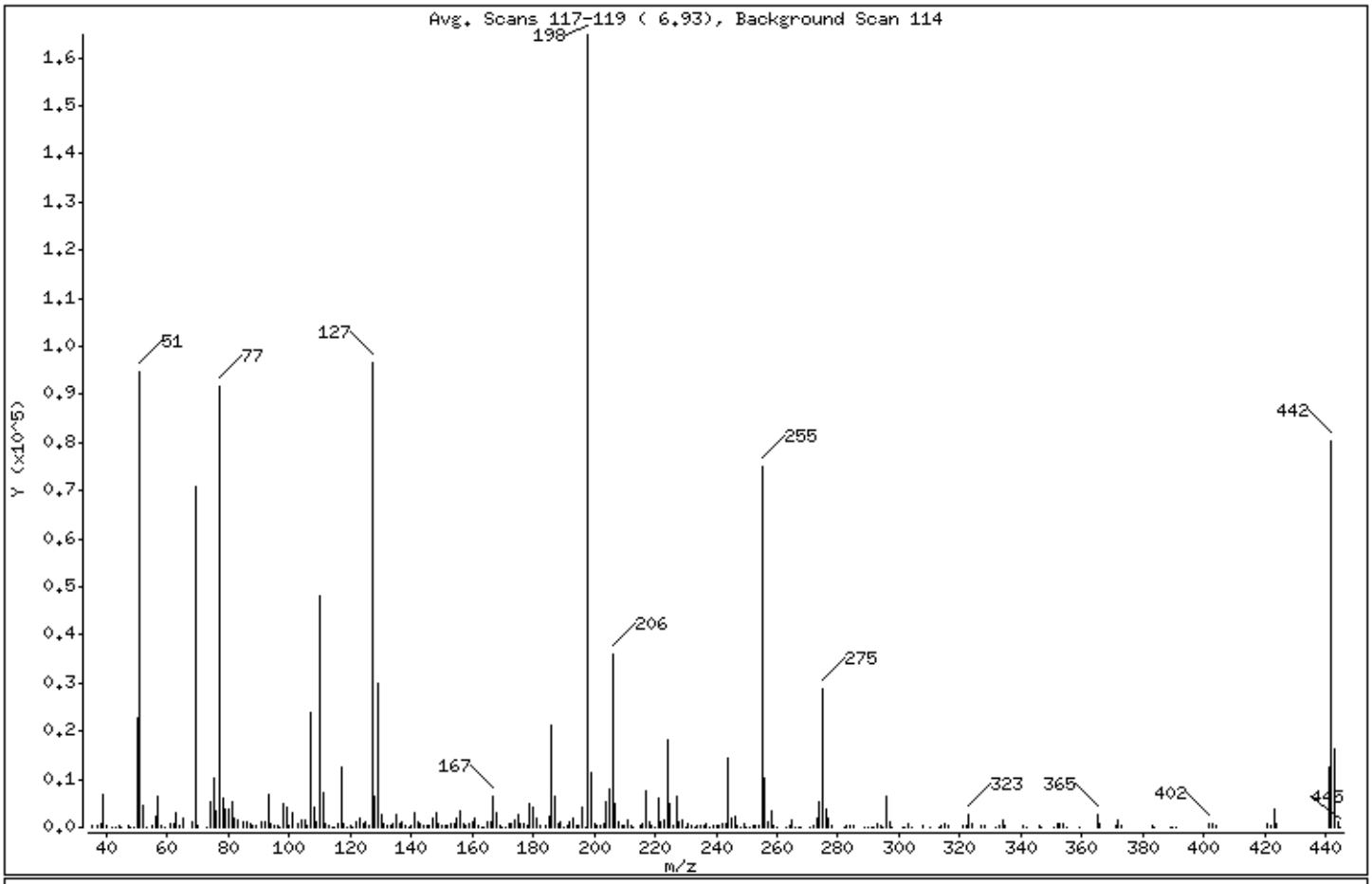
Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG160772-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	57.54
68	Less than 2.00% of mass 69	0.63 (1.46)
69	Less than 100.00% of mass 198	42.94
70	Less than 2.00% of mass 69	0.22 (0.51)
127	40.00 - 60.00% of mass 198	58.73
197	Less than 1.00% of mass 198	0.11
199	5.00 - 9.00% of mass 198	6.84
275	10.00 - 30.00% of mass 198	17.48
365	1.00 - 100.00% of mass 198	1.71
441	0.01 - 100.00% of mass 443	7.61 (76.54)
442	40.00 - 100.00% of mass 198	48.65
443	17.00 - 23.00% of mass 442	9.95 (20.45)

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\GD588.D

Date : 07-APR-2015 11:01

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG160772-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD588.D
Spectrum: Avg. Scans 117-119 (6.93), Background Scan 114
Location of Maximum: 198.00
Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	191	121.00	75	196.00	3984	275.00	28800
37.00	348	122.00	1133	197.00	182	276.00	3839
38.00	884	123.00	1892	198.00	164800	277.00	1938
39.00	6745	124.00	835	199.00	11270	278.00	460
40.00	404	125.00	1165	200.00	761	282.00	61
42.00	60	126.00	281	201.00	490	283.00	244
43.00	10	127.00	96784	202.00	457	284.00	287
44.00	194	128.00	6560	203.00	860	285.00	450
45.00	65	129.00	30048	204.00	5156	289.00	88
47.00	227	130.00	2549	205.00	8062	290.00	58
48.00	62	131.00	587	206.00	36048	291.00	73
49.00	16	132.00	314	207.00	4831	292.00	66
50.00	22816	133.00	207	208.00	1253	293.00	675
51.00	94824	134.00	834	209.00	249	294.00	275
52.00	4670	135.00	2464	210.00	537	295.00	125
53.00	179	136.00	883	211.00	1664	296.00	6410
55.00	491	137.00	1080	212.00	351	297.00	1022
56.00	2387	138.00	359	213.00	112	298.00	81
57.00	6532	139.00	154	215.00	335	301.00	139
58.00	331	140.00	340	216.00	644	302.00	71
59.00	74	141.00	3135	217.00	7616	303.00	742
61.00	684	142.00	1149	218.00	1068	304.00	146
62.00	907	143.00	790	219.00	197	308.00	196
63.00	2878	144.00	308	220.00	121	310.00	50
64.00	380	145.00	308	221.00	6187	313.00	85
65.00	1716	146.00	531	222.00	1298	314.00	416
68.00	1034	147.00	1826	223.00	1571	315.00	671
69.00	70768	148.00	3147	224.00	18280	316.00	466
70.00	358	149.00	787	225.00	5072	321.00	265
73.00	149	150.00	213	226.00	425	322.00	204
74.00	5459	151.00	522	227.00	6356	323.00	2756
75.00	10105	152.00	499	228.00	1112	324.00	647
76.00	3480	153.00	749	229.00	1577	327.00	412
77.00	91616	154.00	714	230.00	124	328.00	266
78.00	6081	155.00	1992	231.00	796	332.00	75

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\GD588.D

Date : 07-APR-2015 11:01

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG160772-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD588.D
Spectrum: Avg. Scans 117-119 (6.93), Background Scan 114
Location of Maximum: 198.00
Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	3973	156.00	3246	232.00	250	333.00	256
80.00	3625	157.00	675	233.00	174	334.00	1697
81.00	5268	158.00	534	234.00	261	335.00	328
82.00	1711	159.00	640	235.00	547	341.00	284
83.00	1617	160.00	1038	236.00	381	342.00	60
85.00	1024	161.00	1792	237.00	632	346.00	532
86.00	1043	162.00	517	238.00	76	347.00	77
87.00	643	163.00	147	239.00	211	351.00	52
88.00	360	164.00	182	240.00	200	352.00	716
89.00	218	165.00	983	241.00	494	353.00	765
91.00	1147	166.00	1196	242.00	840	354.00	868
92.00	1150	167.00	6309	243.00	761	355.00	120
93.00	6654	168.00	2950	244.00	14328	359.00	60
94.00	683	169.00	291	245.00	1838	365.00	2814
95.00	311	170.00	160	246.00	2185	366.00	643
96.00	563	171.00	171	247.00	394	371.00	288
97.00	62	172.00	609	248.00	115	372.00	1398
98.00	4783	173.00	702	249.00	619	373.00	295
99.00	4082	174.00	1327	250.00	168	383.00	417
100.00	501	175.00	2701	251.00	127	384.00	89
101.00	3157	176.00	802	252.00	260	389.00	68
103.00	859	177.00	946	253.00	346	390.00	137
104.00	1648	178.00	301	254.00	308	391.00	134
105.00	1417	179.00	4992	255.00	75192	402.00	660
106.00	526	180.00	3995	256.00	10314	403.00	596
107.00	23904	181.00	1987	257.00	956	404.00	458
108.00	4014	182.00	236	258.00	3393	421.00	767
109.00	1012	184.00	422	259.00	511	422.00	371
110.00	48128	185.00	2375	260.00	180	423.00	3903
111.00	7041	186.00	21160	263.00	121	424.00	933
112.00	767	187.00	6383	264.00	212	441.00	12546
113.00	314	188.00	597	265.00	1457	442.00	80168
114.00	70	189.00	1062	266.00	29	443.00	16392
115.00	157	190.00	164	267.00	63	444.00	1096
116.00	843	191.00	532	268.00	74	445.00	89

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\GD588.D

Date : 07-APR-2015 11:01

Client ID: DFTPP02 Instrument: gcms-g.i

Sample Info: WG160772-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: GD588.D
Spectrum: Avg. Scans 117-119 (6.93), Background Scan 114
Location of Maximum: 198.00
Number of points: 292

m/z	Y	m/z	Y	m/z	Y	m/z	Y
117.00	12349	192.00	1020	271.00	182		
118.00	945	193.00	1842	272.00	234		
119.00	114	194.00	534	273.00	2048		
120.00	335	195.00	492	274.00	5304		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160715-1
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: G4586.D

Sample Date:
Received Date:
Extract Date: 03-APR-15
Extracted By: HG
Extraction Method: SW846 3520
Lab Prep Batch: WG160715

Analysis Date: 07-APR-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,4-Dioxane	U	0.18	ug/L	1	.25	0.25	0.085	0.18
1,4-Dioxane-D8		82.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4586.D
Report Date: 09-Apr-2015 13:05

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G040715.b\G4586.D
Lab Smp Id: WG160715-1 Client Smp ID: WG160715-Blank
Inj Date : 07-APR-2015 11:49 MS Autotune Date: 20-DEC-2013 17:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG160715-1,SI2008
Misc Info : WG160772,WG160715,WG158285-4,SI2008-5
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G040715.b\GDIOXN52.m
Meth Date : 07-Apr-2015 11:45 cgomez Quant Type: ISTD
Cal Date : 18-FEB-2015 12:41 Cal File: G4259.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: KATHADIN-50E985

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

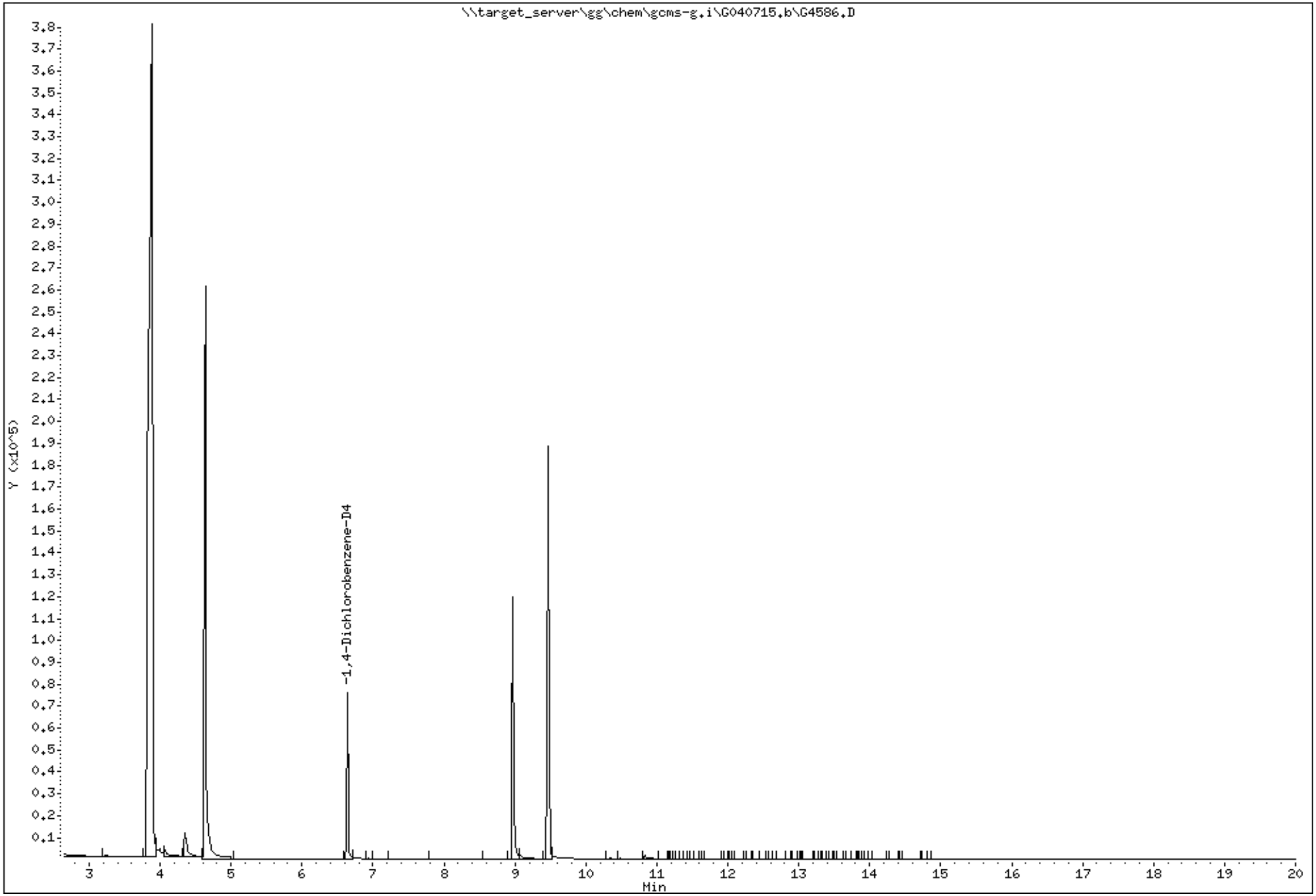
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 2 1,4-Dioxane-D8	96	2.512	2.496	(0.379)	39836	1.64813	1.65(Q)	
* 3 1,4-Dichlorobenzene-D4	150	6.635	6.636	(1.000)	54011	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4586.D
Date : 07-APR-2015 11:49
Client ID: WG160715-Blank
Instrument: gcms-g.i
Sample Info: WG160715-1,SI2008



0000411

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160715-2
LCSD ID: WG160715-3
Project:
SDG: SI2008
Report Date: 10-APR-15
LCS File ID: G4587.D

Received Date:
Extract Date: 03-APR-15
Extracted By: HG
Extraction Method: SW846 3520
Lab Prep Batch: WG160715
LCSD File ID: G4588.D

Analysis Date: 07-APR-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
1,4-Dioxane	0.200	0.144	72.0	0.144	72.0	ug/L	0	30	10-93
1,4-Dioxane-D8			85.0		67.0				30-150

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4587.D
Report Date: 09-Apr-2015 13:05

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G040715.b\G4587.D
Lab Smp Id: WG160715-2 Client Smp ID: WG160715-LCS
Inj Date : 07-APR-2015 12:16 MS Autotune Date: 20-DEC-2013 17:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG160715-2,SI2008
Misc Info : WG160772,WG160715,WG158285-4,SI2008-5
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G040715.b\GDIOXN52.m
Meth Date : 07-Apr-2015 11:45 cgomez Quant Type: ISTD
Cal Date : 18-FEB-2015 12:41 Cal File: G4259.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: KATHADIN-50E985

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

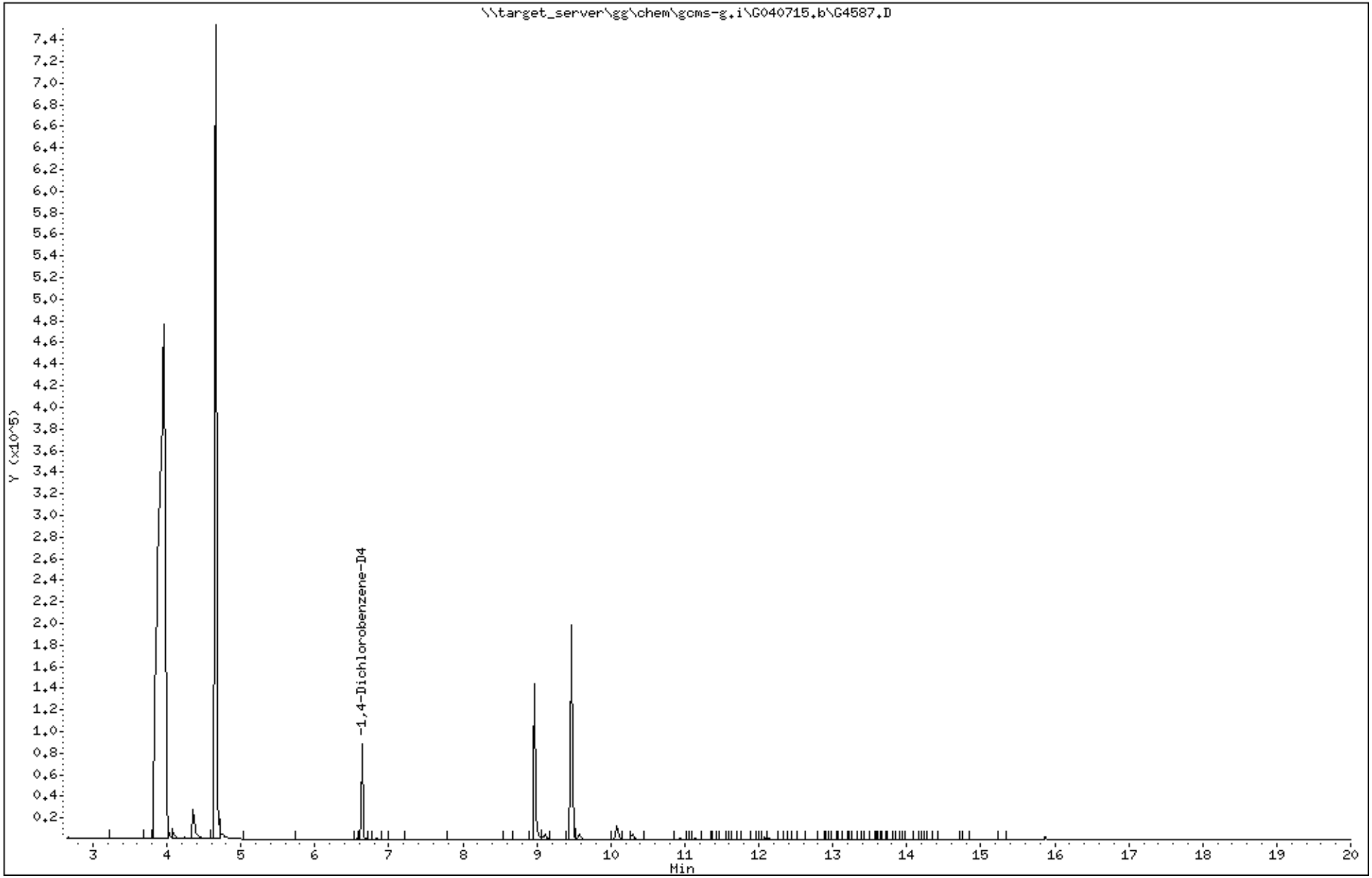
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
1 1,4-Dioxane	88	2.598	2.525	(0.392)	4284	0.14366	0.144(aQRM)	M6
$ 2 1,4-Dioxane-D8	96	2.540	2.496	(0.383)	44223	1.69978	1.70(Q)	
* 3 1,4-Dichlorobenzene-D4	150	6.635	6.636	(1.000)	58137	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

1:14 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4587.D
Date : 07-APR-2015 12:16
Client ID: WG160715-LCS
Instrument: gcms-g.i
Sample Info: WG160715-2,SI2008
Purge Volume: 1.0
Operator: JCG
Column phase: RTX5-MS
Column diameter: 0.25

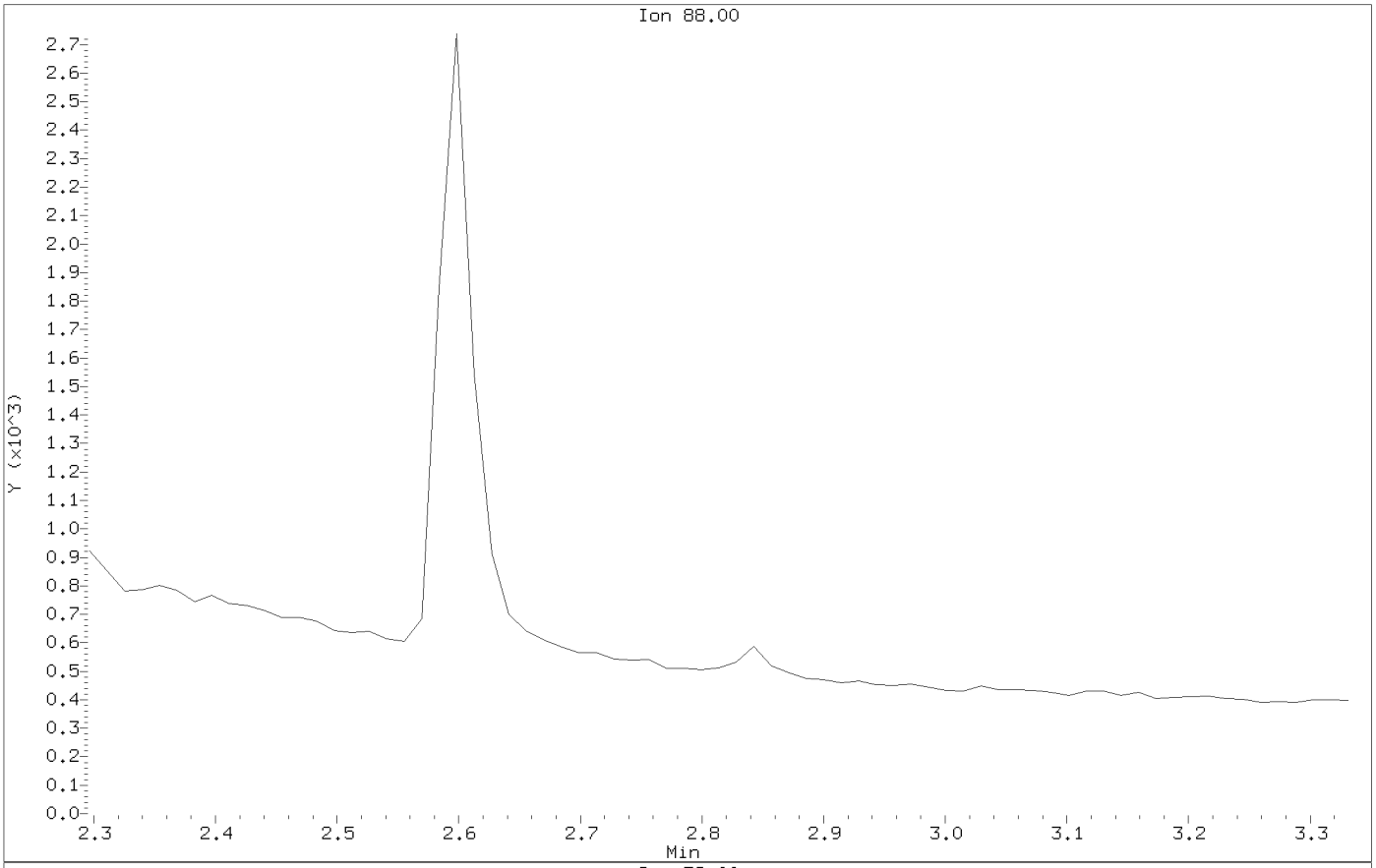


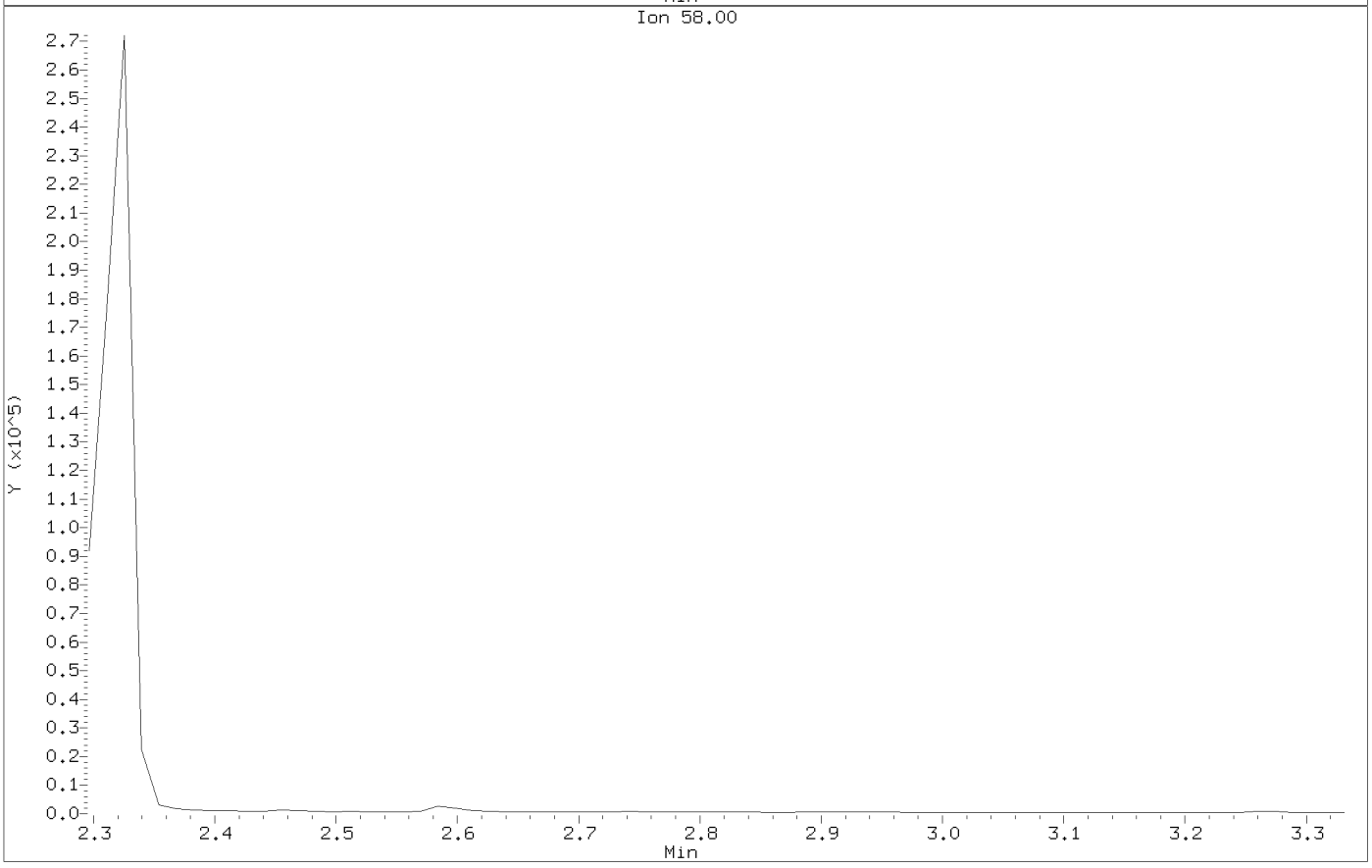
0000414

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4587.D
Injection Date: 07-APR-2015 12:16
Instrument: gcms-g.i
Client Sample ID: WG160715-LCS

Compound: 1,4-Dioxane
CAS Number: 123-91-1

BEFORE MANUAL INTEGRATION

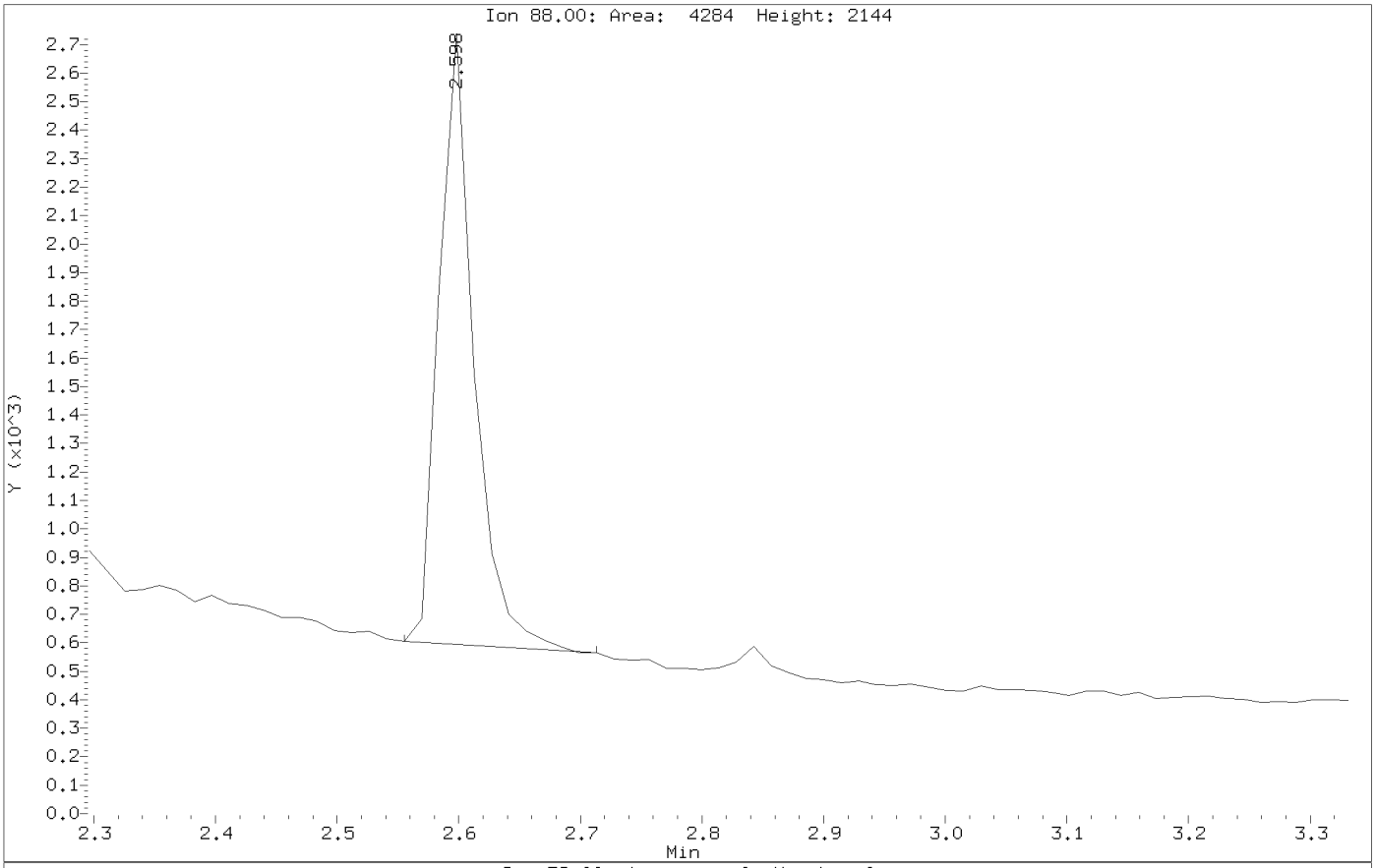


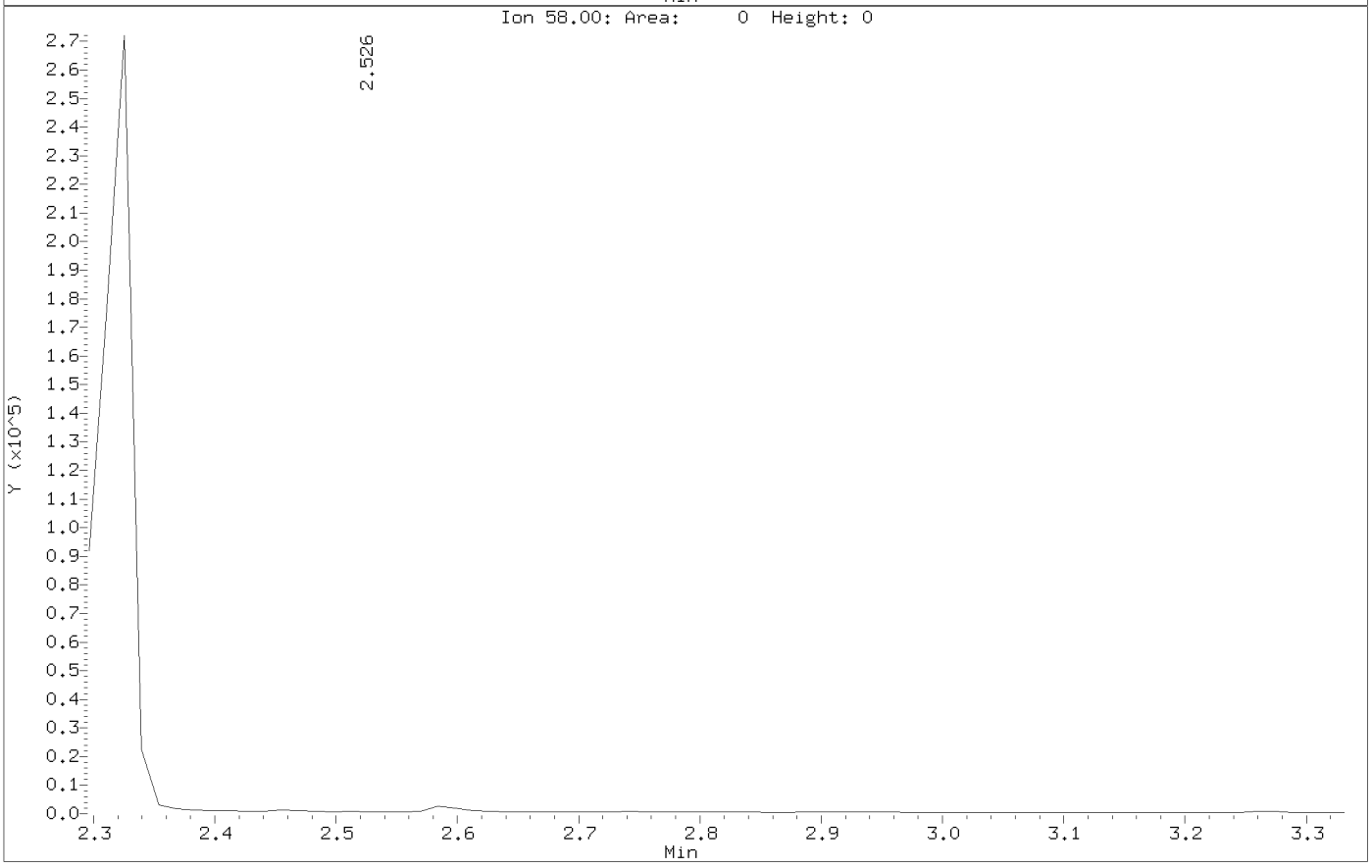


Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4587.D
Injection Date: 07-APR-2015 12:16
Instrument: gcms-g.i
Client Sample ID: WG160715-LCS

AFTER MANUAL INTEGRATION

Compound: 1,4-Dioxane
CAS Number: 123-91-1





Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4588.D
Report Date: 09-Apr-2015 13:05

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-g.i\G040715.b\G4588.D
Lab Smp Id: WG160715-3 Client Smp ID: WG160715-LCSD
Inj Date : 07-APR-2015 12:44 MS Autotune Date: 20-DEC-2013 17:08
Operator : JCG Inst ID: gcms-g.i
Smp Info : WG160715-3,SI2008
Misc Info : WG160772,WG160715,WG158285-4,SI2008-5
Comment :
Method : \\target_server\gg\chem\gcms-g.i\G040715.b\GDIOXN52.m
Meth Date : 07-Apr-2015 11:45 cgomez Quant Type: ISTD
Cal Date : 18-FEB-2015 12:41 Cal File: G4259.D
Als bottle: 5 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: KATHADIN-50E985

Concentration Formula: Amt * DF * (Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
1 1,4-Dioxane	88	2.583	2.525	(0.389)	4319	0.14404	0.144(aQRM)	M6
$ 2 1,4-Dioxane-D8	96	2.540	2.496	(0.383)	35069	1.34053	1.34	
* 3 1,4-Dichlorobenzene-D4	150	6.635	6.636	(1.000)	58458	0.80000	(a)	

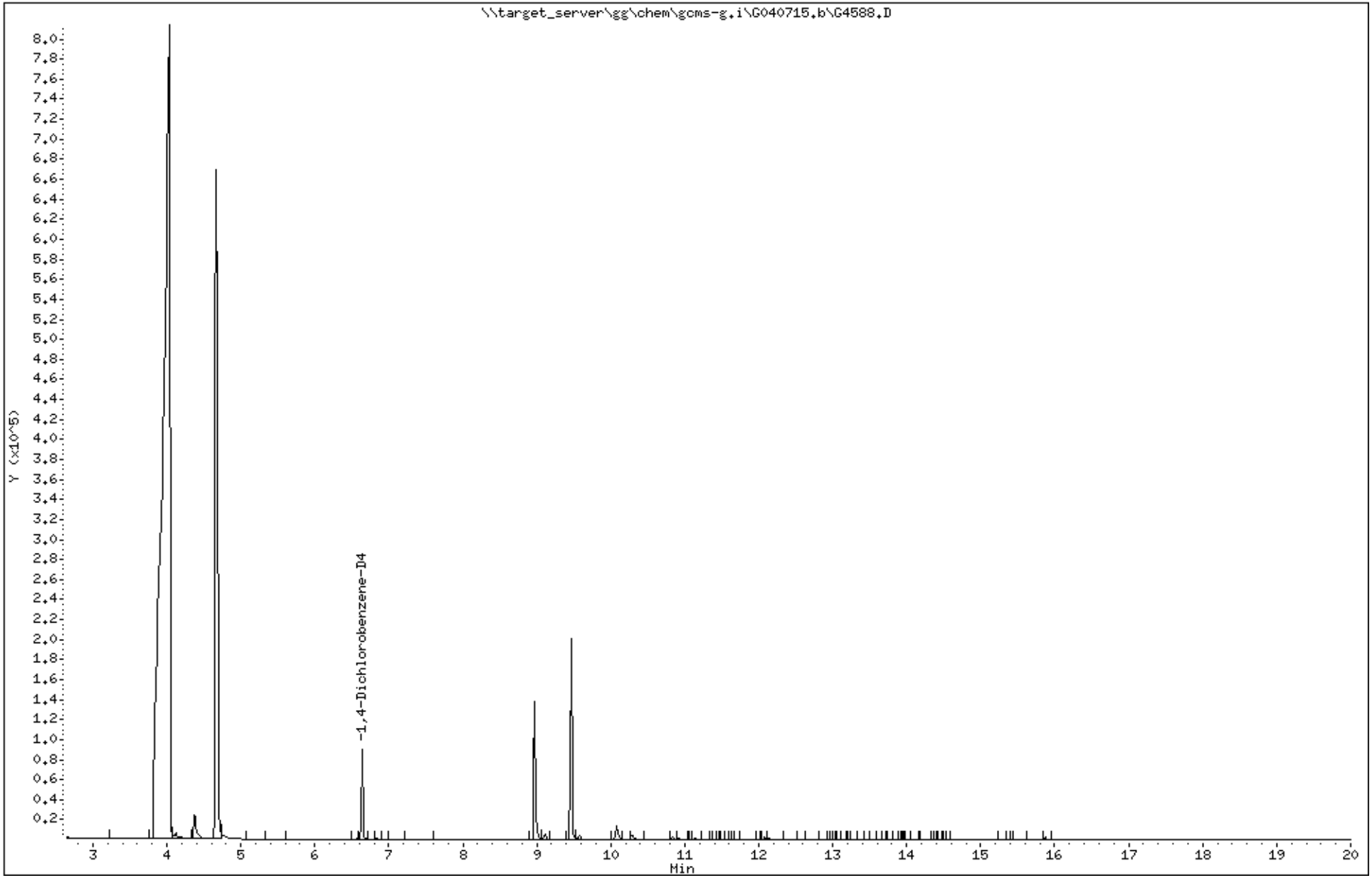
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

1:14 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4588.D
Date : 07-APR-2015 12:44
Client ID: WG160715-LCSD
Sample Info: WG160715-3,SI2008
Purge Volume: 1.0
Column phase: RTX5-MS

Instrument: gcms-g.i
Operator: JCG
Column diameter: 0.25

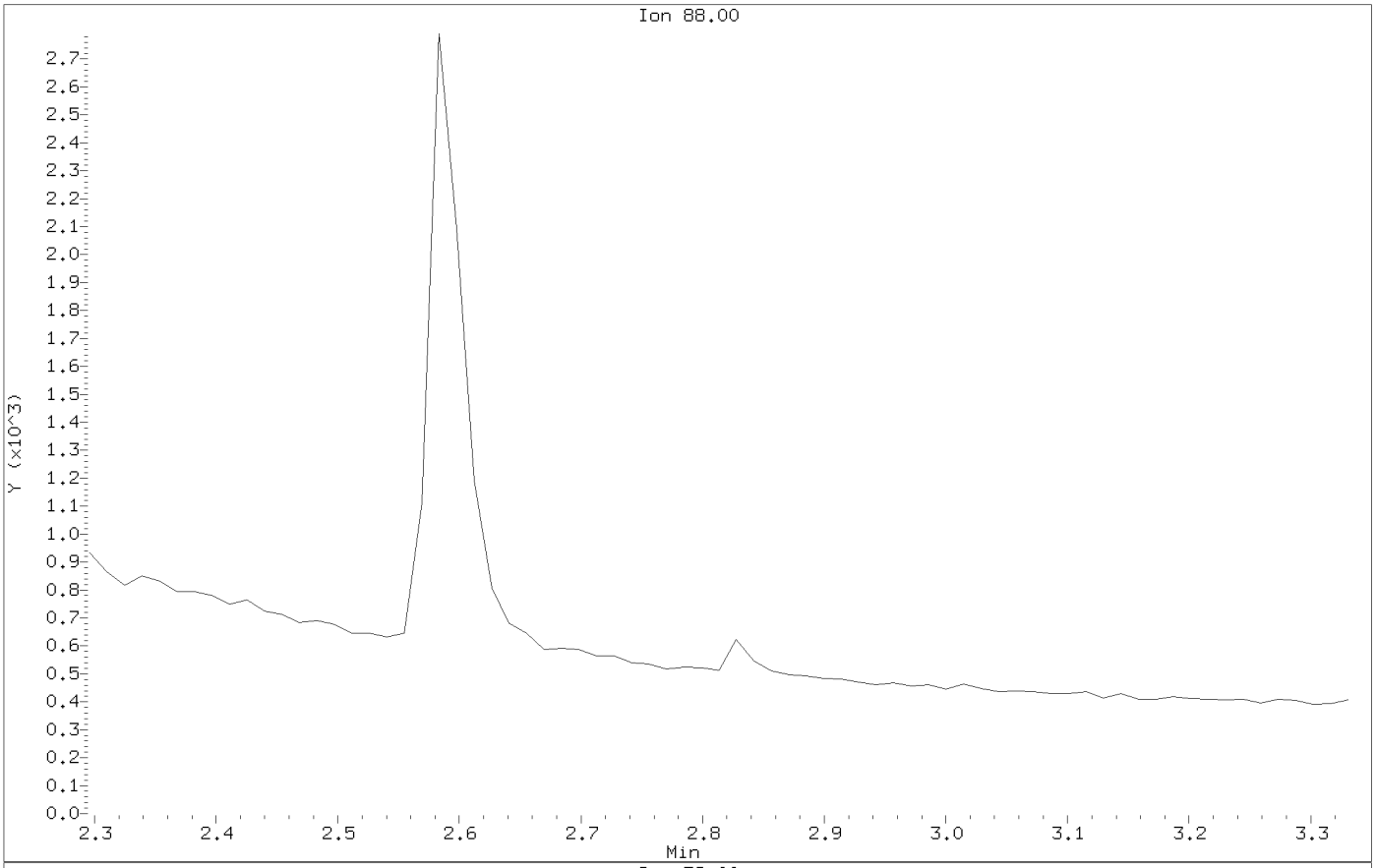


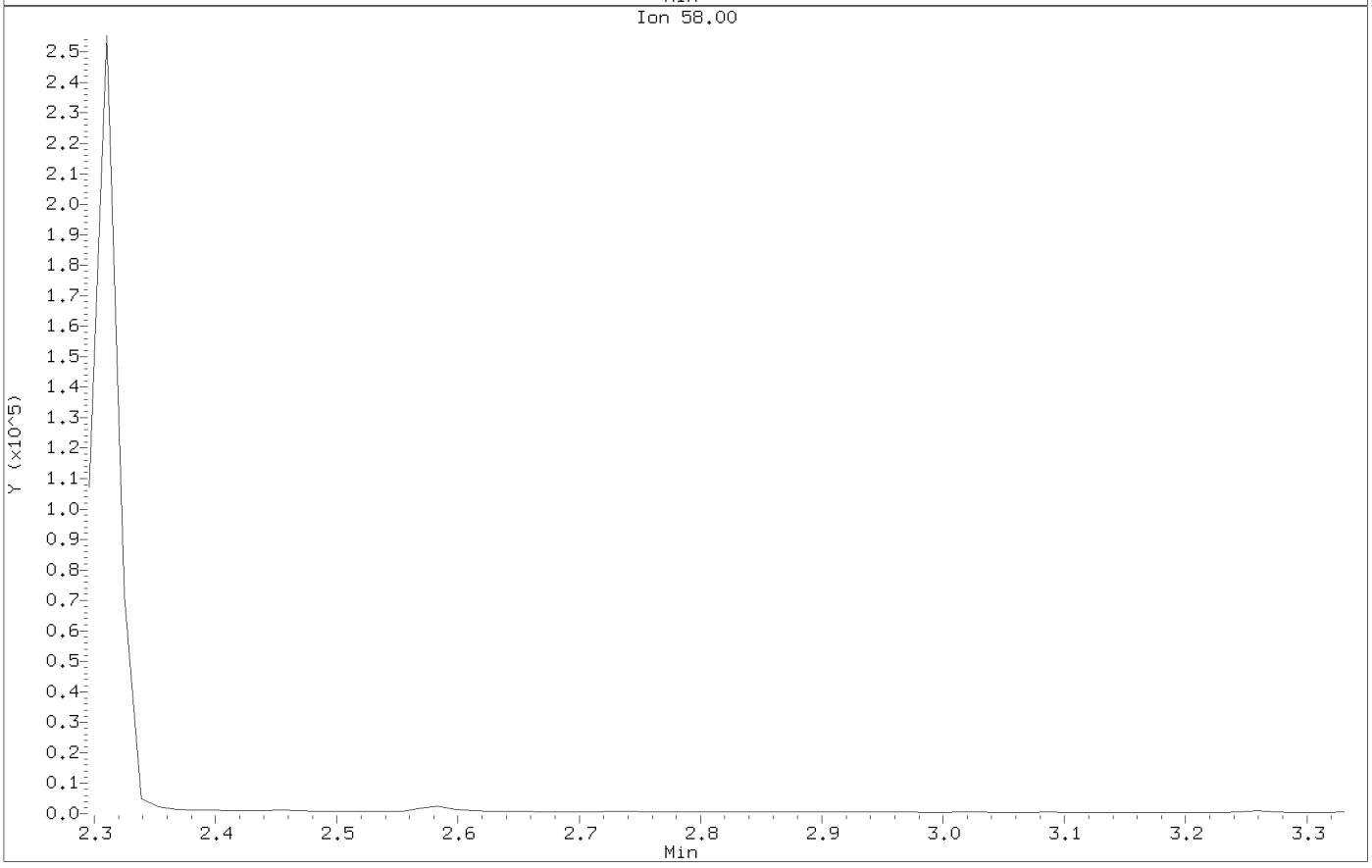
0000418

Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4588.D
Injection Date: 07-APR-2015 12:44
Instrument: gcms-g.i
Client Sample ID: WG160715-LCSD

Compound: 1,4-Dioxane
CAS Number: 123-91-1

BEFORE MANUAL INTEGRATION

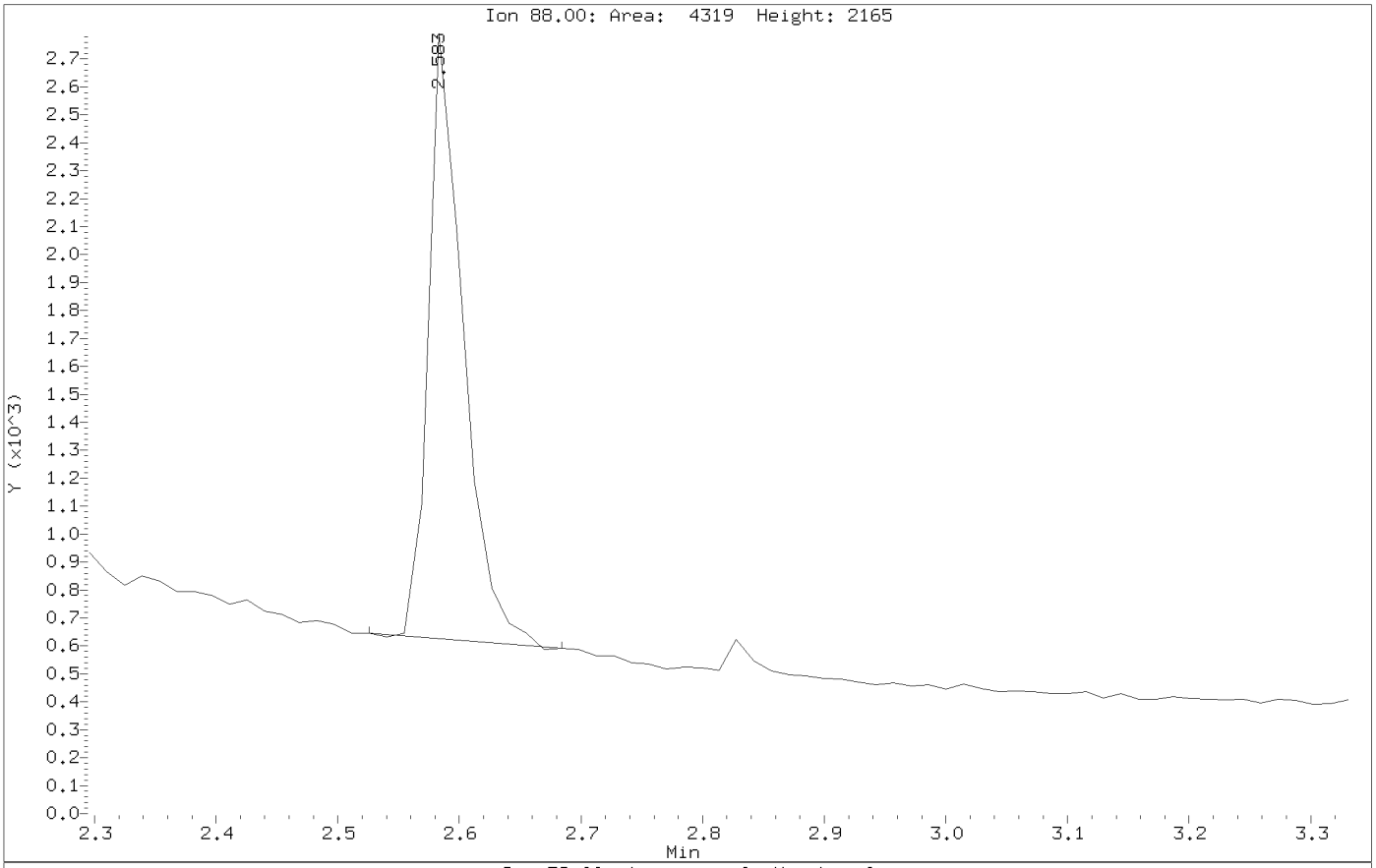


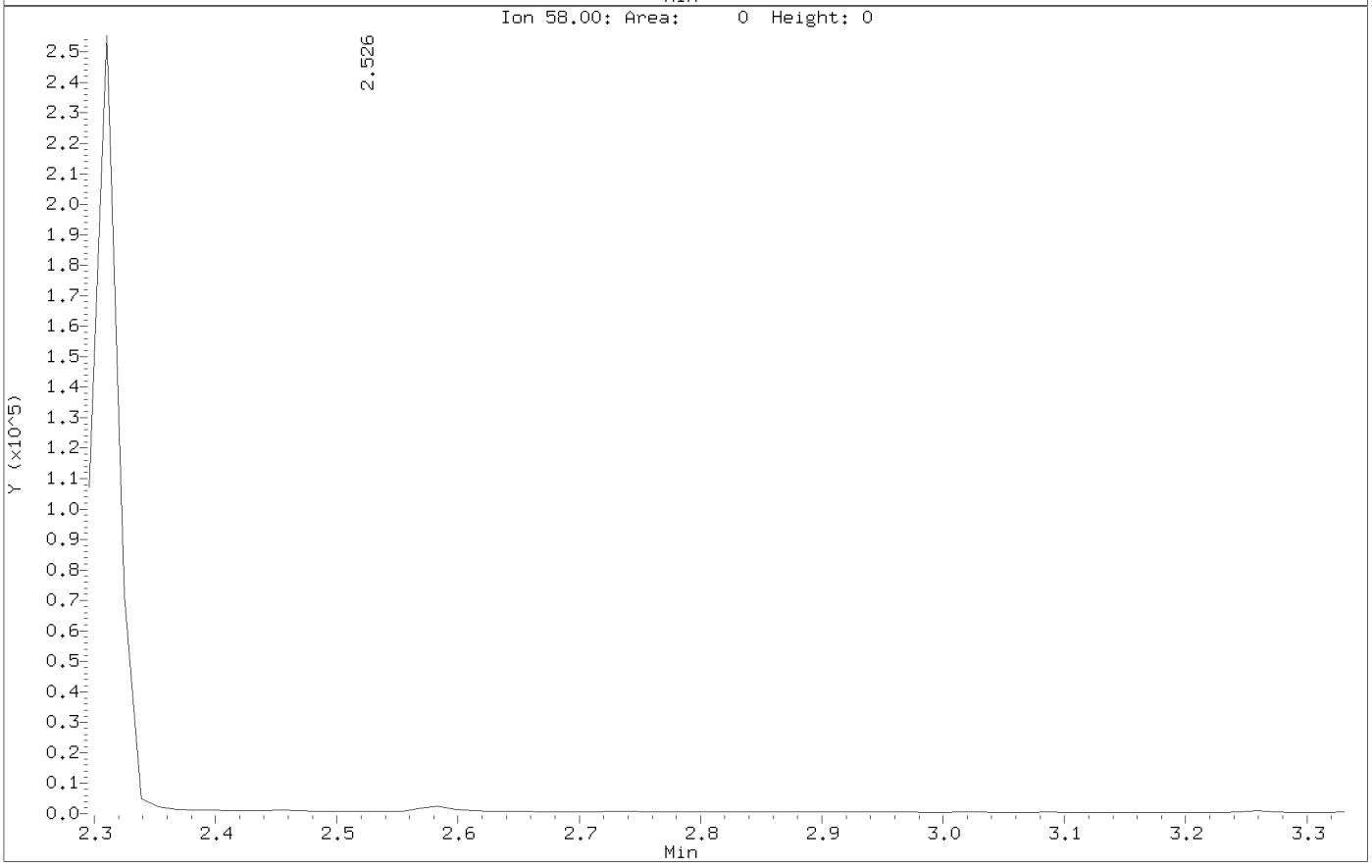


Data File: \\target_server\gg\chem\gcms-g.i\G040715.b\G4588.D
Injection Date: 07-APR-2015 12:44
Instrument: gcms-g.i
Client Sample ID: WG160715-LCSD

Compound: 1,4-Dioxane
CAS Number: 123-91-1

AFTER MANUAL INTEGRATION





Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 021815

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG158285-1	50ng DFTPP	GD563	1	1	DFTPPSIM	2.0	SCM	OK
	SSTD1.00 G0218	G4254		2	GDLOXNS2			✓
	0.25	55		3				✓
	0.5	56		4				✓
	3.0	57		5				✓
	7.0	58		6				✓
	10.	59		7				✓
	100	60		8				OK
3520	WG158473-1	61		9				OK
	510891-1	62		10				OK
	-2	63		11				OK
	-3	64		12				OK
	WG158473-2	65		13				OK
	-3	66		14				OK

STANDARD	CODE
DFTPP	52557
CAL. STD.	52557
IS MIX	~~52564~~ 52561

dm

REVIEWED AND APPROVED BY:
DATE:

SVOA-003 - revision 1 - 03/23/2010

QAMS559

00000422
00000036

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 040715

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG160772-1	50ng DFTPP	GD588	1	1	DFTPPSIM	2.0	JLG	OK
-2	50TD 1.00 G0407	G45[illegible]		2	GDIOXN52			OK
3520	WG160715-1	86		3				OK
	-2	87		4				low Rec
	-3	88		5				
	SE2008-5RE	89		6				DL 1:2
	-6RE	90		7				OK
	-5REDL	91	2	8				OK 100/200
	5STD1.00 G0407	92	1	9	GSPSIM38			
	SV2712-DL	93	2	10				100/200

STANDARD	CODE
DFTPP	52585
CAL. STD.	52551
IS MIX	52584

REVIEWED AND APPROVED BY: _____
DATE: _____

1,4 Dioxane RE

CLLE

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP)		SW846 3520 (CLLE) ✓		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270	EPA 625	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV2709		Spike ID (1): SIM SV2711		
	Surrogate ID (2): —		Spike ID (2): —		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM056		H_2SO_4 Lot #		NaOH Lot # 84101
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 2796500 1		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) ≥12		pH (2nd Extraction) —
Prep Start Time: 11:15	Prep End Time: 12:00		CLLE Start Time: 12:00		CLLE End Time: 6:00

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV016	Initials	Comments
4-3-15	~~KS~~	W6160715 -1	1000	1.0	NR		✓	1.0	4-6-15	B7	KF	2312606
		-2	1000		1.0					B10		
		-3	1000							C1		
											KF	4-6-15

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000006

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
4-3-15	~~KS~~	SI20008-5E	1050	1.0	NR		✓	1.0	4-6-15	C2	KF	RE
		-4E	1030							C3		
											KF	4-6-15

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000424

0000007

SEMIVOLATILES DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE15-03-06 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI2008

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
MW-09-GW-033115	SI2008-1		56.8		18.0	*	58.1		14.6		39.8	*	74.3	
MW-09-GW-033115	SI2008-1RE		64.6		28.2		67.7		17.9		62.9		78.0	
MW-08-GW-033115	SI2008-2		57.0		18.3	*	56.7		14.8		44.1		84.6	
MW-08-GW-033115	SI2008-2RE		62.8		20.4		63.7		15.3		44.8		81.6	
MW-06-GW-033115	SI2008-3		72.3		36.4		69.3		25.0		78.8		97.5	
MW-07-GW-033115	SI2008-4		57.4		21.0		61.3		16.7		45.6		90.5	
DUPLICATE-GW-033115	SI2008-7		58.0		23.6		61.1		16.6		44.9		85.4	
Method Blank Sample	WG160777-1		75.4		34.2		87.9		24.9		54.5		81.2	
Laboratory Control S	WG160777-2		72.3		35.7		74.3		23.6		77.2		84.8	
Laboratory Control S	WG160777-3		65.8		29.1		65.3		19.9		68.4		86.6	
Matrix Spike	WG160777-4		62.2		16.8	*	56.0		12.6		53.2		89.2	
Matrix Spike Duplica	WG160777-5		67.2		30.1		65.6		21.6		69.8		88.1	
Method Blank Sample	WG160882-1		63.0		28.2		68.9		16.9		62.0		79.2	
Laboratory Control S	WG160882-2		63.1		27.3		64.1		16.8		64.9		77.3	
Laboratory Control S	WG160882-3		76.1		39.0		75.1		24.9		78.9		87.8	

		QC Limits
2FBP	2-FLUOROBIPHENYL	50-110
2FP	2-FLUOROPHENOL	20-110
PHL	PHENOL-D6	10-115
TPH	TERPHENYL-D14	50-135
NBZ	NITROBENZENE-D5	40-110
TBP	2,4,6-TRIBROMOPHENOL	40-125

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
SDG : SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab Sample ID : WG160777-1
Lab File ID : U9933.D
Date Extracted : 06-APR-15
Instrument ID : GCMS-U
Date Analyzed : 06-APR-15
Matrix : AQ
Time Analyzed : 15:39

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG160777-2	U9934.D	04/06/15	16:05
Laboratory Control S	WG160777-3	U9935.D	04/06/15	16:31
MW-09-GW-033115	SI2008-1	U9941.D	04/06/15	19:06
Matrix Spike	WG160777-4	U9942.D	04/06/15	19:31
Matrix Spike Duplica	WG160777-5	U9943.D	04/06/15	19:57
MW-08-GW-033115	SI2008-2	U9944.D	04/06/15	20:22
MW-06-GW-033115	SI2008-3	U9945.D	04/06/15	20:48
MW-07-GW-033115	SI2008-4	U9946.D	04/06/15	21:13
DUPLICATE-GW-033115	SI2008-7	U9947.D	04/06/15	21:39

Method Blank Summary

Lab Name : Katahdin Analytical Services
SDG : SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab Sample ID : WG160882-1
Lab File ID : U9983.D
Date Extracted : 08-APR-15
Instrument ID : GCMS-U
Date Analyzed : 08-APR-15
Matrix : AQ
Time Analyzed : 14:03

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG160882-2	U9984.D	04/08/15	14:29
Laboratory Control S	WG160882-3	U9985.D	04/08/15	14:55
MW-09-GW-033115	SI2008-1RE	U9986.D	04/08/15	15:21
MW-08-GW-033115	SI2008-2RE	U9987.D	04/08/15	15:46

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : UD340.D
Instrument ID : GCMS-U

SDG : SI2008
Date Analyzed : 23-MAR-15
Time Analyzed : 14:55

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.4		
68	Less than 2.0% of mass 69	0.5	1.33	1
69	Less than 100.0% of mass 198	38.7		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	53.0		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.9		
275	10.0 - 30.0% of mass 198	23.3		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	13.9	81.06	2
442	40.0 - 100.0% of mass 198	90.6		
443	17.0 - 23.0% of mass 442	17.1	18.93	3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG160080-4	U9721.D	03/23/15	15:13
Initial Calibration	WG160080-2	U9722.D	03/23/15	15:39
Initial Calibration	WG160080-3	U9723.D	03/23/15	16:05
Initial Calibration	WG160080-5	U9724.D	03/23/15	16:31
Initial Calibration	WG160080-6	U9725.D	03/23/15	16:57
Initial Calibration	WG160080-7	U9726.D	03/23/15	17:23
Independent Source	WG160080-8	U9727.D	03/23/15	17:49

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : UD349.D
Instrument ID : GCMS-U

SDG : SI2008
Date Analyzed : 06-APR-15
Time Analyzed : 14:49

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	33.1		
68	Less than 2.0% of mass 69	0.2	0.63	1
69	Less than 100.0% of mass 198	38.9		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	52.2		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	21.7		
365	1.0 - 100.0% of mass 198	2.7		
441	0.0 - 100.0% of mass 443	13.6	82.94	2
442	40.0 - 100.0% of mass 198	86.5		
443	17.0 - 23.0% of mass 442	16.4	19.00	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG160781-2	U9932.D	04/06/15	15:10
Method Blank Sample	WG160777-1	U9933.D	04/06/15	15:39
Laboratory Control S	WG160777-2	U9934.D	04/06/15	16:05
Laboratory Control S	WG160777-3	U9935.D	04/06/15	16:31
MW-09-GW-033115	SI2008-1	U9941.D	04/06/15	19:06
Matrix Spike	WG160777-4	U9942.D	04/06/15	19:31
Matrix Spike Duplica	WG160777-5	U9943.D	04/06/15	19:57
MW-08-GW-033115	SI2008-2	U9944.D	04/06/15	20:22
MW-06-GW-033115	SI2008-3	U9945.D	04/06/15	20:48
MW-07-GW-033115	SI2008-4	U9946.D	04/06/15	21:13
DUPLICATE-GW-033115	SI2008-7	U9947.D	04/06/15	21:39

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Date Analyzed : 08-APR-15
Lab File ID : UD351.D
Time Analyzed : 12:54
Instrument ID : GCMS-U

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.8		
68	Less than 2.0% of mass 69	0.5	1.23	1
69	Less than 100.0% of mass 198	40.1		
70	Less than 2.0% of mass 69	0.2	0.41	1
127	40.0 - 60.0% of mass 198	53.3		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.3		
275	10.0 - 30.0% of mass 198	21.7		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	14.3	86.78	2
442	40.0 - 100.0% of mass 198	89.5		
443	17.0 - 23.0% of mass 442	16.5	18.44	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG160877-2	U9982.D	04/08/15	13:30
Method Blank Sample	WG160882-1	U9983.D	04/08/15	14:03
Laboratory Control S	WG160882-2	U9984.D	04/08/15	14:29
Laboratory Control S	WG160882-3	U9985.D	04/08/15	14:55
MW-09-GW-033115	SI2008-1RE	U9986.D	04/08/15	15:21
MW-08-GW-033115	SI2008-2RE	U9987.D	04/08/15	15:46

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160080-4
Lab File ID : U9721.D

SDG: SI2008
Analytical Date: 03/23/15 15:13
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	331260		4.05		1286125		5.40		649262		7.48	
	Upper Limit	662520		4.55		2572250		5.90		1298524		7.98	
	Lower Limit	165630		3.55		643062.5		4.90		324631		6.98	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG160781-2	300552		4.02		1159234		5.37		602802		7.45	
Method Blank Sample	WG160777-1	349246		4.02		1212683		5.36		677147		7.45	
Laboratory Control S	WG160777-2	326652		4.02		1231963		5.37		671009		7.45	
Laboratory Control S	WG160777-3	316118		4.02		1220728		5.37		660932		7.45	
MW-09-GW-033115	SI2008-1	357971		4.02		1268265		5.36		669706		7.45	
Matrix Spike	WG160777-4	320414		4.02		1225725		5.37		668638		7.45	
Matrix Spike Duplica	WG160777-5	304822		4.02		1163291		5.37		652336		7.46	
MW-08-GW-033115	SI2008-2	316852		4.02		1165802		5.37		604502		7.45	
MW-06-GW-033115	SI2008-3	329559		4.02		1257839		5.37		671012		7.46	
MW-07-GW-033115	SI2008-4	339063		4.02		1196480		5.36		623916		7.45	
DUPLICATE-GW-033	SI2008-7	340808		4.02		1252010		5.36		647529		7.45	
Continuing Calibrati	WG160877-2	361138		4.01		1363286		5.36		697597		7.45	
Method Blank Sample	WG160882-1	381394		4.01		1361815		5.35		706801		7.45	
Laboratory Control S	WG160882-2	356981		4.01		1342662		5.36		703335		7.44	
Laboratory Control S	WG160882-3	339701		4.01		1237431		5.36		634075		7.44	
MW-09-GW-033115	SI2008-1RE	349172		4.01		1233525		5.35		641204		7.43	
MW-08-GW-033115	SI2008-2RE	356884		4.01		1301363		5.35		665823		7.43	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160080-4
Lab File ID : U9721.D

SDG: SI2008
Analytical Date: 03/23/15 15:13
Instrument ID: GCMS-U

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	983961		9.31		559989		12.85		314600		15.78	
	Upper Limit	1967922		9.81		1119978		13.35		629200		16.28	
	Lower Limit	491980.5		8.81		279994.5		12.35		157300		15.28	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG160781-2	964198		9.27		546045		12.81		330380		15.74	
Method Blank Sample	WG160777-1	996678		9.27		778301		12.80		521755		15.74	
Laboratory Control S	WG160777-2	1046969		9.27		676020		12.81		421595		15.75	
Laboratory Control S	WG160777-3	1017668		9.27		603142		12.81		359121		15.73	
MW-09-GW-033115	SI2008-1	979346		9.26		731454		12.80		476061		15.73	
Matrix Spike	WG160777-4	1042504		9.27		605821		12.81		333118		15.73	
Matrix Spike Duplica	WG160777-5	1018632		9.27		626247		12.81		371094		15.74	
MW-08-GW-033115	SI2008-2	888680		9.26		627771		12.80		361336		15.74	
MW-06-GW-033115	SI2008-3	937918		9.26		446846		12.80		235448		15.74	
MW-07-GW-033115	SI2008-4	947183		9.26		679043		12.80		385154		15.73	
DUPLICATE-GW-033	SI2008-7	966061		9.25		652389		12.79		377556		15.73	
Continuing Calibrati	WG160877-2	972646		9.26		559488		12.78		353696		15.71	
Method Blank Sample	WG160882-1	984920		9.25		658592		12.78		384362		15.72	
Laboratory Control S	WG160882-2	974376		9.24		645757		12.77		396422		15.71	
Laboratory Control S	WG160882-3	913817		9.25		572851		12.78		329346		15.71	
MW-09-GW-033115	SI2008-1RE	917711		9.25		599269		12.76		336079		15.70	
MW-08-GW-033115	SI2008-2RE	988881		9.25		632578		12.76		345320		15.70	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-1
Client ID: MW-09-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9941.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.1	ug/L	1	10	9.4	1.7	7.1
Bis(2-Chloroethyl)Ether	U	7.1	ug/L	1	10	9.4	1.9	7.1
2-Chlorophenol	U	7.1	ug/L	1	10	9.4	3.0	7.1
1,3-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
1,4-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.1	7.1
1,2-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.3	7.1
2-Methylphenol	UM	7.1	ug/L	1	10	9.4	3.6	7.1
2,2'-Oxybis(1-Chloropropane)	U	7.1	ug/L	1	10	9.4	2.0	7.1
3&4-Methylphenol	U	7.1	ug/L	1	10	9.4	5.3	7.1
N-Nitroso-Di-N-Propylamine	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachloroethane	U	7.1	ug/L	1	10	9.4	2.2	7.1
Nitrobenzene	U	7.1	ug/L	1	10	9.4	2.9	7.1
Isophorone	U	7.1	ug/L	1	10	9.4	1.6	7.1
2-Nitrophenol	UM	7.1	ug/L	1	10	9.4	2.5	7.1
2,4-Dimethylphenol	U	7.1	ug/L	1	10	9.4	4.2	7.1
Bis(2-Chloroethoxy)Methane	U	7.1	ug/L	1	10	9.4	2.0	7.1
2,4-Dichlorophenol	UM	7.1	ug/L	1	10	9.4	2.8	7.1
1,2,4-Trichlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
Naphthalene	U	7.1	ug/L	1	10	9.4	2.1	7.1
4-Chloroaniline	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachlorobutadiene	U	7.1	ug/L	1	10	9.4	1.7	7.1
4-Chloro-3-Methylphenol	U	7.1	ug/L	1	10	9.4	3.4	7.1
2-Methylnaphthalene	U	7.1	ug/L	1	10	9.4	3.0	7.1
Hexachlorocyclopentadiene	U	7.1	ug/L	1	10	9.4	1.1	7.1
2,4,6-Trichlorophenol	UM	7.1	ug/L	1	10	9.4	2.5	7.1
2,4,5-Trichlorophenol	UM	18	ug/L	1	25	24.	3.4	18.
2-Chloronaphthalene	U	7.1	ug/L	1	10	9.4	2.7	7.1
2-Nitroaniline	U	18	ug/L	1	25	24.	1.7	18.
Dimethyl Phthalate	U	7.1	ug/L	1	10	9.4	1.9	7.1
Acenaphthylene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2,6-Dinitrotoluene	U	7.1	ug/L	1	10	9.4	1.9	7.1
3-Nitroaniline	U	18	ug/L	1	25	24.	1.4	18.
Acenaphthene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2,4-Dinitrophenol	U	18	ug/L	1	25	24.	0.94	18.
4-Nitrophenol	U	18	ug/L	1	25	24.	1.7	18.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-1
Client ID: MW-09-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9941.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.1	ug/L	1	10	9.4	1.5	7.1
2,4-Dinitrotoluene	U	7.1	ug/L	1	10	9.4	2.1	7.1
Diethylphthalate	U	7.1	ug/L	1	10	9.4	1.9	7.1
4-Chlorophenyl-Phenylether	U	7.1	ug/L	1	10	9.4	2.1	7.1
Fluorene	U	7.1	ug/L	1	10	9.4	2.0	7.1
4-Nitroaniline	U	18	ug/L	1	25	24.	1.5	18.
4,6-Dinitro-2-Methylphenol	U	18	ug/L	1	25	24.	1.9	18.
N-Nitrosodiphenylamine	U	7.1	ug/L	1	10	9.4	3.5	7.1
4-Bromophenyl-Phenylether	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
Pentachlorophenol	U	18	ug/L	1	25	24.	2.2	18.
Phenanthrene	U	7.1	ug/L	1	10	9.4	2.3	7.1
Anthracene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Carbazole	U	7.1	ug/L	1	10	9.4	2.0	7.1
Di-N-Butylphthalate	U	7.1	ug/L	1	10	9.4	2.4	7.1
Fluoranthene	U	7.1	ug/L	1	10	9.4	2.3	7.1
Pyrene	U	7.1	ug/L	1	10	9.4	1.8	7.1
Butylbenzylphthalate	U	7.1	ug/L	1	10	9.4	1.8	7.1
3,3'-Dichlorobenzidine	U	7.1	ug/L	1	10	9.4	1.0	7.1
Benzo(a)anthracene	U	7.1	ug/L	1	10	9.4	1.5	7.1
Chrysene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Bis(2-Ethylhexyl)Phthalate	U	7.1	ug/L	1	10	9.4	1.7	7.1
Di-N-Octylphthalate	U	7.1	ug/L	1	10	9.4	1.7	7.1
Benzo(b)fluoranthene	U	7.1	ug/L	1	10	9.4	1.1	7.1
Benzo(k)fluoranthene	U	7.1	ug/L	1	10	9.4	1.5	7.1
Benzo(a)pyrene	U	7.1	ug/L	1	10	9.4	1.1	7.1
Indeno(1,2,3-cd)pyrene	U	7.1	ug/L	1	10	9.4	1.8	7.1
Dibenzo(a,h)anthracene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Benzo(g,h,i)perylene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2-Fluorophenol	*	18.0	%					
Phenol-d6		14.6	%					
Nitrobenzene-d5		58.1	%					
2-Fluorobiphenyl		56.8	%					
2,4,6-Tribromophenol	*	39.8	%					
Terphenyl-d14		74.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9941.D
Report Date: 09-Apr-2015 10:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9941.D
Lab Smp Id: SI2008-1 Client Smp ID: MW-09-GW-033115
Inj Date : 06-APR-2015 19:06 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2008-1
Misc Info : WG160781,WG160777,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

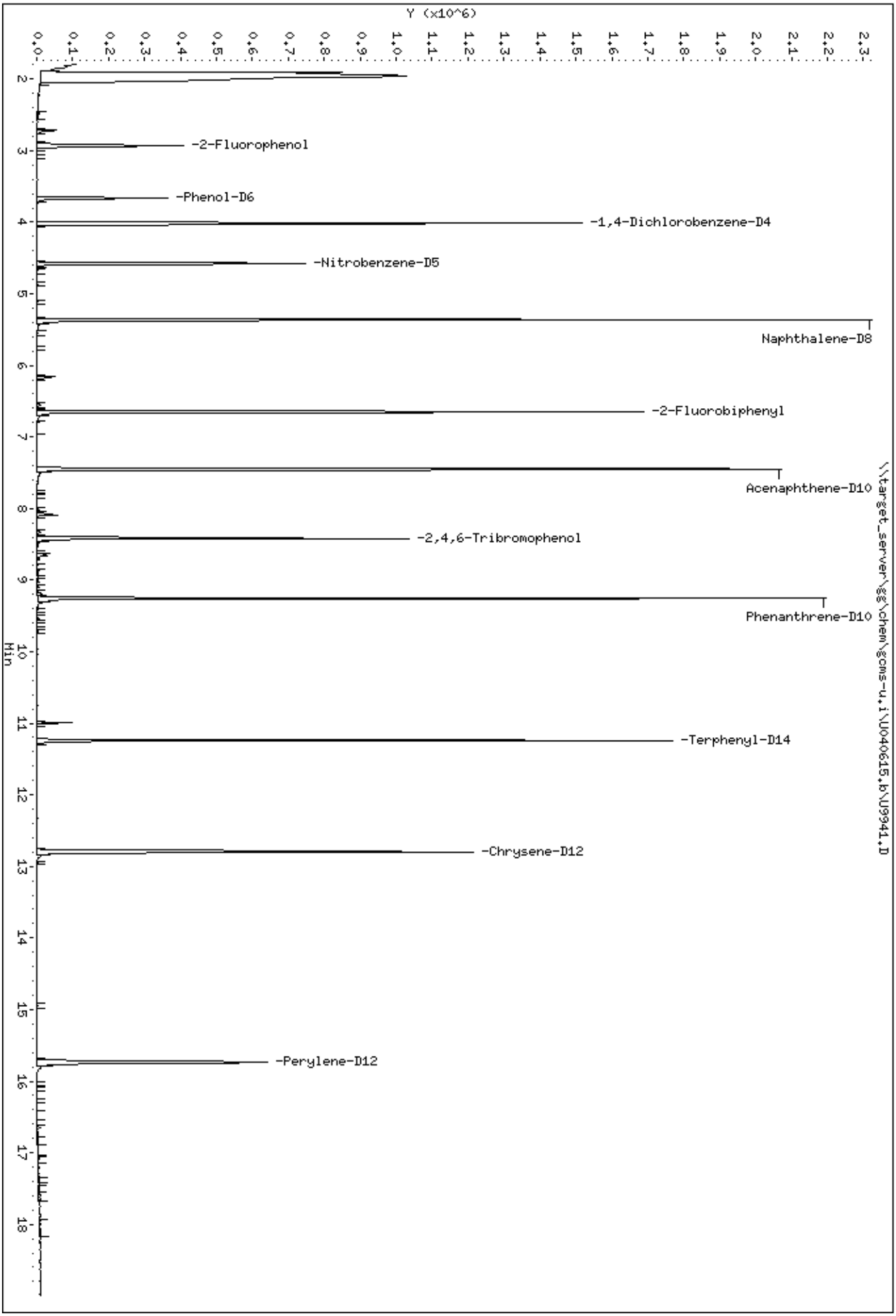
Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.921	2.931	(0.727)	244226	18.0410	17.0(R)	
$ 12 Phenol-D6	99	3.656	3.666	(0.910)	228499	14.5542	13.7	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	357971	40.0000		
$ 33 Nitrobenzene-D5	82	4.577	4.587	(0.853)	329613	29.0456	27.4	
* 45 Naphthalene-D8	136	5.363	5.373	(1.000)	1268265	40.0000		
$ 63 2-Fluorobiphenyl	172	6.647	6.657	(0.892)	552168	28.3783	26.8	
* 78 Acenaphthene-D10	164	7.454	7.454	(1.000)	669706	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.417	8.427	(1.129)	140513	39.8391	37.6(R)	
* 114 Phenanthrene-D10	188	9.255	9.265	(1.000)	979346	40.0000		
$ 129 Terphenyl-D14	244	11.242	11.242	(0.879)	646360	37.1404	35.0	
* 141 Chrysene-D12	240	12.795	12.805	(1.000)	731454	40.0000		
* 150 Perylene-D12	264	15.734	15.744	(1.000)	476061	40.0000		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.


Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9941.D
Date : 06-APR-2015 19:06
Client ID: MW-09-GW-033115
Sample Info: SI2008-1
Instrument: gcms-u.i
Y (x10^6)
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12
Min
\\target_server\gg\chem\gcms-u.i\U040615.b\U9941.D

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-1RE
Client ID: MW-09-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9986.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.1	ug/L	1	10	9.4	1.7	7.1
Bis(2-Chloroethyl)Ether	U	7.1	ug/L	1	10	9.4	1.9	7.1
2-Chlorophenol	U	7.1	ug/L	1	10	9.4	3.0	7.1
1,3-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
1,4-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.1	7.1
1,2-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.3	7.1
2-Methylphenol	UM	7.1	ug/L	1	10	9.4	3.6	7.1
2,2'-Oxybis(1-Chloropropane)	U	7.1	ug/L	1	10	9.4	2.0	7.1
3&4-Methylphenol	U	7.1	ug/L	1	10	9.4	5.3	7.1
N-Nitroso-Di-N-Propylamine	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachloroethane	U	7.1	ug/L	1	10	9.4	2.2	7.1
Nitrobenzene	U	7.1	ug/L	1	10	9.4	2.9	7.1
Isophorone	U	7.1	ug/L	1	10	9.4	1.6	7.1
2-Nitrophenol	UM	7.1	ug/L	1	10	9.4	2.5	7.1
2,4-Dimethylphenol	U	7.1	ug/L	1	10	9.4	4.2	7.1
Bis(2-Chloroethoxy)Methane	U	7.1	ug/L	1	10	9.4	2.0	7.1
2,4-Dichlorophenol	UM	7.1	ug/L	1	10	9.4	2.8	7.1
1,2,4-Trichlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
Naphthalene	U	7.1	ug/L	1	10	9.4	2.1	7.1
4-Chloroaniline	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachlorobutadiene	U	7.1	ug/L	1	10	9.4	1.7	7.1
4-Chloro-3-Methylphenol	U	7.1	ug/L	1	10	9.4	3.4	7.1
2-Methylnaphthalene	U	7.1	ug/L	1	10	9.4	3.0	7.1
Hexachlorocyclopentadiene	U	7.1	ug/L	1	10	9.4	1.1	7.1
2,4,6-Trichlorophenol	UM	7.1	ug/L	1	10	9.4	2.5	7.1
2,4,5-Trichlorophenol	UM	18	ug/L	1	25	24.	3.4	18.
2-Chloronaphthalene	U	7.1	ug/L	1	10	9.4	2.7	7.1
2-Nitroaniline	U	18	ug/L	1	25	24.	1.7	18.
Dimethyl Phthalate	U	7.1	ug/L	1	10	9.4	1.9	7.1
Acenaphthylene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2,6-Dinitrotoluene	U	7.1	ug/L	1	10	9.4	1.9	7.1
3-Nitroaniline	U	18	ug/L	1	25	24.	1.4	18.
Acenaphthene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2,4-Dinitrophenol	U	18	ug/L	1	25	24.	0.94	18.
4-Nitrophenol	U	18	ug/L	1	25	24.	1.7	18.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-1RE
Client ID: MW-09-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9986.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.1	ug/L	1	10	9.4	1.5	7.1
2,4-Dinitrotoluene	U	7.1	ug/L	1	10	9.4	2.1	7.1
Diethylphthalate	U	7.1	ug/L	1	10	9.4	1.9	7.1
4-Chlorophenyl-Phenylether	U	7.1	ug/L	1	10	9.4	2.1	7.1
Fluorene	U	7.1	ug/L	1	10	9.4	2.0	7.1
4-Nitroaniline	U	18	ug/L	1	25	24.	1.5	18.
4,6-Dinitro-2-Methylphenol	U	18	ug/L	1	25	24.	1.9	18.
N-Nitrosodiphenylamine	U	7.1	ug/L	1	10	9.4	3.5	7.1
4-Bromophenyl-Phenylether	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
Pentachlorophenol	U	18	ug/L	1	25	24.	2.2	18.
Phenanthrene	U	7.1	ug/L	1	10	9.4	2.3	7.1
Anthracene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Carbazole	U	7.1	ug/L	1	10	9.4	2.0	7.1
Di-N-Butylphthalate	U	7.1	ug/L	1	10	9.4	2.4	7.1
Fluoranthene	U	7.1	ug/L	1	10	9.4	2.3	7.1
Pyrene	U	7.1	ug/L	1	10	9.4	1.8	7.1
Butylbenzylphthalate	U	7.1	ug/L	1	10	9.4	1.8	7.1
3,3'-Dichlorobenzidine	U	7.1	ug/L	1	10	9.4	1.0	7.1
Benzo(a)anthracene	U	7.1	ug/L	1	10	9.4	1.5	7.1
Chrysene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Bis(2-Ethylhexyl)Phthalate	U	7.1	ug/L	1	10	9.4	1.7	7.1
Di-N-Octylphthalate	U	7.1	ug/L	1	10	9.4	1.7	7.1
Benzo(b)fluoranthene	U	7.1	ug/L	1	10	9.4	1.1	7.1
Benzo(k)fluoranthene	U	7.1	ug/L	1	10	9.4	1.5	7.1
Benzo(a)pyrene	U	7.1	ug/L	1	10	9.4	1.1	7.1
Indeno(1,2,3-cd)pyrene	U	7.1	ug/L	1	10	9.4	1.8	7.1
Dibenzo(a,h)anthracene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Benzo(g,h,i)perylene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2-Fluorophenol		28.2	%					
Phenol-d6		17.9	%					
Nitrobenzene-d5		67.7	%					
2-Fluorobiphenyl		64.6	%					
2,4,6-Tribromophenol		62.9	%					
Terphenyl-d14		78.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9986.D
Report Date: 09-Apr-2015 10:52

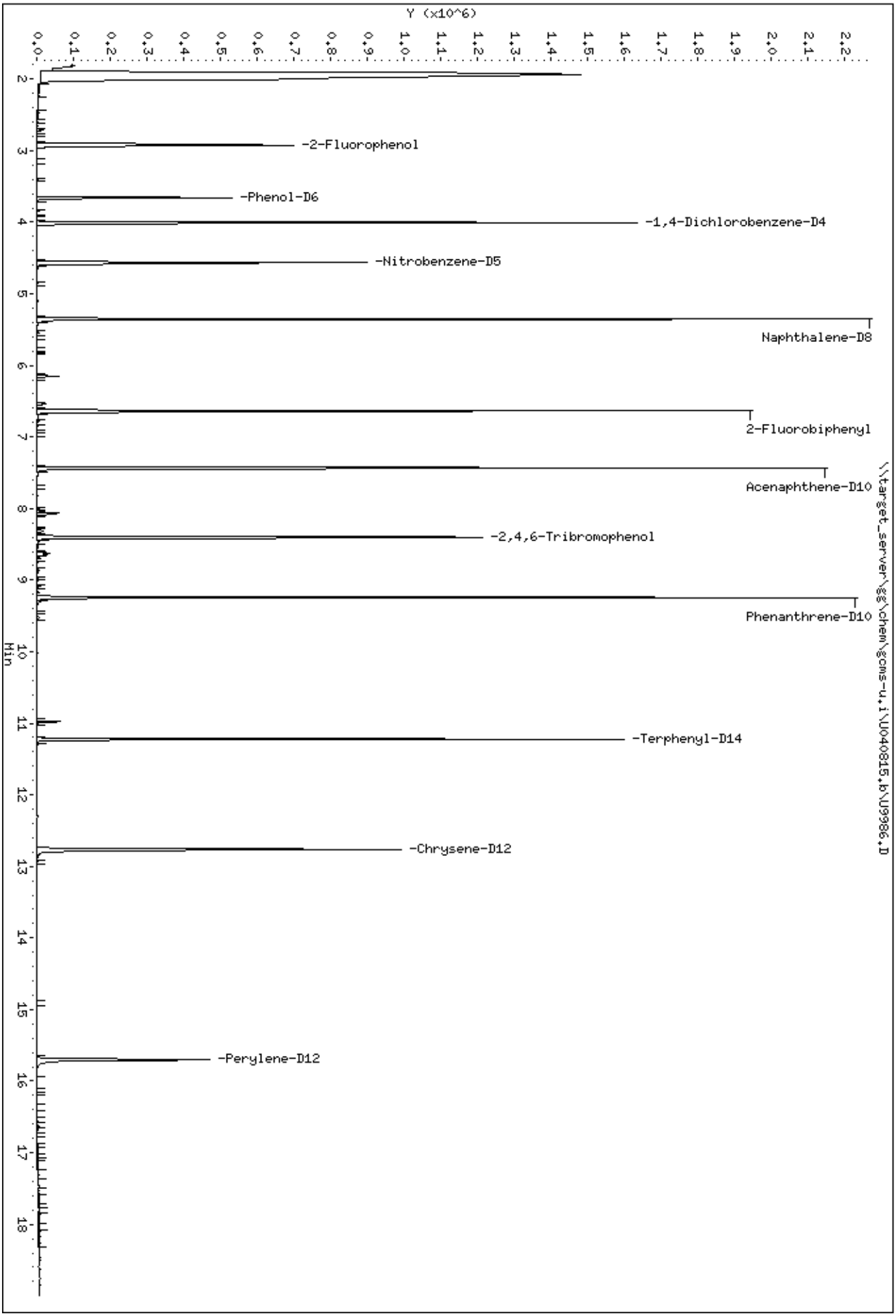
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9986.D
Lab Smp Id: SI2008-1RE Client Smp ID: MW-09-GW-033115
Inj Date : 08-APR-2015 15:21 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2008-1RE
Misc Info : WG160877,WG160882,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.921	2.911	(0.729)	373027	28.2500	26.6	
$ 12 Phenol-D6	99	3.656	3.656	(0.912)	274851	17.9478	16.9	
* 19 1,4-Dichlorobenzene-D4	152	4.008	4.008	(1.000)	349172	40.0000		
$ 33 Nitrobenzene-D5	82	4.567	4.578	(0.853)	373571	33.8463	31.9	
* 45 Naphthalene-D8	136	5.353	5.364	(1.000)	1233525	40.0000		
$ 63 2-Fluorobiphenyl	172	6.637	6.637	(0.893)	601547	32.2904	30.5	
* 78 Acenaphthene-D10	164	7.434	7.445	(1.000)	641204	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.407	8.417	(1.131)	212532	62.9369	59.4	
* 114 Phenanthrene-D10	188	9.245	9.256	(1.000)	917711	40.0000		
$ 129 Terphenyl-D14	244	11.222	11.222	(0.879)	556448	39.0267	36.8	
* 141 Chrysene-D12	240	12.764	12.775	(1.000)	599269	40.0000		
* 150 Perylene-D12	264	15.703	15.714	(1.000)	336079	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9986,D
Date : 08-APR-2015 15:21
Client ID: MW-09-GW-033115
Sample Info: SI2008-1RE
Instrument: gcms-u,i
\\target_server\gg\chem\gcms-u,i\U040815,b\U9986,D
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-2
Client ID: MW-08-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9944.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.4	ug/L	1	10	9.9	1.8	7.4
Bis(2-Chloroethyl)Ether	U	7.4	ug/L	1	10	9.9	2.0	7.4
2-Chlorophenol	U	7.4	ug/L	1	10	9.9	3.2	7.4
1,3-Dichlorobenzene	U	7.4	ug/L	1	10	9.9	2.1	7.4
1,4-Dichlorobenzene	U	7.4	ug/L	1	10	9.9	2.2	7.4
1,2-Dichlorobenzene	U	7.4	ug/L	1	10	9.9	2.4	7.4
2-Methylphenol	U	7.4	ug/L	1	10	9.9	3.8	7.4
2,2'-Oxybis(1-Chloropropane)	U	7.4	ug/L	1	10	9.9	2.1	7.4
3&4-Methylphenol	U	7.4	ug/L	1	10	9.9	5.5	7.4
N-Nitroso-Di-N-Propylamine	U	7.4	ug/L	1	10	9.9	1.9	7.4
Hexachloroethane	U	7.4	ug/L	1	10	9.9	2.3	7.4
Nitrobenzene	U	7.4	ug/L	1	10	9.9	3.1	7.4
Isophorone	U	7.4	ug/L	1	10	9.9	1.7	7.4
2-Nitrophenol	U	7.4	ug/L	1	10	9.9	2.7	7.4
2,4-Dimethylphenol	U	7.4	ug/L	1	10	9.9	4.4	7.4
Bis(2-Chloroethoxy)Methane	U	7.4	ug/L	1	10	9.9	2.1	7.4
2,4-Dichlorophenol	U	7.4	ug/L	1	10	9.9	3.0	7.4
1,2,4-Trichlorobenzene	U	7.4	ug/L	1	10	9.9	2.1	7.4
Naphthalene	U	7.4	ug/L	1	10	9.9	2.2	7.4
4-Chloroaniline	U	7.4	ug/L	1	10	9.9	1.9	7.4
Hexachlorobutadiene	U	7.4	ug/L	1	10	9.9	1.8	7.4
4-Chloro-3-Methylphenol	U	7.4	ug/L	1	10	9.9	3.6	7.4
2-Methylnaphthalene	U	7.4	ug/L	1	10	9.9	3.2	7.4
Hexachlorocyclopentadiene	U	7.4	ug/L	1	10	9.9	1.2	7.4
2,4,6-Trichlorophenol	U	7.4	ug/L	1	10	9.9	2.7	7.4
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.4	ug/L	1	10	9.9	2.9	7.4
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl Phthalate	U	7.4	ug/L	1	10	9.9	2.0	7.4
Acenaphthylene	U	7.4	ug/L	1	10	9.9	1.5	7.4
2,6-Dinitrotoluene	U	7.4	ug/L	1	10	9.9	2.0	7.4
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.4	ug/L	1	10	9.9	1.5	7.4
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	0.99	19.
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-2
Client ID: MW-08-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9944.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.4	ug/L	1	10	9.9	1.6	7.4
2,4-Dinitrotoluene	U	7.4	ug/L	1	10	9.9	2.2	7.4
Diethylphthalate	U	7.4	ug/L	1	10	9.9	2.0	7.4
4-Chlorophenyl-Phenylether	U	7.4	ug/L	1	10	9.9	2.2	7.4
Fluorene	U	7.4	ug/L	1	10	9.9	2.1	7.4
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.
4,6-Dinitro-2-Methylphenol	U	19	ug/L	1	25	25.	2.0	19.
N-Nitrosodiphenylamine	U	7.4	ug/L	1	10	9.9	3.7	7.4
4-Bromophenyl-Phenylether	U	7.4	ug/L	1	10	9.9	1.9	7.4
Hexachlorobenzene	U	7.4	ug/L	1	10	9.9	2.1	7.4
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Phenanthrene	U	7.4	ug/L	1	10	9.9	2.4	7.4
Anthracene	U	7.4	ug/L	1	10	9.9	1.7	7.4
Carbazole	U	7.4	ug/L	1	10	9.9	2.1	7.4
Di-N-Butylphthalate	U	7.4	ug/L	1	10	9.9	2.5	7.4
Fluoranthene	U	7.4	ug/L	1	10	9.9	2.4	7.4
Pyrene	U	7.4	ug/L	1	10	9.9	1.9	7.4
Butylbenzylphthalate	U	7.4	ug/L	1	10	9.9	1.9	7.4
3,3'-Dichlorobenzidine	U	7.4	ug/L	1	10	9.9	1.1	7.4
Benzo(a)anthracene	U	7.4	ug/L	1	10	9.9	1.6	7.4
Chrysene	U	7.4	ug/L	1	10	9.9	1.7	7.4
Bis(2-Ethylhexyl)Phthalate	U	7.4	ug/L	1	10	9.9	1.8	7.4
Di-N-Octylphthalate	U	7.4	ug/L	1	10	9.9	1.8	7.4
Benzo(b)fluoranthene	U	7.4	ug/L	1	10	9.9	1.2	7.4
Benzo(k)fluoranthene	U	7.4	ug/L	1	10	9.9	1.6	7.4
Benzo(a)pyrene	U	7.4	ug/L	1	10	9.9	1.2	7.4
Indeno(1,2,3-cd)pyrene	U	7.4	ug/L	1	10	9.9	1.9	7.4
Dibenzo(a,h)anthracene	U	7.4	ug/L	1	10	9.9	1.7	7.4
Benzo(g,h,i)perylene	U	7.4	ug/L	1	10	9.9	1.5	7.4
2-Fluorophenol	*	18.3	%					
Phenol-d6		14.8	%					
Nitrobenzene-d5		56.7	%					
2-Fluorobiphenyl		57.0	%					
2,4,6-Tribromophenol		44.1	%					
Terphenyl-d14		84.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9944.D
Report Date: 09-Apr-2015 10:50

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9944.D
Lab Smp Id: SI2008-2 Client Smp ID: MW-08-GW-033115
Inj Date : 06-APR-2015 20:22 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2008-2
Misc Info : WG160781,WG160777,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

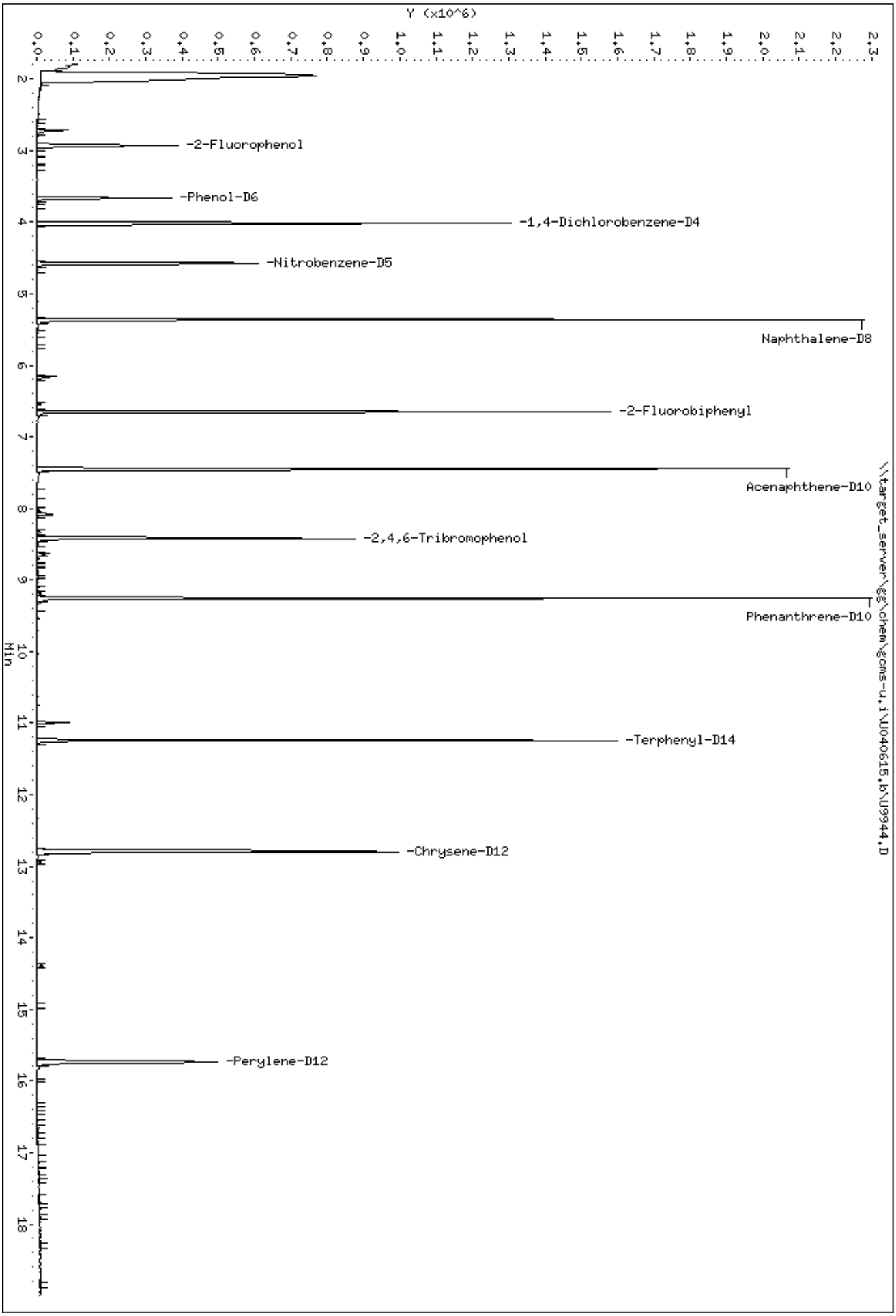
Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.010	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.923	2.931	(0.727)	219707	18.3360	18.2(R)	
$ 12 Phenol-D6	99	3.658	3.666	(0.910)	205545	14.7912	14.6	
* 19 1,4-Dichlorobenzene-D4	152	4.020	4.018	(1.000)	316852	40.0000		
$ 33 Nitrobenzene-D5	82	4.579	4.587	(0.853)	295593	28.3371	28.0	
* 45 Naphthalene-D8	136	5.366	5.373	(1.000)	1165802	40.0000		
$ 63 2-Fluorobiphenyl	172	6.649	6.657	(0.893)	500521	28.4987	28.2	
* 78 Acenaphthene-D10	164	7.446	7.454	(1.000)	604502	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.419	8.427	(1.131)	140441	44.1137	43.7	
* 114 Phenanthrene-D10	188	9.257	9.265	(1.000)	888680	40.0000		
$ 129 Terphenyl-D14	244	11.244	11.242	(0.879)	631617	42.2874	41.9	
* 141 Chrysene-D12	240	12.797	12.805	(1.000)	627771	40.0000		
* 150 Perylene-D12	264	15.736	15.744	(1.000)	361336	40.0000		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.


Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9944,D
Date : 06-APR-2015 20:22
Client ID: MW-08-GW-033115
Sample Info: SI2008-2
Instrument: gcms-u,i
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12
\\target_server\gg\chem\gcms-u,i\U040615,b\U9944,D

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-2RE
Client ID: MW-08-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9987.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.3	ug/L	1	10	9.7	1.7	7.3
Bis(2-Chloroethyl)Ether	U	7.3	ug/L	1	10	9.7	1.9	7.3
2-Chlorophenol	U	7.3	ug/L	1	10	9.7	3.1	7.3
1,3-Dichlorobenzene	U	7.3	ug/L	1	10	9.7	2.0	7.3
1,4-Dichlorobenzene	U	7.3	ug/L	1	10	9.7	2.1	7.3
1,2-Dichlorobenzene	U	7.3	ug/L	1	10	9.7	2.3	7.3
2-Methylphenol	U	7.3	ug/L	1	10	9.7	3.7	7.3
2,2'-Oxybis(1-Chloropropane)	U	7.3	ug/L	1	10	9.7	2.0	7.3
3&4-Methylphenol	U	7.3	ug/L	1	10	9.7	5.4	7.3
N-Nitroso-Di-N-Propylamine	U	7.3	ug/L	1	10	9.7	1.8	7.3
Hexachloroethane	U	7.3	ug/L	1	10	9.7	2.2	7.3
Nitrobenzene	U	7.3	ug/L	1	10	9.7	3.0	7.3
Isophorone	U	7.3	ug/L	1	10	9.7	1.6	7.3
2-Nitrophenol	U	7.3	ug/L	1	10	9.7	2.6	7.3
2,4-Dimethylphenol	U	7.3	ug/L	1	10	9.7	4.3	7.3
Bis(2-Chloroethoxy)Methane	U	7.3	ug/L	1	10	9.7	2.0	7.3
2,4-Dichlorophenol	U	7.3	ug/L	1	10	9.7	2.9	7.3
1,2,4-Trichlorobenzene	U	7.3	ug/L	1	10	9.7	2.0	7.3
Naphthalene	U	7.3	ug/L	1	10	9.7	2.1	7.3
4-Chloroaniline	U	7.3	ug/L	1	10	9.7	1.8	7.3
Hexachlorobutadiene	U	7.3	ug/L	1	10	9.7	1.7	7.3
4-Chloro-3-Methylphenol	U	7.3	ug/L	1	10	9.7	3.5	7.3
2-Methylnaphthalene	U	7.3	ug/L	1	10	9.7	3.1	7.3
Hexachlorocyclopentadiene	U	7.3	ug/L	1	10	9.7	1.2	7.3
2,4,6-Trichlorophenol	U	7.3	ug/L	1	10	9.7	2.6	7.3
2,4,5-Trichlorophenol	U	18	ug/L	1	25	24.	3.5	18.
2-Chloronaphthalene	U	7.3	ug/L	1	10	9.7	2.8	7.3
2-Nitroaniline	U	18	ug/L	1	25	24.	1.7	18.
Dimethyl Phthalate	U	7.3	ug/L	1	10	9.7	2.0	7.3
Acenaphthylene	U	7.3	ug/L	1	10	9.7	1.4	7.3
2,6-Dinitrotoluene	U	7.3	ug/L	1	10	9.7	1.9	7.3
3-Nitroaniline	U	18	ug/L	1	25	24.	1.4	18.
Acenaphthene	U	7.3	ug/L	1	10	9.7	1.4	7.3
2,4-Dinitrophenol	U	18	ug/L	1	25	24.	0.97	18.
4-Nitrophenol	U	18	ug/L	1	25	24.	1.7	18.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-2RE
Client ID: MW-08-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9987.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.3	ug/L	1	10	9.7	1.6	7.3
2,4-Dinitrotoluene	U	7.3	ug/L	1	10	9.7	2.1	7.3
Diethylphthalate	U	7.3	ug/L	1	10	9.7	1.9	7.3
4-Chlorophenyl-Phenylether	U	7.3	ug/L	1	10	9.7	2.1	7.3
Fluorene	U	7.3	ug/L	1	10	9.7	2.0	7.3
4-Nitroaniline	U	18	ug/L	1	25	24.	1.6	18.
4,6-Dinitro-2-Methylphenol	U	18	ug/L	1	25	24.	1.9	18.
N-Nitrosodiphenylamine	U	7.3	ug/L	1	10	9.7	3.6	7.3
4-Bromophenyl-Phenylether	U	7.3	ug/L	1	10	9.7	1.8	7.3
Hexachlorobenzene	U	7.3	ug/L	1	10	9.7	2.0	7.3
Pentachlorophenol	U	18	ug/L	1	25	24.	2.2	18.
Phenanthrene	U	7.3	ug/L	1	10	9.7	2.3	7.3
Anthracene	U	7.3	ug/L	1	10	9.7	1.6	7.3
Carbazole	U	7.3	ug/L	1	10	9.7	2.0	7.3
Di-N-Butylphthalate	U	7.3	ug/L	1	10	9.7	2.4	7.3
Fluoranthene	U	7.3	ug/L	1	10	9.7	2.3	7.3
Pyrene	U	7.3	ug/L	1	10	9.7	1.8	7.3
Butylbenzylphthalate	U	7.3	ug/L	1	10	9.7	1.8	7.3
3,3'-Dichlorobenzidine	U	7.3	ug/L	1	10	9.7	1.1	7.3
Benzo(a)anthracene	U	7.3	ug/L	1	10	9.7	1.6	7.3
Chrysene	U	7.3	ug/L	1	10	9.7	1.6	7.3
Bis(2-Ethylhexyl)Phthalate	U	7.3	ug/L	1	10	9.7	1.7	7.3
Di-N-Octylphthalate	U	7.3	ug/L	1	10	9.7	1.7	7.3
Benzo(b)fluoranthene	U	7.3	ug/L	1	10	9.7	1.2	7.3
Benzo(k)fluoranthene	U	7.3	ug/L	1	10	9.7	1.6	7.3
Benzo(a)pyrene	U	7.3	ug/L	1	10	9.7	1.2	7.3
Indeno(1,2,3-cd)pyrene	U	7.3	ug/L	1	10	9.7	1.8	7.3
Dibenzo(a,h)anthracene	U	7.3	ug/L	1	10	9.7	1.6	7.3
Benzo(g,h,i)perylene	U	7.3	ug/L	1	10	9.7	1.4	7.3
2-Fluorophenol		20.4	%					
Phenol-d6		15.3	%					
Nitrobenzene-d5		63.7	%					
2-Fluorobiphenyl		62.8	%					
2,4,6-Tribromophenol		44.8	%					
Terphenyl-d14		81.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9987.D
Report Date: 09-Apr-2015 10:52

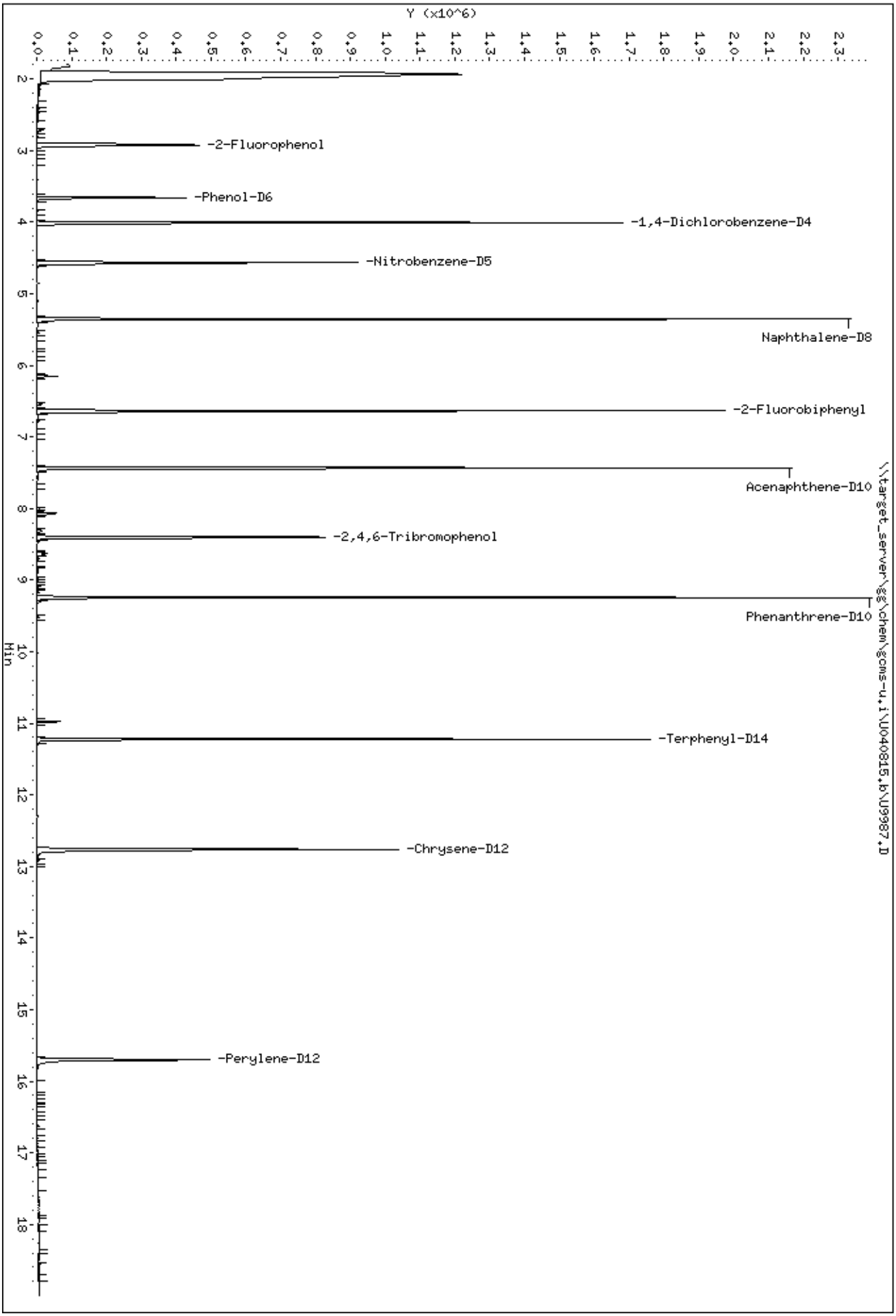
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9987.D
Lab Smp Id: SI2008-2RE Client Smp ID: MW-08-GW-033115
Inj Date : 08-APR-2015 15:46 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2008-2RE
Misc Info : WG160877,WG160882,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.030	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.921	2.911	(0.729)	274790	20.3606	19.8	
$ 12 Phenol-D6	99	3.656	3.656	(0.912)	240142	15.3424	14.9	
* 19 1,4-Dichlorobenzene-D4	152	4.008	4.008	(1.000)	356884	40.0000		
$ 33 Nitrobenzene-D5	82	4.566	4.578	(0.853)	370776	31.8420	30.9	
* 45 Naphthalene-D8	136	5.353	5.364	(1.000)	1301363	40.0000		
$ 63 2-Fluorobiphenyl	172	6.636	6.637	(0.893)	607007	31.3787	30.5	
* 78 Acenaphthene-D10	164	7.433	7.445	(1.000)	665823	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.406	8.417	(1.131)	157234	44.8400	43.5	
* 114 Phenanthrene-D10	188	9.245	9.256	(1.000)	988881	40.0000		
$ 129 Terphenyl-D14	244	11.222	11.222	(0.879)	613803	40.7825	39.6	
* 141 Chrysene-D12	240	12.764	12.775	(1.000)	632578	40.0000		
* 150 Perylene-D12	264	15.703	15.714	(1.000)	345320	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9987,D
Date : 08-APR-2015 15:46
Client ID: MW-08-GW-033115
Sample Info: SI2008-2RE
Instrument: gcms-u,i
\\target_server\gg\chem\gcms-u,i\U040815,b\U9987,D
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-3
Client ID: MW-06-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9945.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.1	ug/L	1	10	9.4	1.7	7.1
Bis(2-Chloroethyl)Ether	U	7.1	ug/L	1	10	9.4	1.9	7.1
2-Chlorophenol	U	7.1	ug/L	1	10	9.4	3.0	7.1
1,3-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
1,4-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.1	7.1
1,2-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.3	7.1
2-Methylphenol	U	7.1	ug/L	1	10	9.4	3.6	7.1
2,2'-Oxybis(1-Chloropropane)	U	7.1	ug/L	1	10	9.4	2.0	7.1
3&4-Methylphenol	U	7.1	ug/L	1	10	9.4	5.3	7.1
N-Nitroso-Di-N-Propylamine	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachloroethane	U	7.1	ug/L	1	10	9.4	2.2	7.1
Nitrobenzene	U	7.1	ug/L	1	10	9.4	2.9	7.1
Isophorone	U	7.1	ug/L	1	10	9.4	1.6	7.1
2-Nitrophenol	U	7.1	ug/L	1	10	9.4	2.5	7.1
2,4-Dimethylphenol	U	7.1	ug/L	1	10	9.4	4.2	7.1
Bis(2-Chloroethoxy)Methane	U	7.1	ug/L	1	10	9.4	2.0	7.1
2,4-Dichlorophenol	U	7.1	ug/L	1	10	9.4	2.8	7.1
1,2,4-Trichlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
Naphthalene	U	7.1	ug/L	1	10	9.4	2.1	7.1
4-Chloroaniline	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachlorobutadiene	U	7.1	ug/L	1	10	9.4	1.7	7.1
4-Chloro-3-Methylphenol	U	7.1	ug/L	1	10	9.4	3.4	7.1
2-Methylnaphthalene	U	7.1	ug/L	1	10	9.4	3.0	7.1
Hexachlorocyclopentadiene	U	7.1	ug/L	1	10	9.4	1.1	7.1
2,4,6-Trichlorophenol	U	7.1	ug/L	1	10	9.4	2.5	7.1
2,4,5-Trichlorophenol	U	18	ug/L	1	25	24.	3.4	18.
2-Chloronaphthalene	U	7.1	ug/L	1	10	9.4	2.7	7.1
2-Nitroaniline	U	18	ug/L	1	25	24.	1.7	18.
Dimethyl Phthalate	U	7.1	ug/L	1	10	9.4	1.9	7.1
Acenaphthylene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2,6-Dinitrotoluene	U	7.1	ug/L	1	10	9.4	1.9	7.1
3-Nitroaniline	U	18	ug/L	1	25	24.	1.4	18.
Acenaphthene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2,4-Dinitrophenol	U	18	ug/L	1	25	24.	0.94	18.
4-Nitrophenol	U	18	ug/L	1	25	24.	1.7	18.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-3
Client ID: MW-06-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9945.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.1	ug/L	1	10	9.4	1.5	7.1
2,4-Dinitrotoluene	U	7.1	ug/L	1	10	9.4	2.1	7.1
Diethylphthalate	U	7.1	ug/L	1	10	9.4	1.9	7.1
4-Chlorophenyl-Phenylether	U	7.1	ug/L	1	10	9.4	2.1	7.1
Fluorene	U	7.1	ug/L	1	10	9.4	2.0	7.1
4-Nitroaniline	U	18	ug/L	1	25	24.	1.5	18.
4,6-Dinitro-2-Methylphenol	U	18	ug/L	1	25	24.	1.9	18.
N-Nitrosodiphenylamine	U	7.1	ug/L	1	10	9.4	3.5	7.1
4-Bromophenyl-Phenylether	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
Pentachlorophenol	U	18	ug/L	1	25	24.	2.2	18.
Phenanthrene	U	7.1	ug/L	1	10	9.4	2.3	7.1
Anthracene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Carbazole	U	7.1	ug/L	1	10	9.4	2.0	7.1
Di-N-Butylphthalate	U	7.1	ug/L	1	10	9.4	2.4	7.1
Fluoranthene	U	7.1	ug/L	1	10	9.4	2.3	7.1
Pyrene	U	7.1	ug/L	1	10	9.4	1.8	7.1
Butylbenzylphthalate	U	7.1	ug/L	1	10	9.4	1.8	7.1
3,3'-Dichlorobenzidine	U	7.1	ug/L	1	10	9.4	1.0	7.1
Benzo(a)anthracene	U	7.1	ug/L	1	10	9.4	1.5	7.1
Chrysene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Bis(2-Ethylhexyl)Phthalate	U	7.1	ug/L	1	10	9.4	1.7	7.1
Di-N-Octylphthalate	U	7.1	ug/L	1	10	9.4	1.7	7.1
Benzo(b)fluoranthene	U	7.1	ug/L	1	10	9.4	1.1	7.1
Benzo(k)fluoranthene	U	7.1	ug/L	1	10	9.4	1.5	7.1
Benzo(a)pyrene	U	7.1	ug/L	1	10	9.4	1.1	7.1
Indeno(1,2,3-cd)pyrene	UL	7.1	ug/L	1	10	9.4	1.8	7.1
Dibenzo(a,h)anthracene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Benzo(g,h,i)perylene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2-Fluorophenol		36.4	%					
Phenol-d6		25.0	%					
Nitrobenzene-d5		69.3	%					
2-Fluorobiphenyl		72.3	%					
2,4,6-Tribromophenol		78.8	%					
Terphenyl-d14		97.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9945.D
Report Date: 09-Apr-2015 10:50

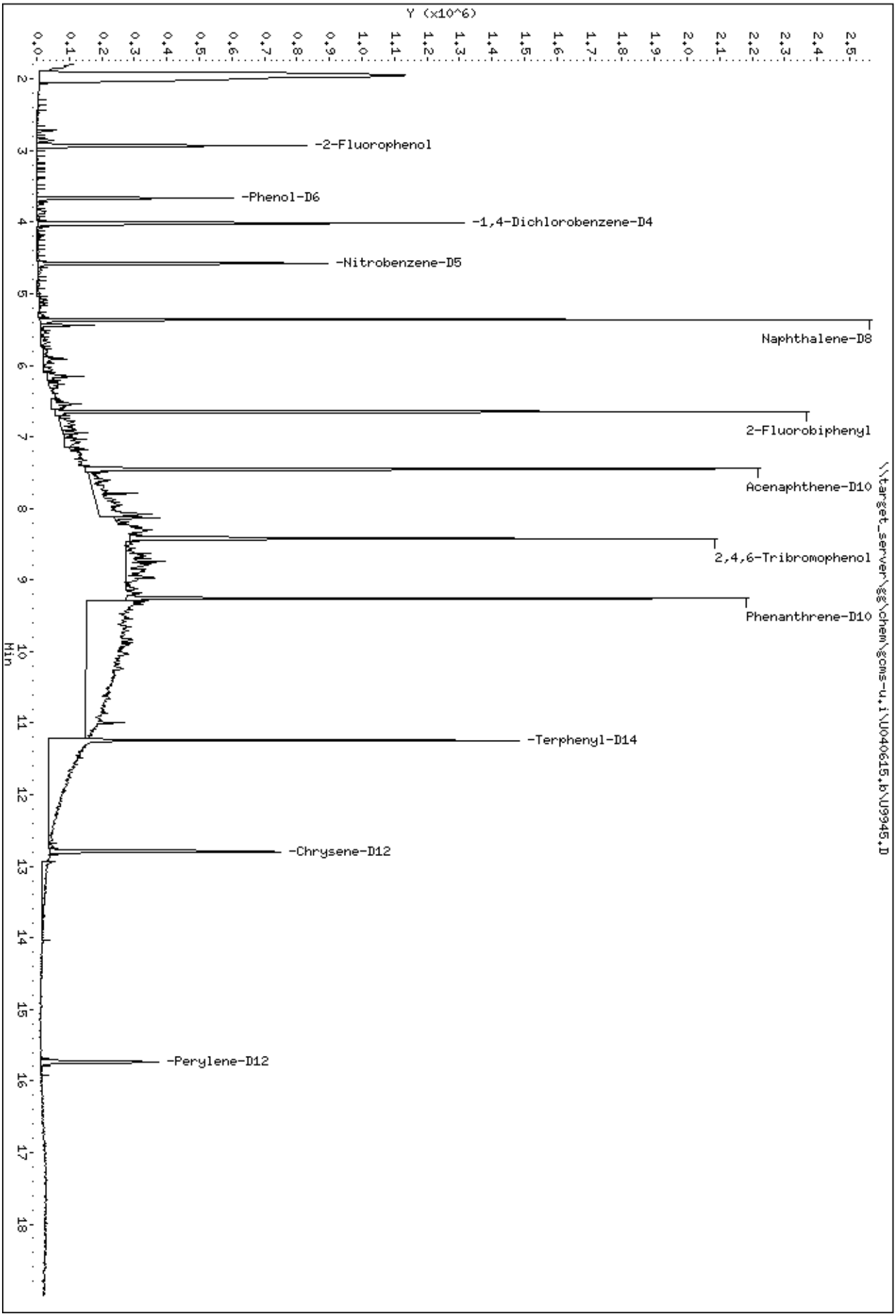
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9945.D
Lab Smp Id: SI2008-3 Client Smp ID: MW-06-GW-033115
Inj Date : 06-APR-2015 20:48 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2008-3
Misc Info : WG160781,WG160777,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.923	2.931	(0.727)	454325	36.4545	34.4	
$ 12 Phenol-D6	99	3.658	3.666	(0.910)	362186	25.0583	23.6	
* 19 1,4-Dichlorobenzene-D4	152	4.020	4.018	(1.000)	329559	40.0000		
$ 33 Nitrobenzene-D5	82	4.579	4.587	(0.853)	390134	34.6637	32.7	
* 45 Naphthalene-D8	136	5.365	5.373	(1.000)	1257839	40.0000		
$ 63 2-Fluorobiphenyl	172	6.649	6.657	(0.892)	705193	36.1724	34.1	
* 78 Acenaphthene-D10	164	7.456	7.454	(1.000)	671012	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.419	8.427	(1.129)	278327	78.7594	74.3	
* 114 Phenanthrene-D10	188	9.257	9.265	(1.000)	937918	40.0000		
$ 129 Terphenyl-D14	244	11.244	11.242	(0.879)	518438	48.7638	46.0	
* 141 Chrysene-D12	240	12.797	12.805	(1.000)	446846	40.0000		
* 150 Perylene-D12	264	15.736	15.744	(1.000)	235448	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9945,D
Date : 06-APR-2015 20:48
Client ID: MW-06-GW-033115
Sample Info: SI2008-3
Instrument: gcms-u,i
\\target_server\gg\chem\gcms-u,i\U040615,b\U9945,D
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
2-Fluorobiphenyl
Acenaphthene-D10
2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-4
Client ID: MW-07-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9946.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
Bis(2-Chloroethyl)Ether	U	7.5	ug/L	1	10	10.	2.0	7.5
2-Chlorophenol	U	7.5	ug/L	1	10	10.	3.2	7.5
1,3-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
1,4-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.2	7.5
1,2-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.4	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
2,2'-Oxybis(1-Chloropropane)	U	7.5	ug/L	1	10	10.	2.1	7.5
3&4-Methylphenol	U	7.5	ug/L	1	10	10.	5.6	7.5
N-Nitroso-Di-N-Propylamine	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachloroethane	U	7.5	ug/L	1	10	10.	2.3	7.5
Nitrobenzene	U	7.5	ug/L	1	10	10.	3.1	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2-Nitrophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Bis(2-Chloroethoxy)Methane	U	7.5	ug/L	1	10	10.	2.1	7.5
2,4-Dichlorophenol	U	7.5	ug/L	1	10	10.	3.0	7.5
1,2,4-Trichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Naphthalene	U	7.5	ug/L	1	10	10.	2.2	7.5
4-Chloroaniline	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobutadiene	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Methylnaphthalene	U	7.5	ug/L	1	10	10.	3.2	7.5
Hexachlorocyclopentadiene	U	7.5	ug/L	1	10	10.	1.2	7.5
2,4,6-Trichlorophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.9	7.5
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
2,6-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.0	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	1.0	19.
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-4
Client ID: MW-07-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9946.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.5	ug/L	1	10	10.	1.6	7.5
2,4-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.2	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
4-Chlorophenyl-Phenylether	U	7.5	ug/L	1	10	10.	2.2	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.
4,6-Dinitro-2-Methylphenol	U	19	ug/L	1	25	25.	2.0	19.
N-Nitrosodiphenylamine	U	7.5	ug/L	1	10	10.	3.7	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Phenanthrene	U	7.5	ug/L	1	10	10.	2.4	7.5
Anthracene	U	7.5	ug/L	1	10	10.	1.7	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
Di-N-Butylphthalate	U	7.5	ug/L	1	10	10.	2.5	7.5
Fluoranthene	U	7.5	ug/L	1	10	10.	2.4	7.5
Pyrene	U	7.5	ug/L	1	10	10.	1.9	7.5
Butylbenzylphthalate	U	7.5	ug/L	1	10	10.	1.9	7.5
3,3'-Dichlorobenzidine	U	7.5	ug/L	1	10	10.	1.1	7.5
Benzo(a)anthracene	U	7.5	ug/L	1	10	10.	1.6	7.5
Chrysene	U	7.5	ug/L	1	10	10.	1.7	7.5
Bis(2-Ethylhexyl)Phthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Di-N-Octylphthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Benzo(b)fluoranthene	U	7.5	ug/L	1	10	10.	1.2	7.5
Benzo(k)fluoranthene	U	7.5	ug/L	1	10	10.	1.6	7.5
Benzo(a)pyrene	U	7.5	ug/L	1	10	10.	1.2	7.5
Indeno(1,2,3-cd)pyrene	UL	7.5	ug/L	1	10	10.	1.9	7.5
Dibenzo(a,h)anthracene	U	7.5	ug/L	1	10	10.	1.7	7.5
Benzo(g,h,i)perylene	U	7.5	ug/L	1	10	10.	1.5	7.5
2-Fluorophenol		21.0	%					
Phenol-d6		16.7	%					
Nitrobenzene-d5		61.3	%					
2-Fluorobiphenyl		57.4	%					
2,4,6-Tribromophenol		45.6	%					
Terphenyl-d14		90.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9946.D
Report Date: 09-Apr-2015 10:50

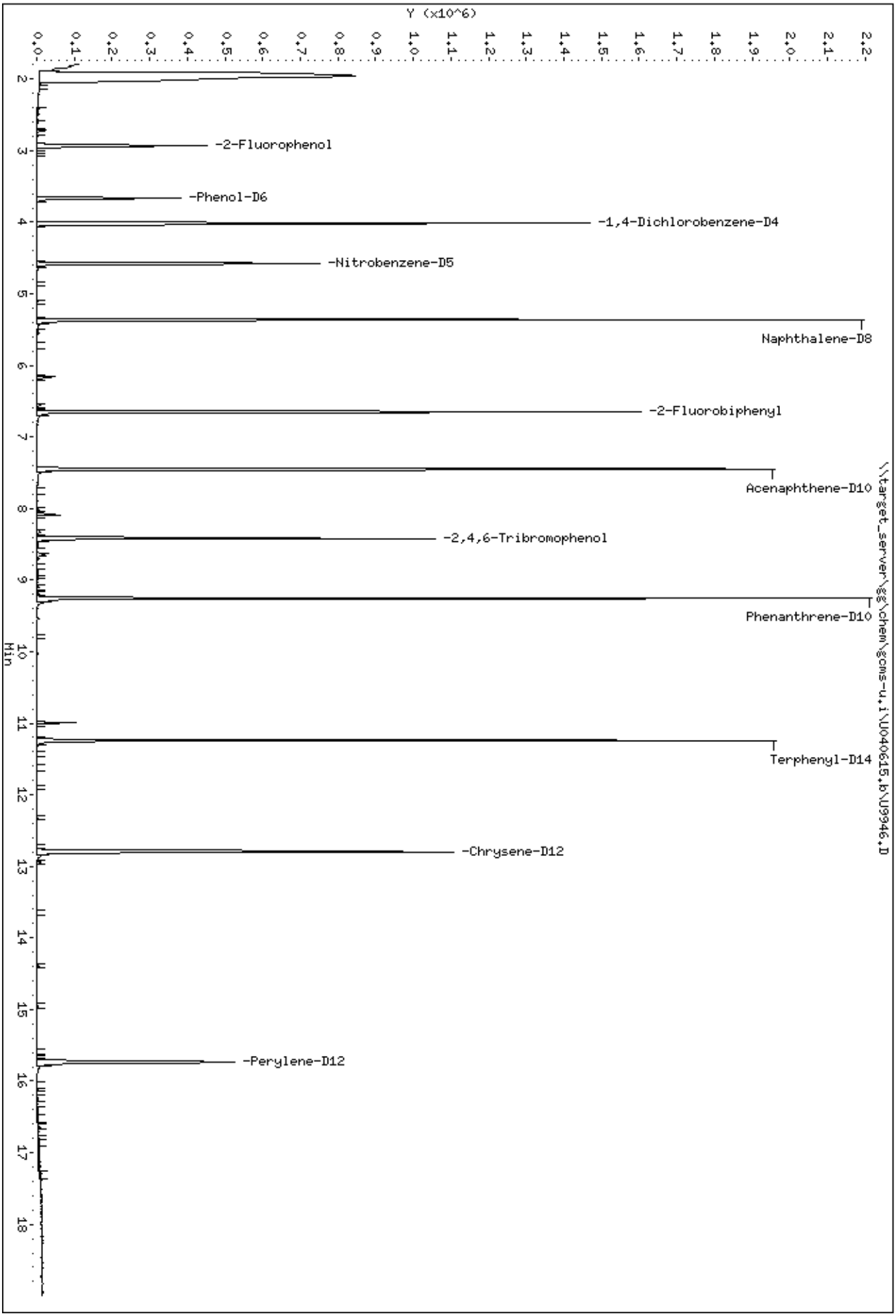
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9946.D
Lab Smp Id: SI2008-4 Client Smp ID: MW-07-GW-033115
Inj Date : 06-APR-2015 21:13 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2008-4
Misc Info : WG160781,WG160777,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.921	2.931	(0.727)	268626	20.9500	21.0	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	248254	16.6943	16.7	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	339063	40.0000		
$ 33 Nitrobenzene-D5	82	4.577	4.587	(0.853)	328075	30.6446	30.6	
* 45 Naphthalene-D8	136	5.364	5.373	(1.000)	1196480	40.0000		
$ 63 2-Fluorobiphenyl	172	6.647	6.657	(0.892)	520263	28.7010	28.7	
* 78 Acenaphthene-D10	164	7.454	7.454	(1.000)	623916	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.417	8.427	(1.129)	150008	45.6526	45.6	
* 114 Phenanthrene-D10	188	9.255	9.265	(1.000)	947183	40.0000		
$ 129 Terphenyl-D14	244	11.243	11.242	(0.879)	730800	45.2335	45.2	
* 141 Chrysene-D12	240	12.795	12.805	(1.000)	679043	40.0000		
* 150 Perylene-D12	264	15.734	15.744	(1.000)	385154	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9946,D
Date : 06-APR-2015 21:13
Client ID: MW-07-GW-033115
Sample Info: SI2008-4
Instrument: gcms-u,i
\\target_server\gg\chem\gcms-u,i\U040615,b\U9946,D
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
Terphenyl-D14
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-7
Client ID: DUPLICATE-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9947.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.4	ug/L	1	10	9.8	1.8	7.4
Bis(2-Chloroethyl)Ether	U	7.4	ug/L	1	10	9.8	2.0	7.4
2-Chlorophenol	U	7.4	ug/L	1	10	9.8	3.1	7.4
1,3-Dichlorobenzene	U	7.4	ug/L	1	10	9.8	2.0	7.4
1,4-Dichlorobenzene	U	7.4	ug/L	1	10	9.8	2.2	7.4
1,2-Dichlorobenzene	U	7.4	ug/L	1	10	9.8	2.4	7.4
2-Methylphenol	U	7.4	ug/L	1	10	9.8	3.7	7.4
2,2'-Oxybis(1-Chloropropane)	U	7.4	ug/L	1	10	9.8	2.0	7.4
3&4-Methylphenol	U	7.4	ug/L	1	10	9.8	5.5	7.4
N-Nitroso-Di-N-Propylamine	U	7.4	ug/L	1	10	9.8	1.9	7.4
Hexachloroethane	U	7.4	ug/L	1	10	9.8	2.2	7.4
Nitrobenzene	U	7.4	ug/L	1	10	9.8	3.0	7.4
Isophorone	U	7.4	ug/L	1	10	9.8	1.7	7.4
2-Nitrophenol	U	7.4	ug/L	1	10	9.8	2.6	7.4
2,4-Dimethylphenol	U	7.4	ug/L	1	10	9.8	4.3	7.4
Bis(2-Chloroethoxy)Methane	U	7.4	ug/L	1	10	9.8	2.0	7.4
2,4-Dichlorophenol	U	7.4	ug/L	1	10	9.8	2.9	7.4
1,2,4-Trichlorobenzene	U	7.4	ug/L	1	10	9.8	2.0	7.4
Naphthalene	U	7.4	ug/L	1	10	9.8	2.2	7.4
4-Chloroaniline	U	7.4	ug/L	1	10	9.8	1.9	7.4
Hexachlorobutadiene	U	7.4	ug/L	1	10	9.8	1.8	7.4
4-Chloro-3-Methylphenol	U	7.4	ug/L	1	10	9.8	3.5	7.4
2-Methylnaphthalene	U	7.4	ug/L	1	10	9.8	3.1	7.4
Hexachlorocyclopentadiene	U	7.4	ug/L	1	10	9.8	1.2	7.4
2,4,6-Trichlorophenol	U	7.4	ug/L	1	10	9.8	2.6	7.4
2,4,5-Trichlorophenol	U	18	ug/L	1	25	24.	3.5	18.
2-Chloronaphthalene	U	7.4	ug/L	1	10	9.8	2.8	7.4
2-Nitroaniline	U	18	ug/L	1	25	24.	1.8	18.
Dimethyl Phthalate	U	7.4	ug/L	1	10	9.8	2.0	7.4
Acenaphthylene	U	7.4	ug/L	1	10	9.8	1.5	7.4
2,6-Dinitrotoluene	U	7.4	ug/L	1	10	9.8	2.0	7.4
3-Nitroaniline	U	18	ug/L	1	25	24.	1.5	18.
Acenaphthene	U	7.4	ug/L	1	10	9.8	1.5	7.4
2,4-Dinitrophenol	U	18	ug/L	1	25	24.	0.98	18.
4-Nitrophenol	U	18	ug/L	1	25	24.	1.8	18.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2008-7
Client ID: DUPLICATE-GW-033115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2008
Lab File ID: U9947.D

Sample Date: 31-MAR-15
Received Date: 01-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.4	ug/L	1	10	9.8	1.6	7.4
2,4-Dinitrotoluene	U	7.4	ug/L	1	10	9.8	2.2	7.4
Diethylphthalate	U	7.4	ug/L	1	10	9.8	2.0	7.4
4-Chlorophenyl-Phenylether	U	7.4	ug/L	1	10	9.8	2.2	7.4
Fluorene	U	7.4	ug/L	1	10	9.8	2.0	7.4
4-Nitroaniline	U	18	ug/L	1	25	24.	1.6	18.
4,6-Dinitro-2-Methylphenol	U	18	ug/L	1	25	24.	2.0	18.
N-Nitrosodiphenylamine	U	7.4	ug/L	1	10	9.8	3.6	7.4
4-Bromophenyl-Phenylether	U	7.4	ug/L	1	10	9.8	1.9	7.4
Hexachlorobenzene	U	7.4	ug/L	1	10	9.8	2.0	7.4
Pentachlorophenol	U	18	ug/L	1	25	24.	2.2	18.
Phenanthrene	U	7.4	ug/L	1	10	9.8	2.4	7.4
Anthracene	U	7.4	ug/L	1	10	9.8	1.7	7.4
Carbazole	U	7.4	ug/L	1	10	9.8	2.0	7.4
Di-N-Butylphthalate	U	7.4	ug/L	1	10	9.8	2.4	7.4
Fluoranthene	U	7.4	ug/L	1	10	9.8	2.4	7.4
Pyrene	U	7.4	ug/L	1	10	9.8	1.9	7.4
Butylbenzylphthalate	U	7.4	ug/L	1	10	9.8	1.9	7.4
3,3'-Dichlorobenzidine	U	7.4	ug/L	1	10	9.8	1.1	7.4
Benzo(a)anthracene	U	7.4	ug/L	1	10	9.8	1.6	7.4
Chrysene	U	7.4	ug/L	1	10	9.8	1.7	7.4
Bis(2-Ethylhexyl)Phthalate	U	7.4	ug/L	1	10	9.8	1.8	7.4
Di-N-Octylphthalate	U	7.4	ug/L	1	10	9.8	1.8	7.4
Benzo(b)fluoranthene	U	7.4	ug/L	1	10	9.8	1.2	7.4
Benzo(k)fluoranthene	U	7.4	ug/L	1	10	9.8	1.6	7.4
Benzo(a)pyrene	U	7.4	ug/L	1	10	9.8	1.2	7.4
Indeno(1,2,3-cd)pyrene	UL	7.4	ug/L	1	10	9.8	1.9	7.4
Dibenzo(a,h)anthracene	U	7.4	ug/L	1	10	9.8	1.7	7.4
Benzo(g,h,i)perylene	U	7.4	ug/L	1	10	9.8	1.5	7.4
2-Fluorophenol		23.6	%					
Phenol-d6		16.6	%					
Nitrobenzene-d5		61.1	%					
2-Fluorobiphenyl		58.0	%					
2,4,6-Tribromophenol		44.9	%					
Terphenyl-d14		85.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9947.D
Report Date: 09-Apr-2015 10:50

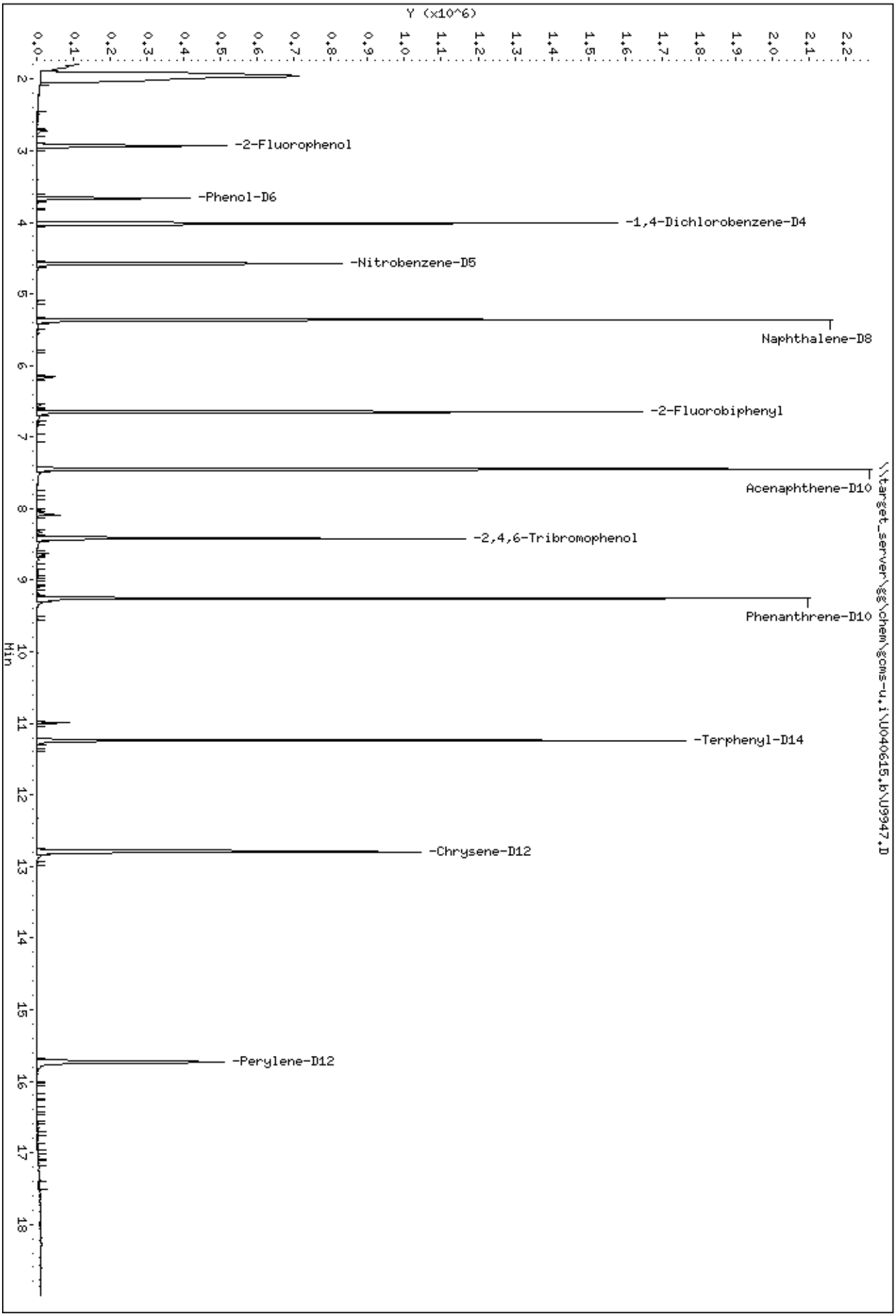
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9947.D
Lab Smp Id: SI2008-7 Client Smp ID: DUPLICATE-GW-033115
Inj Date : 06-APR-2015 21:39 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2008-7
Misc Info : WG160781,WG160777,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.020	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.930	2.931	(0.730)	304679	23.6401	23.2	
$ 12 Phenol-D6	99	3.665	3.666	(0.912)	247993	16.5914	16.3	
* 19 1,4-Dichlorobenzene-D4	152	4.017	4.018	(1.000)	340808	40.0000		
$ 33 Nitrobenzene-D5	82	4.576	4.587	(0.853)	342225	30.5485	29.9	
* 45 Naphthalene-D8	136	5.363	5.373	(1.000)	1252010	40.0000		
$ 63 2-Fluorobiphenyl	172	6.646	6.657	(0.892)	545806	29.0121	28.4	
* 78 Acenaphthene-D10	164	7.453	7.454	(1.000)	647529	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.416	8.427	(1.129)	153110	44.8975	44.0	
* 114 Phenanthrene-D10	188	9.254	9.265	(1.000)	966061	40.0000		
$ 129 Terphenyl-D14	244	11.242	11.242	(0.879)	662931	42.7091	41.9	
* 141 Chrysene-D12	240	12.794	12.805	(1.000)	652389	40.0000		
* 150 Perylene-D12	264	15.733	15.744	(1.000)	377556	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9947.D
Date : 06-APR-2015 21:39
Client ID: DUPLICATE-GW-033115
Sample Info: S12008-7
Instrument: gcms-u,i
Y (x10^6)
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12
\\target_server\gg\chem\gcms-u,i\U040615,b\U9947.D

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-U
Lab File IDs : U9722.D U9723.D U9721.D U9724.D U9725.D U9726.D **Column ID:**
Calibration Date(s): 23-MAR-15 15:13 23-MAR-15 17:23

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Crv					Max	
	10.0000	25.0000	50.0000	75.0000	100.0000	125.0000	New	b	m1	m2	%RSD	%RSD	
Phenol	1.79315	1.79641	1.70590	2.02599	1.74890	1.92642	AVG		1.83280		6.55312	30.00000	O
Bis(2-Chloroethyl)ether	1.48150	1.37761	1.21853	1.29677	1.07681	1.15826	AVG		1.26825		11.66685	15.00000	O
2-Chlorophenol	1.53342	1.52803	1.41536	1.52639	1.38865	1.41647	AVG		1.46805		4.62154	15.00000	O
1,3-Dichlorobenzene	1.62344	1.60773	1.50123	1.58079	1.36364	1.36819	AVG		1.50750		7.79279	15.00000	O
1,4-Dichlorobenzene	1.56333	1.51643	1.40536	1.46198	1.28065	1.25271	AVG		1.41341		8.89108	30.00000	O
1,2-Dichlorobenzene	1.57728	1.48589	1.39544	1.47516	1.22836	1.18592	AVG		1.39134		11.10272	15.00000	O
2-Methylphenol	1.34125	1.39244	1.29548	1.44036	1.27655	1.35796	AVG		1.35067		4.49991	15.00000	O
2,2'-Oxybis(1-chloropropane	1.67335	1.62335	1.46365	1.50692	1.26618	1.25895	AVG		1.46540		11.90707	15.00000	O
3&4-Methylphenol	1.34166	1.28032	1.09564	1.17472	0.85178	0.93664	AVG		1.11346		17.21582	15.00000	W(
N-Nitroso-di-n-propylamine	0.93513	0.87285	0.72497	0.77761	0.59168	0.62700	AVG		0.75487		17.85253	15.00000	W(
Hexachloroethane	0.71017	0.69144	0.63199	0.65289	0.56964	0.57344	AVG		0.63826		9.17919	15.00000	O
Nitrobenzene	0.36751	0.36430	0.33421	0.34159	0.29289	0.26823	AVG		0.32812		12.11969	15.00000	O
Isophorone	0.73570	0.72549	0.64205	0.70337	0.64272	0.66136	AVG		0.68511		6.10176	15.00000	O
2-Nitrophenol	0.20148	0.21212	0.19054	0.20800	0.18599	0.18452	AVG		0.19711		5.95225	30.00000	O
2,4-Dimethylphenol	0.40069	0.39563	0.33829	0.36213	0.31208	0.31284	AVG		0.35361		11.08068	15.00000	O
Bis(2-Chloroethoxy)methane	0.47064	0.56903	0.46183	0.49766	0.44147	0.43908	AVG		0.47995		10.12810	15.00000	O
2,4-Dichlorophenol	0.30113	0.30227	0.25596	0.26488	0.22561	0.22624	AVG		0.26268		12.96388	30.00000	O
1,2,4-Trichlorobenzene	0.32924	0.30989	0.26858	0.27417	0.23681	0.23019	AVG		0.27482		14.24940	15.00000	O
Naphthalene	323717	757473	1342694	2074701	2761078	3329736	QUA	0.01948	0.77228	0.28656	0.99097	0.99000	O
4-Chloroaniline	0.47719	0.43745	0.39001	0.41283	0.34158	0.34248	AVG		0.40025		13.38277	15.00000	O
Hexachlorobutadiene	54870	123736	233802	326456	465980	551647	QUA	0.01396	4.60157	10.80533	0.99875	0.99000	O
4-Chloro-3-Methylphenol	0.31952	0.32050	0.27766	0.28671	0.24503	0.23314	AVG		0.28042		13.02447	30.00000	O
2-Methylnaphthalene	0.71657	0.67188	0.58744	0.58222	0.51908	0.49276	AVG		0.59499		14.48263	15.00000	O
Hexachlorocyclopentadiene	0.38701	0.36882	0.31751	0.32429	0.30723	0.29525	AVG		0.33335		10.90218	15.00000	O
2,4,6-Trichlorophenol	0.35635	0.37509	0.32996	0.34388	0.32091	0.31170	AVG		0.33965		6.94109	30.00000	O
2,4,5-Trichlorophenol	0.36383	0.37429	0.37283	0.39043	0.32578	0.33666	AVG		0.36064		6.81821	15.00000	O
2-Chloronaphthalene	1.34267	1.13887	1.13821	1.31311	0.98056	1.03453	AVG		1.15799		12.55297	15.00000	O
2-Nitroaniline	0.37716	0.39599	0.37050	0.40216	0.37330	0.38646	AVG		0.38426		3.33828	15.00000	O
Dimethyl Phthalate	1.39139	1.37594	1.15324	1.27210	1.22064	1.21325	AVG		1.27109		7.48388	15.00000	O
2,6-Dinitrotoluene	0.30723	0.29789	0.26879	0.28324	0.27838	0.27300	AVG		0.28475		5.24062	15.00000	O
Acenaphthylene	1.95414	1.87749	1.63916	1.61432	1.46221	1.52140	AVG		1.67812		11.69854	15.00000	O
3-Nitroaniline	0.34307	0.35811	0.33108	0.37114	0.30602	0.33306	AVG		0.34042		6.68395	15.00000	O
Acenaphthene	1.17850	1.15280	0.94650	0.93766	0.90448	0.86328	AVG		0.99720		13.43375	30.00000	O
2,4-Dinitrophenol	0.12272	0.14876	0.16255	0.18303	0.16492	0.18337	AVG		0.16089		14.22441	15.00000	O
4-Nitrophenol	0.20628	0.21479	0.14949	0.19495	0.26856	0.31349	AVG		0.22460		25.79805	15.00000	W(
Dibenzofuran	1.57583	1.46633	1.35554	1.37083	1.09838	1.13481	AVG		1.33362		13.94823	15.00000	O
2,4-Dinitrotoluene	0.36719	0.36459	0.33269	0.36824	0.33845	0.34958	AVG		0.35346		4.38772	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2008
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-U
Lab File IDs : U9722.D U9723.D U9721.D U9724.D U9725.D U9726.D **Column ID:**
Calibration Date(s): 23-MAR-15 15:13
23-MAR-15 17:23

Diethylphthalate	1.47456	1.36566	1.16197	1.19486	1.05486	1.03565	AVG		1.21459		14.31258	15.00000	O
Fluorene	205691	462275	767813	1142480	1471190	1679457	QUA	0.02823	0.55423	0.31250	0.99352	0.99000	O
4-Chlorophenyl-phenylether	88601	203096	340600	455799	590788	669007	QUA	0.03926	0.87107	2.53888	0.99732	0.99000	O
4-Nitroaniline	0.26548	0.27517	0.25682	0.29833	0.27880	0.26983	AVG		0.27407		5.16396	15.00000	O
4,6-Dinitro-2-Methylphenol	0.11532	0.13182	0.12100	0.14679	0.11879	0.12107	AVG		0.12580		9.27788	15.00000	O
N-Nitrosodiphenylamine	0.70366	0.68861	0.57816	0.60241	0.52052	0.52106	AVG		0.60240		13.19558	30.00000	O
4-Bromophenyl-phenylether	56943	134774	243002	348997	450014	580619	QUA	-0.00356	3.84563	4.23285	0.99114	0.99000	O
Hexachlorobenzene	0.29051	0.28556	0.23593	0.25535	0.20252	0.20028	AVG		0.24503		16.02619	15.00000	W(
Pentachlorophenol	0.16179	0.16234	0.14200	0.14957	0.12069	0.11690	AVG		0.14222		13.87298	30.00000	O
Phenanthrene	273709	587294	1032211	1390501	1766050	2147135	QUA	0.02504	0.55435	0.54216	0.99146	0.99000	O
Anthracene	1.13341	1.13629	0.92760	0.95241	0.75638	0.75336	AVG		0.94324		18.03733	15.00000	W(
Carbazole	0.98951	0.96976	0.81791	0.86018	0.71134	0.74472	AVG		0.84890		13.45585	15.00000	O
Di-n-butylphthalate	1.65190	1.50829	1.18912	1.25793	0.98363	0.98204	AVG		1.26215		21.66542	15.00000	W(
Fluoranthene	266404	561346	979174	1479963	1933344	2326366	QUA	0.01825	0.77881	0.32581	0.99069	0.99000	O
Pyrene	1.52194	1.56513	1.46283	1.48858	1.29093	1.31368	AVG		1.44051		7.81884	15.00000	O
Butylbenzylphthalate	0.79909	0.76974	0.72202	0.80454	0.69152	0.71807	AVG		0.75083		6.24471	15.00000	O
Benzo(a)anthracene	1.02105	1.03202	0.95260	1.04463	0.90627	0.90462	AVG		0.97686		6.53517	15.00000	O
3,3'-Dichlorobenzidine	0.27362	0.29509	0.27907	0.30351	0.26780	0.26305	AVG		0.28036		5.65656	15.00000	O
Chrysene	1.03035	1.01919	0.90025	0.99756	0.87333	0.86433	AVG		0.94750		8.05985	15.00000	O
bis(2-Ethylhexyl)phthalate	1.01808	1.01304	0.99457	1.08044	0.97188	0.99704	AVG		1.01251		3.65775	15.00000	O
Di-n-octylphthalate	2.33119	2.27530	2.51390	2.94011	2.69741	2.81901	AVG		2.59615		10.30897	30.00000	O
Benzo(b)fluoranthene	1.14698	1.23139	1.20971	1.34260	1.18318	1.22475	AVG		1.22310		5.41337	15.00000	O
Benzo(k)fluoranthene	1.14182	1.23282	1.18950	1.35260	1.18288	1.25903	AVG		1.22644		6.04059	15.00000	O
Benzo(a)pyrene	0.92707	0.97989	0.98502	1.11967	1.01555	1.03008	AVG		1.00954		6.39927	30.00000	O
Indeno(1,2,3-cd)pyrene	0.47609	0.53551	0.53980	0.60244	0.54117	0.56608	AVG		0.54351		7.63537	15.00000	O
Dibenzo(a,h)anthracene	0.44499	0.52064	0.53312	0.64703	0.54847	0.56356	AVG		0.54297		12.07079	15.00000	O
Benzo(g,h,i)perylene	0.58705	0.63613	0.62781	0.68029	0.54804	0.55516	AVG		0.60575		8.48406	15.00000	O
2-Fluorophenol	1.50107	1.51788	1.44725	1.60969	1.47828	1.52181	AVG		1.51266		3.63553	15.00000	
Phenol-D6	1.79797	1.79098	1.68645	1.85770	1.65603	1.73676	AVG		1.75431		4.30455	15.00000	
Nitrobenzene-D5	0.38536	0.38396	0.34508	0.36925	0.33475	0.32905	AVG		0.35791		6.95056	15.00000	
2-Fluorobiphenyl	1.31427	1.33753	1.11449	1.18219	1.02470	0.99968	AVG		1.16214		12.28169	15.00000	
2,4,6-Tribromophenol	0.22780	0.23300	0.19732	0.21339	0.19516	0.19728	AVG		0.21066		7.93542	15.00000	
Terphenyl-D14	1.03522	1.03746	0.92644	1.00899	0.80635	0.89575	AVG		0.95170		9.68827	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG160080-8
Level: LOW
Data Type: MS DATA
SpikeList File: INDcheck8270.spk
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Misc Info: WG160080,WG160080,WG160080-4

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	49.0	98.11	80-120
2 N-Nitrosodimethyla	50.0	44.9	89.85	80-120
3 Pyridine	50.0	51.9	103.73	80-120
5 2-Picoline	50.0	53.6	107.17	80-120
6 N-Nitrosomethyleth	50.0	49.3	98.60	80-120
7 Methyl Methanesulf	50.0	42.7	85.40	80-120
9 N-Nitrosodiethylam	50.0	51.1	102.17	80-120
10 Ethyl Methanesulfo	50.0	48.7	97.42	80-120
11 Benzaldehyde	50.0	0.000	*	80-120
14 Aniline	50.0	53.5	106.97	80-120
13 Phenol	50.0	52.6	105.26	80-120
16 Bis(2-Chloroethyl)	50.0	62.8	125.62*	80-120
17 2-Chlorophenol	50.0	51.2	102.37	80-120
18 1,3-Dichlorobenzen	50.0	53.5	107.09	80-120
20 1,4-Dichlorobenzen	50.0	53.2	106.32	80-120
22 1,2-Dichlorobenzen	50.0	54.1	108.25	80-120
21 Benzyl alcohol	50.0	51.6	103.21	80-120
25 2,2'-Oxybis(1-chlo	50.0	48.5	96.97	80-120
23 2-Methylphenol	50.0	50.3	100.56	80-120
27 Acetophenone	100	89.1	89.15	80-120
26 N-Nitrosopyrrolidi	50.0	53.0	105.96	80-120
31 o-Toluidine	50.0	53.6	107.18	80-120
29 N-Nitrosomorpholin	50.0	51.7	103.47	80-120
30 N-Nitroso-di-n-pro	50.0	45.5	90.98	80-120
32 Hexachloroethane	50.0	51.9	103.75	80-120
28 3&4-Methylphenol	50.0	45.4	90.90	80-120
34 Nitrobenzene	50.0	57.2	114.50	80-120
35 N-Nitrosopiperidin	50.0	52.5	104.92	80-120
36 Isophorone	50.0	52.9	105.85	80-120
37 2-Nitrophenol	50.0	52.1	104.21	80-120
38 2,4-Dimethylphenol	50.0	50.4	100.75	80-120
39 O,O,O-Triethylphos	50.0	56.2	112.41	80-120
40 Bis(2-Chloroethoxy	50.0	54.8	109.71	80-120
42 2,4-Dichlorophenol	50.0	52.8	105.63	80-120
43 1,2,4-Trichloroben	50.0	52.5	104.96	80-120
41 Benzoic acid	50.0	84.1	168.24*	80-120
46 Naphthalene	50.0	54.4	108.79	80-120
48 2,6-Dichlorophenol	50.0	50.6	101.30	80-120
47 4-Chloroaniline	50.0	51.5	102.95	80-120
49 Hexachloropropene	50.0	47.6	95.17	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
50 Hexachlorobutadien	50.0	54.6	109.26	80-120
44 A,A-Dimethylphene	50.0	0.000	*	80-120
51 N-Nitroso-Di-N-But	50.0	56.0	111.93	80-120
52 p-Phenylenediamine	50.0	5.19	10.39*	80-120
53 Caprolactam	50.0	50.1	100.25	80-120
54 4-Chloro-3-Methylp	50.0	52.7	105.45	80-120
55 Isosafrole	50.0	48.6	97.21	80-120
56 2-Methylnaphthalen	50.0	56.3	112.56	80-120
58 1-Methylnaphthalen	50.0	53.1	106.25	80-120
60 1,2,4,5-Tetrachlor	100	99.0	99.03	80-120
57 Diethyl Adipate	50.0	0.000	*	80-120
59 Hexachlorocyclopen	50.0	36.2	72.46*	80-120
61 2,4,6-Trichlorophe	50.0	50.9	101.79	80-120
62 2,4,5-Trichlorophe	50.0	52.4	104.90	80-120
64 Safrole	50.0	47.1	94.19	80-120
66 2-Chloronaphthalen	50.0	51.2	102.51	80-120
65 1,1'-Biphenyl	50.0	50.0	100.09	80-120
67 1-Chloronaphthalen	50.0	41.7	83.41	80-120
69 2-Nitroaniline	50.0	42.6	85.23	80-120
70 1,4-Naphthoquinone	50.0	54.9	109.73	80-120
73 1,3-Dinitrobenzene	50.0	48.1	96.15	80-120
72 Dimethyl Phthalate	50.0	48.7	97.42	80-120
74 2,6-Dinitrotoluene	50.0	48.6	97.17	80-120
75 Acenaphthylene	50.0	46.9	93.84	80-120
77 3-Nitroaniline	50.0	50.5	100.95	80-120
79 Acenaphthene	50.0	50.5	100.95	80-120
80 2,4-Dinitrophenol	50.0	52.0	104.03	80-120
82 Pentachlorobenzene	50.0	47.8	95.63	80-120
83 Dibenzofuran	50.0	51.4	102.70	80-120
81 4-Nitrophenol	50.0	40.8	81.53	80-120
84 2,4-Dinitrotoluene	50.0	50.0	99.99	80-120
85 1-Naphthylamine	50.0	44.8	89.67	80-120
87 2,3,4,6-Tetrachlor	50.0	47.7	95.32	80-120
88 2-Naphthylamine	50.0	46.6	93.20	80-120
89 Diethylphthalate	50.0	50.1	100.19	80-120
90 Fluorene	50.0	45.3	90.55	80-120
92 4-Chlorophenyl-phe	50.0	49.3	98.53	80-120
91 O,O-diethyl-o-2-py	50.0	53.2	106.30	80-120
93 5-Nitro-O-Toluidin	50.0	49.0	97.93	80-120
94 4-Nitroaniline	50.0	51.4	102.70	80-120
95 4,6-Dinitro-2-Meth	50.0	55.2	110.44	80-120
96 N-Nitrosodiphenyla	100	85.2	85.18	80-120
98 1,2-Diphenylhydraz	50.0	50.0	100.06	80-120
101 Sulfotepp	50.0	51.0	102.00	80-120
103 Diallate	50.0	47.8	95.61	80-120
104 Phorate	50.0	37.2	74.46*	80-120
102 1,3,5-Trinitrobenz	50.0	49.4	98.73	80-120
106 4-Bromophenyl-phen	50.0	51.9	103.74	80-120
105 Phenacetin	50.0	56.5	113.03	80-120
107 Hexachlorobenzene	50.0	50.3	100.53	80-120
108 Dimethoate	50.0	54.8	109.63	80-120
109 Atrazine	50.0	18.5	37.03*	80-120
110 Pentachlorophenol	50.0	56.9	113.87	80-120
112 Pentachloronitrobe	50.0	51.5	102.97	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
111 4-Aminobiphenyl	50.0	44.6	89.15	80-120
113 Pronamide	50.0	50.3	100.61	80-120
115 Phenanthrene	50.0	53.1	106.14	80-120
118 Anthracene	50.0	53.2	106.50	80-120
116 Disulfoton	50.0	47.7	95.40	80-120
117 Dinoseb	50.0	62.2	124.51*	80-120
119 Carbazole	50.0	54.6	109.19	80-120
120 Methyl Parathion	50.0	60.0	119.98	80-120
121 Di-n-butylphthalat	50.0	53.4	106.91	80-120
122 4-Nitroquinoline-1	50.0	62.4	124.82*	80-120
123 Ethyl Parathion	50.0	58.1	116.15	80-120
124 Methapyrilene	50.0	44.0	88.07	80-120
125 Isodrin	50.0	49.5	99.05	80-120
126 Fluoranthene	50.0	51.8	103.68	80-120
127 Benzidine	50.0	38.8	77.62*	80-120
128 Pyrene	50.0	48.7	97.35	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	48.0	95.93	80-120
132 Chlorobenzilate	50.0	48.2	96.34	80-120
135 Kepone	50.0	0.000	*	80-120
134 3,3'-Dimethylbenzi	50.0	53.5	106.97	80-120
136 Butylbenzylphthala	50.0	50.5	101.07	80-120
137 Bis(2-ethylhexyl)a	50.0	46.0	91.94	80-120
138 2-Acetylaminofluor	50.0	56.1	112.13	80-120
133 Famphur	50.0	38.2	76.44*	80-120
139 Benzo(a)anthracene	50.0	51.4	102.88	80-120
140 3,3'-Dichlorobenzi	100	49.4	49.35*	80-120
142 Chrysene	50.0	50.0	100.04	80-120
143 bis(2-Ethylhexyl)p	50.0	52.4	104.74	80-120
144 Di-n-octylphthalat	50.0	49.9	99.86	80-120
145 Benzo(b)fluoranthe	50.0	49.2	98.45	80-120
146 7,12-Dimethylbenz(	50.0	46.6	93.23	80-120
147 Benzo(k)fluoranthe	50.0	53.2	106.32	80-120
149 Benzo(a)pyrene	50.0	49.3	98.56	80-120
151 3-Methylcholanthre	50.0	51.9	103.75	80-120
148 Hexachlorophene	50.0	0.000	*	80-120
152 Dibenz(a,j)acridin	50.0	49.4	98.92	80-120
153 Indeno(1,2,3-cd)py	50.0	54.3	108.56	80-120
154 Dibenzo(a,h)anthra	50.0	52.0	104.04	80-120
155 Benzo(g,h,i)peryle	50.0	50.7	101.47	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	20-110
$ 12 Phenol-D6	100	0.000	*	10-115
$ 33 Nitrobenzene-D5	50.0	0.000	*	40-110
$ 63 2-Fluorobiphenyl	50.0	0.000	*	50-110
$ 100 2,4,6-Tribromophe	100	0.000	*	40-125
$ 129 Terphenyl-D14	50.0	0.000	*	50-135

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Lab Smp Id: WG160080-4
Inj Date : 23-MAR-2015 15:13 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-4
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 09-MAR-2015 14:36 Cal File: U9635.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	58	2.101	2.099	(0.389)	156460	50.0000	48.3	
3 Pyridine	79	2.246	2.244	(0.555)	651740	50.0000	47.6(a)	
2 N-Nitrosodimethylamine	42	2.225	2.223	(0.550)	212834	50.0000	48.6	
4 Ethyl Methacrylate	69	2.422	2.420	(0.599)	465295	50.0000	48.8	
5 2-Picoline	93	2.619	2.617	(0.647)	649999	50.0000	47.7	
6 N-Nitrosomethylethylamine	88	2.670	2.669	(0.660)	275401	50.0000	47.6	
7 Methyl Methanesulfonate	80	2.846	2.855	(0.703)	361150	50.0000	48.0	
$ 8 2-Fluorophenol	112	2.960	2.969	(0.732)	599270	50.0000	47.8	
9 N-Nitrosodiethylamine	102	3.136	3.145	(0.775)	279992	50.0000	47.2	
10 Ethyl Methanesulfonate	79	3.354	3.383	(0.829)	466518	50.0000	47.9	
11 Benzaldehyde	77	3.643	3.652	(0.900)	279010	50.0000	49.9	
15 Pentachloroethane	117	3.788	3.786	(0.936)	222138	50.0000	49.9	
14 Aniline	93	3.747	3.766	(0.926)	927427	50.0000	49.8(Q)	
16 Bis(2-Chloroethyl)ether	93	3.788	3.807	(0.936)	504563	50.0000	48.0	
$ 12 Phenol-D6	99	3.695	3.714	(0.913)	698316	50.0000	48.1	
13 Phenol	94	3.705	3.735	(0.916)	706370	50.0000	46.5(Q)	
17 2-Chlorophenol	128	3.861	3.869	(0.954)	586065	50.0000	48.2	
18 1,3-Dichlorobenzene	146	4.006	4.004	(0.990)	621622	50.0000	49.8	
* 19 1,4-Dichlorobenzene-D4	152	4.047	4.055	(1.000)	331260	40.0000		
20 1,4-Dichlorobenzene	146	4.068	4.076	(1.005)	581926	50.0000	49.7	
22 1,2-Dichlorobenzene	146	4.223	4.231	(1.043)	577816	50.0000	50.1	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.182	4.200	(1.033)	391859	50.0000	47.8	
	24 Bis(2-Chloroisopropyl)ether	45	4.326	4.335	(1.069)	606062	50.0000	49.9	
	25 2,2'-Oxybis(1-chloropropane)	45	4.326	4.335	(1.069)	606062	50.0000	49.9	
	23 2-Methylphenol	108	4.295	4.304	(1.061)	536426	50.0000	48.0	
	27 Acetophenone	105	4.451	4.469	(0.824)	670400	50.0000	45.8	
	32 Hexachloroethane	117	4.565	4.573	(1.128)	261692	50.0000	49.5	
	26 N-Nitrosopyrrolidine	100	4.440	4.521	(1.097)	295520	50.0000	52.6(Q)	
	31 o-Toluidine	106	4.492	4.521	(1.110)	780849	50.0000	50.8(Q)	
	29 N-Nitrosomorpholine	56	4.471	4.521	(1.105)	256594	50.0000	52.3	
	30 N-Nitroso-di-n-propylamine	70	4.471	4.500	(1.105)	300192	50.0000	48.0	
	28 3&4-Methylphenol	108	4.461	4.511	(1.102)	453676	50.0000	49.2(Q)	
$	33 Nitrobenzene-D5	82	4.616	4.635	(0.854)	554771	50.0000	48.2	
	34 Nitrobenzene	77	4.637	4.656	(0.858)	537289	50.0000	50.9	
	35 N-Nitrosopiperidine	114	4.792	4.821	(0.887)	285962	50.0000	46.5	
	36 Isophorone	82	4.896	4.925	(0.906)	1032200	50.0000	46.8	
	37 2-Nitrophenol	139	4.979	4.997	(0.921)	306324	50.0000	48.3	
	38 2,4-Dimethylphenol	107	5.030	5.070	(0.931)	543857	50.0000	47.8	
	40 Bis(2-Chloroethoxy)methane	93	5.134	5.163	(0.950)	742465	50.0000	48.1	
	39 O,O,O-Triethylphosphorothioat	198	5.113	5.132	(0.946)	185644	50.0000	48.9	
	42 2,4-Dichlorophenol	162	5.248	5.277	(0.971)	411493	50.0000	48.7	
	43 1,2,4-Trichlorobenzene	180	5.341	5.349	(0.989)	431792	50.0000	48.9	
*	45 Naphthalene-D8	136	5.403	5.411	(1.000)	1286125	40.0000		
	41 Benzoic acid	122	5.186	5.297	(0.960)	297547	50.0000	44.5	
	46 Naphthalene	128	5.424	5.442	(1.004)	1342694	50.0000	45.5	
	44 A,A-Dimethylphenethylamine	58	5.382	5.753	(0.996)	1295389	50.0000	53.3(TM)	M9
	49 Hexachloropropene	213	5.537	5.546	(1.025)	282080	50.0000	45.8	
	48 2,6-Dichlorophenol	162	5.506	5.525	(1.019)	382934	50.0000	45.5	
	47 4-Chloroaniline	127	5.496	5.525	(1.017)	626998	50.0000	48.7	
	50 Hexachlorobutadiene	225	5.589	5.598	(1.034)	233802	50.0000	48.3	
	51 N-Nitroso-Di-N-Butylamine	84	5.900	5.939	(1.092)	432472	50.0000	51.6	
	53 Caprolactam	113	5.931	6.022	(1.098)	169771	50.0000	46.5(Q)	
	52 p-Phenylenediamine	108	5.931	5.960	(1.098)	552290	50.0000	51.0	
	55 Isosafrole	162	6.148	6.157	(1.138)	382318	50.0000	49.8	
	56 2-Methylnaphthalene	142	6.231	6.250	(1.153)	944404	50.0000	49.4	
	54 4-Chloro-3-Methylphenol	107	6.086	6.125	(1.126)	446376	50.0000	49.5	
	58 1-Methylnaphthalene	142	6.355	6.364	(1.176)	883223	50.0000	49.6	
	60 1,2,4,5-Tetrachlorobenzene	216	6.448	6.457	(0.862)	344045	50.0000	50.8	
	59 Hexachlorocyclopentadiene	237	6.438	6.446	(0.860)	257687	50.0000	47.6	
	61 2,4,6-Trichlorophenol	196	6.583	6.612	(0.880)	267790	50.0000	48.6	
$	63 2-Fluorobiphenyl	172	6.686	6.705	(0.894)	904498	50.0000	47.9	
	62 2,4,5-Trichlorophenol	196	6.624	6.664	(0.885)	302582	50.0000	51.7	
	64 Safrole	104	6.769	6.788	(0.905)	194111	50.0000	49.2(Q)	
	66 2-Chloronaphthalene	162	6.821	6.840	(0.911)	923746	50.0000	49.1	
	65 1,1'-Biphenyl	154	6.800	6.829	(0.909)	951039	50.0000	49.8	
	67 1-Chloronaphthalene	162	6.842	6.860	(0.914)	788724	50.0000	44.6	
	68 Diphenylether	170	6.935	6.943	(0.927)	579269	50.0000	49.7	
	69 2-Nitroaniline	65	6.955	6.974	(0.929)	300688	50.0000	48.2	
	70 1,4-Naphthoquinone	158	7.028	7.047	(0.939)	310048	50.0000	49.3	
	71 1,4-Dinitrobenzene	75	7.111	7.150	(0.950)	180254	50.0000	45.7	
	75 Acenaphthylene	152	7.307	7.326	(0.976)	1330307	50.0000	48.8	
	72 Dimethyl Phthalate	163	7.204	7.243	(0.963)	935942	50.0000	45.4	
	73 1,3-Dinitrobenzene	168	7.225	7.264	(0.965)	157745	50.0000	48.7	
	74 2,6-Dinitrotoluene	165	7.256	7.285	(0.970)	218145	50.0000	47.2	
	76 1,2-Dinitrobenzene	50	7.318	7.347	(0.978)	124172	50.0000	44.9	

12:45 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
* 78 Acenaphthene-D10	164	7.483	7.502	(1.000)	649262	40.0000		
79 Acenaphthene	153	7.525	7.543	(1.006)	768156	50.0000	47.4	
77 3-Nitroaniline	138	7.463	7.502	(0.997)	268699	50.0000	48.6	
80 2,4-Dinitrophenol	184	7.597	7.647	(1.015)	131920	50.0000	50.5	
83 Dibenzofuran	168	7.742	7.761	(1.035)	1100125	50.0000	50.8	
82 Pentachlorobenzene	250	7.701	7.719	(1.029)	343753	50.0000	46.0	
85 1-Naphthylamine	143	7.835	7.864	(1.047)	941888	50.0000	48.2	
84 2,4-Dinitrotoluene	165	7.752	7.802	(1.036)	270002	50.0000	47.1	
86 2,3,5,6-Tetrachlorophenol	232	7.856	7.885	(1.050)	227347	50.0000	50.4	
88 2-Naphthylamine	143	7.939	7.978	(1.061)	868200	50.0000	46.8	
81 4-Nitrophenol	139	7.690	7.750	(1.028)	121324	50.0000	33.3(Q)	
87 2,3,4,6-Tetrachlorophenol	232	7.908	7.937	(1.057)	231639	50.0000	49.2	
90 Fluorene	166	8.156	8.175	(1.090)	767813	50.0000	44.8	
89 Diethylphthalate	149	8.063	8.092	(1.077)	943025	50.0000	47.8	
92 4-Chlorophenyl-phenylether	204	8.166	8.185	(1.091)	340600	50.0000	47.8	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.156	8.195	(1.090)	133129	50.0000	45.3	
93 5-Nitro-O-Toluidine	152	8.197	8.237	(1.095)	279461	50.0000	49.5	
94 4-Nitroaniline	138	8.208	8.268	(1.097)	208433	50.0000	46.8	
95 4,6-Dinitro-2-Methylphenol	198	8.249	8.289	(0.887)	148820	50.0000	48.1	
96 N-Nitrosodiphenylamine	169	8.322	8.351	(0.894)	711106	50.0000	48.0	
97 N-Nitrosodiphenylamine/DPA	169	8.322	8.351	(0.894)	711106	50.0000	48.0	
98 1,2-Diphenylhydrazine	77	8.363	8.382	(0.899)	1004581	50.0000	48.2	
99 Azobenzene	77	8.363	8.382	(0.899)	1004581	50.0000	48.2	
$ 100 2,4,6-Tribromophenol	330	8.456	8.485	(1.130)	160143	50.0000	46.8	
101 Sulfotepp	97	8.549	8.568	(0.919)	171007	50.0000	49.4	
103 Diallate	86	8.694	8.703	(0.934)	401346	50.0000	47.7	
106 4-Bromophenyl-phenylether	248	8.767	8.785	(0.942)	243002	50.0000	48.2	
104 Phorate	75	8.694	8.723	(0.934)	675813	50.0000	50.2	
102 1,3,5-Trinitrobenzene	213	8.684	8.744	(0.933)	55432	50.0000	43.1(Q)	
105 Phenacetin	108	8.746	8.796	(0.940)	432741	50.0000	49.7	
107 Hexachlorobenzene	284	8.850	8.868	(0.951)	290184	50.0000	48.1	
108 Dimethoate	87	8.912	8.951	(0.958)	335825	50.0000	49.2	
109 Atrazine	200	9.005	9.034	(0.968)	191730	50.0000	51.2	
111 4-Aminobiphenyl	169	9.098	9.127	(0.978)	799109	50.0000	51.3	
110 Pentachlorophenol	266	9.088	9.117	(0.977)	174659	50.0000	49.9	
112 Pentachloronitrobenzene	237	9.119	9.148	(0.980)	105908	50.0000	47.4	
* 114 Phenanthrene-D10	188	9.305	9.313	(1.000)	983961	40.0000		
113 Pronamide	173	9.201	9.220	(0.989)	394921	50.0000	49.7	
115 Phenanthrene	178	9.326	9.355	(1.002)	1032211	50.0000	48.1	
118 Anthracene	178	9.388	9.417	(1.009)	1140901	50.0000	49.2	
116 Disulfoton	88	9.336	9.355	(1.003)	484919	50.0000	46.5	
117 Dinoseb	211	9.346	9.355	(1.004)	147497	50.0000	49.2	
119 Carbazole	167	9.595	9.613	(1.031)	1005994	50.0000	48.2	
120 Methyl Parathion	109	9.791	9.800	(1.052)	304344	50.0000	50.0	
121 Di-n-butylphthalate	149	10.071	10.079	(1.082)	1462555	50.0000	47.1	
122 4-Nitroquinoline-1-Oxide	190	10.278	10.307	(1.105)	74933	50.0000	47.9	
123 Ethyl Parathion	291	10.278	10.297	(1.105)	68644	50.0000	43.7	
124 Methapyrilene	97	10.412	10.431	(1.119)	302861	50.0000	45.6	
125 Isodrin	193	10.599	10.607	(1.139)	151110	50.0000	49.2	
126 Fluoranthene	202	10.785	10.804	(1.159)	979174	50.0000	44.6	
128 Pyrene	202	11.054	11.073	(0.861)	1023960	50.0000	50.8	
127 Benzidine	184	10.971	10.990	(0.854)	287170	50.0000	50.8	
$ 129 Terphenyl-D14	244	11.282	11.301	(0.878)	648497	50.0000	48.7	
130 Aramite	185	11.385	11.394	(0.886)	71814	50.0000	50.2	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Report Date: 27-Mar-2015 15:13

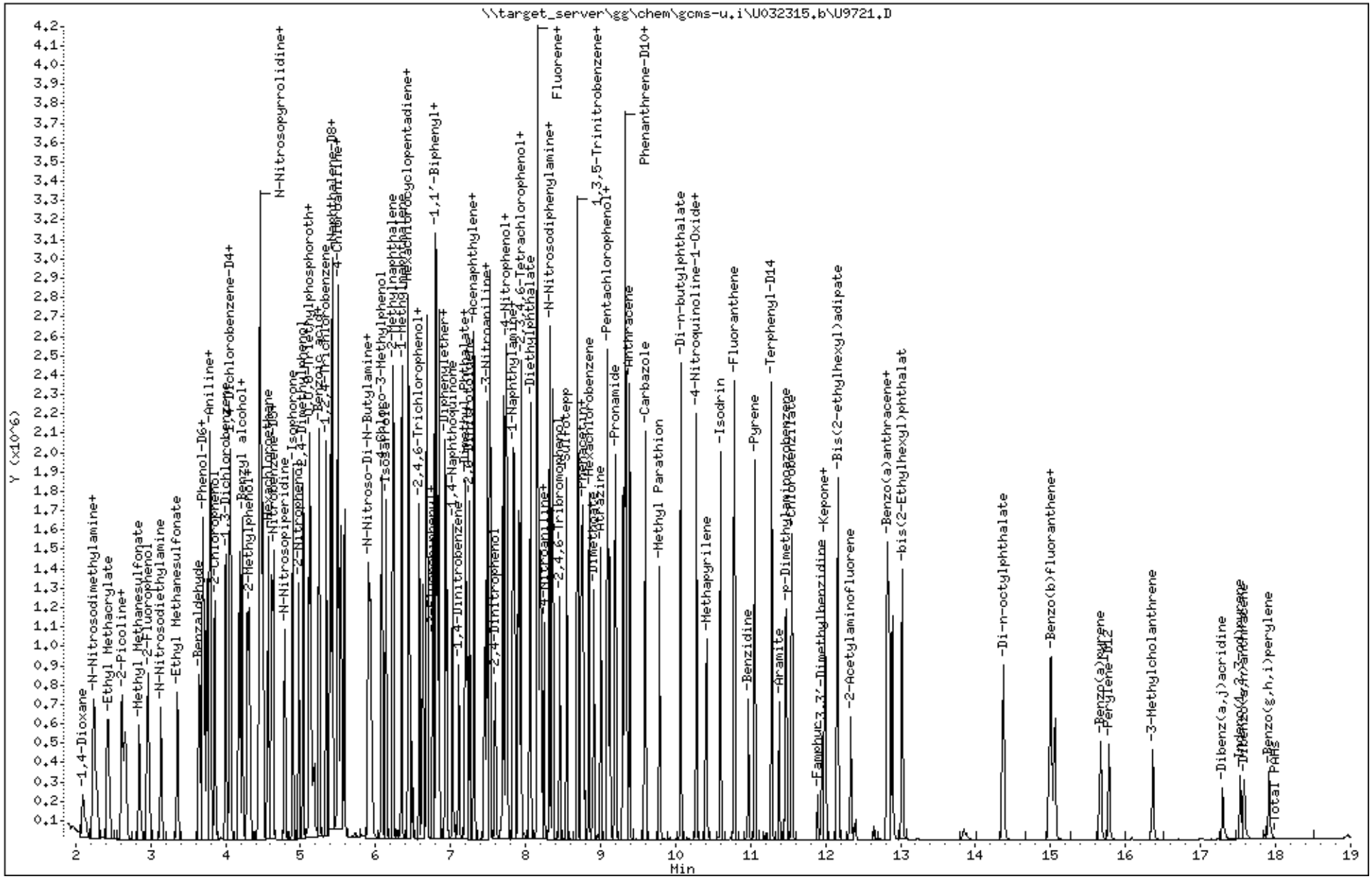
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
131 p-Dimethylaminoazobenzene	225	11.478	11.487	(0.894)	186396	50.0000	48.0	
132 Chlorobenzilate	251	11.551	11.570	(0.899)	273851	50.0000	47.9	
135 Kepone	272	11.986	11.995	(0.933)	9388	50.0000	22.3(aQ)	
133 Famphur	218	11.892	11.901	(0.926)	73930	50.0000	42.5	
134 3,3'-Dimethylbenzidine	212	11.955	11.963	(0.931)	268950	50.0000	49.7	
136 Butylbenzylphthalate	149	11.996	12.004	(0.934)	505403	50.0000	48.1	
137 Bis(2-ethylhexyl)adipate	129	12.162	12.170	(0.947)	517647	50.0000	48.6	
138 2-Acetylaminofluorene	181	12.338	12.367	(0.961)	202889	50.0000	49.7	
139 Benzo(a)anthracene	228	12.834	12.853	(0.999)	666808	50.0000	48.8	
* 141 Chrysene-D12	240	12.845	12.863	(1.000)	559989	40.0000		
142 Chrysene	228	12.896	12.915	(1.004)	630162	50.0000	47.5	
140 3,3'-Dichlorobenzidine	252	12.824	12.832	(0.998)	195346	50.0000	49.8	
143 bis(2-Ethylhexyl)phthalate	149	13.021	13.029	(1.014)	696187	50.0000	49.1	
144 Di-n-octylphthalate	149	14.366	14.385	(0.910)	988591	50.0000	48.4	
145 Benzo(b)fluoranthene	252	14.997	15.027	(0.950)	475718	50.0000	49.4	
146 7,12-Dimethylbenz(A)Anthracen	256	15.008	15.027	(0.951)	252455	50.0000	48.6	
147 Benzo(k)fluoranthene	252	15.060	15.078	(0.954)	467769	50.0000	48.5(H)	
149 Benzo(a)pyrene	252	15.670	15.679	(0.993)	387358	50.0000	48.8	
* 150 Perylene-D12	264	15.784	15.782	(1.000)	314600	40.0000		
151 3-Methylcholanthrene	268	16.364	16.372	(1.037)	182451	50.0000	49.4	
152 Dibenz(a,j)acridine	279	17.295	17.304	(1.096)	192326	50.0000	51.0	
153 Indeno(1,2,3-cd)pyrene	276	17.533	17.542	(1.111)	212275	50.0000	49.6	
154 Dibenzo(a,h)anthracene	278	17.585	17.593	(1.114)	209648	50.0000	49.1	
155 Benzo(g,h,i)perylene	276	17.916	17.925	(1.135)	246888	50.0000	51.8	

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Date : 23-MAR-2015 15:13
Client ID:
Sample Info: WG160080-4
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



0000476

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Lab Smp Id: WG160080-2
Inj Date : 23-MAR-2015 15:39 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-2
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 15:39 Cal File: U9722.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	58	2.102	2.099	(0.390)	32594	10.0000	10.5	
3 Pyridine	79	2.247	2.244	(0.555)	138610	10.0000	9.86(a)	
2 N-Nitrosodimethylamine	42	2.226	2.223	(0.550)	45437	10.0000	10.1	
4 Ethyl Methacrylate	69	2.423	2.420	(0.599)	99858	10.0000	10.2	
5 2-Picoline	93	2.609	2.617	(0.645)	136747	10.0000	9.77(a)	
6 N-Nitrosomethylethylamine	88	2.661	2.669	(0.657)	59168	10.0000	9.94(a)	
7 Methyl Methanesulfonate	80	2.847	2.855	(0.703)	76584	10.0000	9.90(a)	
$ 8 2-Fluorophenol	112	2.951	2.969	(0.729)	127783	10.0000	9.92(a)	
9 N-Nitrosodiethylamine	102	3.127	3.145	(0.772)	58533	10.0000	9.59(a)	
10 Ethyl Methanesulfonate	79	3.344	3.383	(0.826)	96160	10.0000	9.60(a)	
11 Benzaldehyde	77	3.644	3.652	(0.900)	82944	10.0000	14.4	
15 Pentachloroethane	117	3.789	3.786	(0.936)	51244	10.0000	11.2	
14 Aniline	93	3.738	3.766	(0.923)	193938	10.0000	10.1(a)	
16 Bis(2-Chloroethyl)ether	93	3.789	3.807	(0.936)	126117	10.0000	11.7	
$ 12 Phenol-D6	99	3.686	3.714	(0.911)	153058	10.0000	10.2	
13 Phenol	94	3.696	3.735	(0.913)	152647	10.0000	9.78(a)	
17 2-Chlorophenol	128	3.851	3.869	(0.951)	130537	10.0000	10.4	
18 1,3-Dichlorobenzene	146	3.996	4.004	(0.987)	138200	10.0000	10.8	
* 19 1,4-Dichlorobenzene-D4	152	4.048	4.055	(1.000)	340512	40.0000		
20 1,4-Dichlorobenzene	146	4.069	4.076	(1.005)	133083	10.0000	11.1	
22 1,2-Dichlorobenzene	146	4.214	4.231	(1.041)	134271	10.0000	11.3	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.172	4.200	(1.031)	84290	10.0000	10.0(a)	
	24 Bis(2-Chloroisopropyl)ether	45	4.317	4.335	(1.066)	142449	10.0000	11.4(Q)	
	25 2,2'-Oxybis(1-chloropropane)	45	4.317	4.335	(1.066)	142449	10.0000	11.4	
	23 2-Methylphenol	108	4.286	4.304	(1.059)	114178	10.0000	9.93(a)	
	27 Acetophenone	105	4.452	4.469	(0.825)	163534	10.0000	11.6	
	32 Hexachloroethane	117	4.566	4.573	(1.128)	60455	10.0000	11.1	
	26 N-Nitrosopyrrolidine	100	4.421	4.521	(1.092)	63129	10.0000	10.9	
	31 o-Toluidine	106	4.483	4.521	(1.107)	178144	10.0000	11.3(a)	
	29 N-Nitrosomorpholine	56	4.452	4.521	(1.100)	61679	10.0000	12.2	
	30 N-Nitroso-di-n-propylamine	70	4.452	4.500	(1.100)	79606	10.0000	12.4	
	28 3&4-Methylphenol	108	4.441	4.511	(1.097)	114213	10.0000	12.0	
$	33 Nitrobenzene-D5	82	4.607	4.635	(0.854)	118912	10.0000	10.8	
	34 Nitrobenzene	77	4.628	4.656	(0.858)	113404	10.0000	11.2	
	35 N-Nitrosopiperidine	114	4.783	4.821	(0.887)	63253	10.0000	10.7	
	36 Isophorone	82	4.886	4.925	(0.906)	227016	10.0000	10.7	
	37 2-Nitrophenol	139	4.969	4.997	(0.921)	62172	10.0000	10.2	
	38 2,4-Dimethylphenol	107	5.021	5.070	(0.931)	123643	10.0000	11.3	
	40 Bis(2-Chloroethoxy)methane	93	5.124	5.163	(0.950)	145226	10.0000	9.80(a)	
	39 O,O,O-Triethylphosphorothioat	198	5.104	5.132	(0.946)	40628	10.0000	11.2	
	42 2,4-Dichlorophenol	162	5.238	5.277	(0.971)	92921	10.0000	11.5	
	43 1,2,4-Trichlorobenzene	180	5.331	5.349	(0.988)	101595	10.0000	12.0	
*	45 Naphthalene-D8	136	5.394	5.411	(1.000)	1234294	40.0000		
	41 Benzoic acid	122	5.104	5.297	(0.946)	50045	10.0000	7.80(aMH)	M9
	46 Naphthalene	128	5.425	5.442	(1.006)	323717	10.0000	9.67(a)	
	49 Hexachloropropene	213	5.528	5.546	(1.025)	60647	10.0000	12.0	
	48 2,6-Dichlorophenol	162	5.497	5.525	(1.019)	92037	10.0000	9.48(a)	
	47 4-Chloroaniline	127	5.487	5.525	(1.017)	147247	10.0000	11.9	
	50 Hexachlorobutadiene	225	5.580	5.598	(1.035)	54870	10.0000	9.60(a)	
	51 N-Nitroso-Di-N-Butylamine	84	5.890	5.939	(1.092)	78996	10.0000	9.81(a)	
	53 Caprolactam	113	5.870	6.022	(1.088)	35839	10.0000	10.2	
	52 p-Phenylenediamine	108	5.901	5.960	(1.094)	132621	10.0000	12.8	
	55 Isosafrole	162	6.139	6.157	(1.138)	85675	10.0000	11.6	
	56 2-Methylnaphthalene	142	6.232	6.250	(1.155)	221115	10.0000	12.0	
	54 4-Chloro-3-Methylphenol	107	6.066	6.125	(1.125)	98595	10.0000	11.4	
	58 1-Methylnaphthalene	142	6.346	6.364	(1.177)	207307	10.0000	12.1	
	60 1,2,4,5-Tetrachlorobenzene	216	6.439	6.457	(0.860)	84260	10.0000	9.52(a)	
	59 Hexachlorocyclopentadiene	237	6.439	6.446	(0.860)	62108	10.0000	11.6	
	61 2,4,6-Trichlorophenol	196	6.573	6.612	(0.878)	57188	10.0000	10.5	
$	63 2-Fluorobiphenyl	172	6.677	6.705	(0.892)	210917	10.0000	11.3	
	62 2,4,5-Trichlorophenol	196	6.615	6.664	(0.884)	58389	10.0000	10.1(a)	
	64 Safrole	104	6.760	6.788	(0.903)	41023	10.0000	10.5	
	66 2-Chloronaphthalene	162	6.801	6.840	(0.909)	215475	10.0000	11.6(H)	
	65 1,1'-Biphenyl	154	6.791	6.829	(0.907)	254905	10.0000	9.73(a)	
	67 1-Chloronaphthalene	162	6.832	6.860	(0.913)	198062	10.0000	11.3	
	68 Diphenylether	170	6.925	6.943	(0.925)	130575	10.0000	11.3	
	69 2-Nitroaniline	65	6.936	6.974	(0.927)	60527	10.0000	9.82(a)	
	70 1,4-Naphthoquinone	158	7.018	7.047	(0.938)	83451	10.0000	13.4	
	71 1,4-Dinitrobenzene	75	7.101	7.150	(0.949)	36267	10.0000	9.31(a)	
	75 Acenaphthylene	152	7.298	7.326	(0.975)	313605	10.0000	11.6	
	72 Dimethyl Phthalate	163	7.184	7.243	(0.960)	223294	10.0000	10.9(M)	M6
	73 1,3-Dinitrobenzene	168	7.205	7.264	(0.963)	31931	10.0000	9.97(a)	
	74 2,6-Dinitrotoluene	165	7.236	7.285	(0.967)	49305	10.0000	10.8	
	76 1,2-Dinitrobenzene	50	7.298	7.347	(0.975)	29345	10.0000	10.7	
*	78 Acenaphthene-D10	164	7.484	7.502	(1.000)	641931	40.0000		

12:45 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Report Date: 27-Mar-2015 15:13

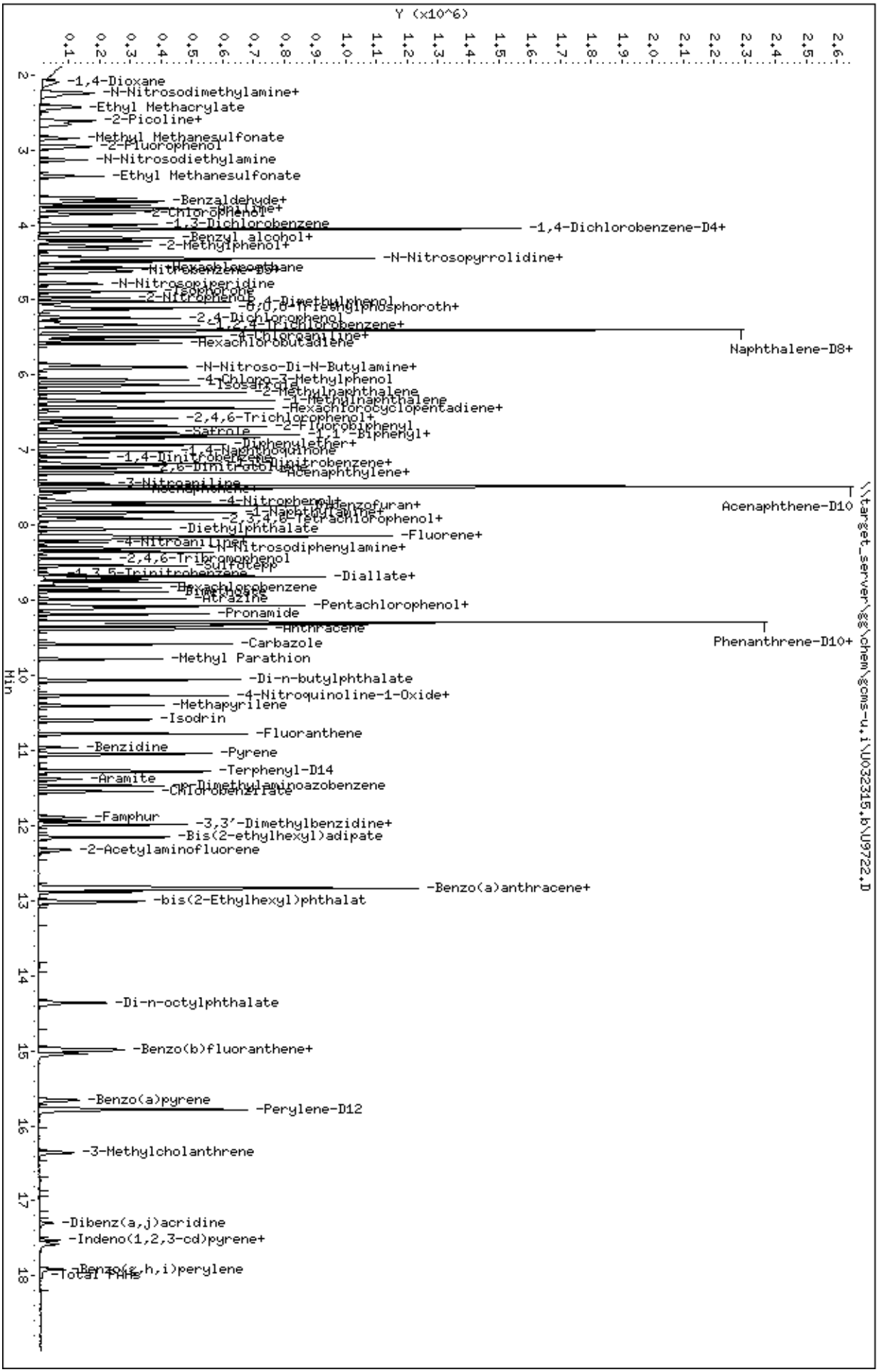
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
79 Acenaphthene	153	7.515	7.543	(1.004)	189129	10.0000	11.8	
77 3-Nitroaniline	138	7.443	7.502	(0.994)	55057	10.0000	10.1(a)	
80 2,4-Dinitrophenol	184	7.577	7.647	(1.012)	19694	10.0000	7.63(a)	
83 Dibenzofuran	168	7.733	7.761	(1.033)	252894	10.0000	11.8	
82 Pentachlorobenzene	250	7.691	7.719	(1.028)	87127	10.0000	11.8	
85 1-Naphthylamine	143	7.826	7.864	(1.046)	219781	10.0000	11.4	
84 2,4-Dinitrotoluene	165	7.733	7.802	(1.033)	58928	10.0000	10.4	
86 2,3,5,6-Tetrachlorophenol	232	7.847	7.885	(1.048)	51590	10.0000	11.6	
88 2-Naphthylamine	143	7.919	7.978	(1.058)	202354	10.0000	11.0	
81 4-Nitrophenol	139	7.671	7.750	(1.025)	33105	10.0000	9.18(a)	
87 2,3,4,6-Tetrachlorophenol	232	7.898	7.937	(1.055)	48312	10.0000	10.4	
90 Fluorene	166	8.147	8.175	(1.089)	205691	10.0000	9.52(a)	
89 Diethylphthalate	149	8.054	8.092	(1.076)	236641	10.0000	12.1	
92 4-Chlorophenyl-phenylether	204	8.157	8.185	(1.090)	88601	10.0000	8.31(a)	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.147	8.195	(1.089)	40671	10.0000	11.1(a)	
93 5-Nitro-O-Toluidine	152	8.167	8.237	(1.091)	57251	10.0000	10.2(Q)	
94 4-Nitroaniline	138	8.188	8.268	(1.094)	42605	10.0000	9.69(a)	
95 4,6-Dinitro-2-Methylphenol	198	8.229	8.289	(0.885)	28066	10.0000	9.17(a)	
96 N-Nitrosodiphenylamine	169	8.312	8.351	(0.894)	171248	10.0000	11.7	
97 N-Nitrosodiphenylamine/DPA	169	8.312	8.351	(0.894)	171248	10.0000	11.7	
98 1,2-Diphenylhydrazine	77	8.354	8.382	(0.899)	236016	10.0000	11.4(a)	
99 Azobenzene	77	8.354	8.382	(0.899)	236016	10.0000	11.4(a)	
$ 100 2,4,6-Tribromophenol	330	8.447	8.485	(1.129)	36558	10.0000	10.8	
101 Sulfotepp	97	8.540	8.568	(0.919)	40834	10.0000	11.9	
103 Diallate	86	8.685	8.703	(0.934)	102490	10.0000	10.0	
106 4-Bromophenyl-phenylether	248	8.757	8.785	(0.942)	56943	10.0000	9.44(a)	
104 Phorate	75	8.685	8.723	(0.934)	146249	10.0000	11.0	
102 1,3,5-Trinitrobenzene	213	8.654	8.744	(0.931)	15286	10.0000	12.0(Q)	
105 Phenacetin	108	8.716	8.796	(0.938)	104156	10.0000	12.1	
107 Hexachlorobenzene	284	8.840	8.868	(0.951)	70700	10.0000	11.8	
108 Dimethoate	87	8.882	8.951	(0.955)	91128	10.0000	13.5	
109 Atrazine	200	8.985	9.034	(0.967)	52357	10.0000	14.1	
111 4-Aminobiphenyl	169	9.078	9.127	(0.977)	202221	10.0000	13.1	
110 Pentachlorophenol	266	9.078	9.117	(0.977)	39373	10.0000	11.4(a)	
112 Pentachloronitrobenzene	237	9.109	9.148	(0.980)	26460	10.0000	12.0	
* 114 Phenanthrene-D10	188	9.296	9.313	(1.000)	973464	40.0000		
113 Pronamide	173	9.182	9.220	(0.988)	97010	10.0000	10.1	
115 Phenanthrene	178	9.316	9.355	(1.002)	273709	10.0000	8.95(a)	
118 Anthracene	178	9.378	9.417	(1.009)	275833	10.0000	12.0	
116 Disulfoton	88	9.327	9.355	(1.003)	141359	10.0000	9.12(a)	
117 Dinoseb	211	9.327	9.355	(1.003)	32880	10.0000	11.1	
119 Carbazole	167	9.585	9.613	(1.031)	240813	10.0000	11.6	
120 Methyl Parathion	109	9.782	9.800	(1.052)	78020	10.0000	13.0	
121 Di-n-butylphthalate	149	10.061	10.079	(1.082)	402017	10.0000	13.1	
122 4-Nitroquinoline-1-Oxide	190	10.268	10.307	(1.105)	14189	10.0000	9.17(a)	
123 Ethyl Parathion	291	10.279	10.297	(1.106)	18727	10.0000	11.1(a)	
124 Methapyrilene	97	10.403	10.431	(1.119)	100960	10.0000	15.4	
125 Isodrin	193	10.600	10.607	(1.140)	37637	10.0000	12.4	
126 Fluoranthene	202	10.776	10.804	(1.159)	266404	10.0000	10.2	
128 Pyrene	202	11.045	11.073	(0.860)	274808	10.0000	10.6	
$ 129 Terphenyl-D14	244	11.272	11.301	(0.878)	186924	10.0000	10.9	
130 Aramite	185	11.386	11.394	(0.886)	17710	10.0000	9.60(a)	
131 p-Dimethylaminoazobenzene	225	11.469	11.487	(0.893)	51380	10.0000	10.2	
132 Chlorobenzilate	251	11.552	11.570	(0.899)	75682	10.0000	10.3	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
135 Kepone	272	11.976	11.995	(0.932)	11723	10.0000	21.6(a)	
133 Famphur	218	11.893	11.901	(0.926)	56122	10.0000	25.0	
136 Butylbenzylphthalate	149	11.987	12.004	(0.933)	144287	10.0000	10.6	
137 Bis(2-ethylhexyl)adipate	129	12.163	12.170	(0.947)	139284	10.0000	10.1	
138 2-Acetylaminofluorene	181	12.328	12.367	(0.960)	42495	10.0000	8.07(a)	
139 Benzo(a)anthracene	228	12.815	12.853	(0.998)	184365	10.0000	10.4	
* 141 Chrysene-D12	240	12.846	12.863	(1.000)	722258	40.0000		
142 Chrysene	228	12.877	12.915	(1.002)	186044	10.0000	10.9	
140 3,3'-Dichlorobenzidine	252	12.815	12.832	(0.998)	49406	10.0000	9.76(a)	
143 bis(2-Ethylhexyl)phthalate	149	13.011	13.029	(1.013)	183830	10.0000	10.0	
144 Di-n-octylphthalate	149	14.367	14.385	(0.910)	262990	10.0000	8.98(a)	
145 Benzo(b)fluoranthene	252	14.978	15.027	(0.949)	129395	10.0000	9.38(a)	
146 7,12-Dimethylbenz(A)Anthracen	256	14.998	15.027	(0.950)	73373	10.0000	9.86(a)	
147 Benzo(k)fluoranthene	252	15.040	15.078	(0.953)	128813	10.0000	9.31(aH)	
149 Benzo(a)pyrene	252	15.661	15.679	(0.992)	104586	10.0000	9.18(a)	
* 150 Perylene-D12	264	15.785	15.782	(1.000)	451255	40.0000		
151 3-Methylcholanthrene	268	16.365	16.372	(1.037)	49611	10.0000	9.36(a)	
152 Dibenz(a,j)acridine	279	17.296	17.304	(1.096)	44650	10.0000	8.25(a)	
153 Indeno(1,2,3-cd)pyrene	276	17.524	17.542	(1.110)	53709	10.0000	8.76(a)	
154 Dibenzo(a,h)anthracene	278	17.576	17.593	(1.113)	50201	10.0000	8.20(a)	
155 Benzo(g,h,i)perylene	276	17.917	17.925	(1.135)	66227	10.0000	9.69(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Date : 23-MAR-2015 15:39
Client ID:
Sample Info: WG160080-2
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25
Y (x10^6)
Min
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Ethyl Methacrylate
-2-Picoline+
-Methyl Methanesulfonate
-2-Fluorophenol
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Benzaldehyde+
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-Benzyl alcohol+
-2-Methylphenol+
-N-Nitrosopyrrolidine+
-Hexachloroethane
-Nitrobenzene-D5+
-N-Nitrosopiperidine
-Isophorone
-2-Nitrophenol+
-2,4-Dimethylphenol
-O,O,O-Triethylphosphoroth+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene+
-4-Chloroaniline+
-Hexachlorobutadiene
Naphthalene-D8+
-N-Nitroso-Di-N-Butylamine+
-4-Chloro-3-Methylphenol
-Isosafrole
-2-Methylnaphthalene
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4,6-Trichlorophenol+
-2-Fluorobiphenyl
-Safrole
-1,1'-Biphenyl+
-Diphenylether+
-1,4-Naphthoquinone
-1,4-Dinitrobenzene
-2,6-Dinitrotoluene+
-Acenaphthylene+
-3-Nitroaniline
-Acenaphthene
-4-Nitrophenol+
-Dibenzofuran+
-1-Naphthylamine+
-2,3,4,6-Tetrachlorophenol+
Acenaphthene-D10
-Diethylphthalate
-Fluorene+
-4-Nitroaniline
-N-Nitrosodiphenylamine+
-2,4,6-Tribromophenol
-Sulfotepp
-1,3,5-Trinitrobenzene
-Diallate+
-Hexachlorobenzene
-Dimethoate
-Atrazine
-Pentachlorophenol+
-Pronamide
-Anthracene
-Carbazole
Phenanthrene-D10+
-Methyl Parathion
-Di-n-butylphthalate
-4-Nitroquinoline-1-Oxide+
-Methapyrilene
-Isodrin
-Fluoranthene
-Benzidine
-Pyrene
-Terphenyl-D14
-Aramite
-p-Dimethylaminoazobenzene
-Chlorobenzilate
-Famphur
-3,3'-Dimethylbenzidine+
-Bis(2-ethylhexyl)adipate
-2-Acetylaminofluorene
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-3-Methylcholanthrene
-Dibenz(a,j)acridine
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
-Total PAHs
\\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Lab Smp Id: WG160080-3
Inj Date : 23-MAR-2015 16:05 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-3
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 16:05 Cal File: U9723.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	58	2.100	2.099	(0.389)	76791	25.0000	26.1	
3 Pyridine	79	2.255	2.244	(0.556)	331612	25.0000	25.3(a)	
2 N-Nitrosodimethylamine	42	2.224	2.223	(0.548)	102310	25.0000	24.4	
4 Ethyl Methacrylate	69	2.431	2.420	(0.599)	225040	25.0000	24.6	
5 2-Picoline	93	2.617	2.617	(0.645)	324882	25.0000	24.9	
6 N-Nitrosomethylethylamine	88	2.669	2.669	(0.658)	138295	25.0000	25.0	
7 Methyl Methanesulfonate	80	2.845	2.855	(0.701)	175866	25.0000	24.4	
$ 8 2-Fluorophenol	112	2.959	2.969	(0.730)	300763	25.0000	25.1	
9 N-Nitrosodiethylamine	102	3.135	3.145	(0.773)	142147	25.0000	25.0	
10 Ethyl Methanesulfonate	79	3.352	3.383	(0.826)	229407	25.0000	24.6	
11 Benzaldehyde	77	3.652	3.652	(0.900)	180262	25.0000	33.7	
15 Pentachloroethane	117	3.787	3.786	(0.934)	113903	25.0000	26.7	
14 Aniline	93	3.745	3.766	(0.923)	452191	25.0000	25.4	
16 Bis(2-Chloroethyl)ether	93	3.787	3.807	(0.934)	272969	25.0000	27.2	
$ 12 Phenol-D6	99	3.683	3.714	(0.908)	354875	25.0000	25.5	
13 Phenol	94	3.694	3.735	(0.911)	355952	25.0000	24.5	
17 2-Chlorophenol	128	3.859	3.869	(0.952)	302774	25.0000	26.0	
18 1,3-Dichlorobenzene	146	4.004	4.004	(0.987)	318566	25.0000	26.7	
* 19 1,4-Dichlorobenzene-D4	152	4.056	4.055	(1.000)	317034	40.0000		
20 1,4-Dichlorobenzene	146	4.066	4.076	(1.003)	300474	25.0000	26.8	
22 1,2-Dichlorobenzene	146	4.222	4.231	(1.041)	294424	25.0000	26.7	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.180	4.200	(1.031)	197621	25.0000	25.2	
	24 Bis(2-Chloroisopropyl)ether	45	4.315	4.335	(1.064)	321661	25.0000	27.7	
	25 2,2'-Oxybis(1-chloropropane)	45	4.315	4.335	(1.064)	321661	25.0000	27.7	
	23 2-Methylphenol	108	4.284	4.304	(1.056)	275907	25.0000	25.8	
	27 Acetophenone	105	4.449	4.469	(0.824)	357074	25.0000	26.9	
	32 Hexachloroethane	117	4.563	4.573	(1.125)	137007	25.0000	27.1	
	26 N-Nitrosopyrrolidine	100	4.429	4.521	(1.092)	158076	25.0000	29.4	
	31 o-Toluidine	106	4.491	4.521	(1.107)	417843	25.0000	28.4	
	29 N-Nitrosomorpholine	56	4.460	4.521	(1.100)	131496	25.0000	28.0	
	30 N-Nitroso-di-n-propylamine	70	4.460	4.500	(1.100)	172952	25.0000	28.9	
	28 3&4-Methylphenol	108	4.449	4.511	(1.097)	253690	25.0000	28.7	
$	33 Nitrobenzene-D5	82	4.604	4.635	(0.852)	280390	25.0000	26.8	
	34 Nitrobenzene	77	4.625	4.656	(0.856)	266032	25.0000	27.8	
	35 N-Nitrosopiperidine	114	4.780	4.821	(0.885)	141098	25.0000	25.2	
	36 Isophorone	82	4.884	4.925	(0.904)	529790	25.0000	26.5	
	37 2-Nitrophenol	139	4.977	4.997	(0.921)	154898	25.0000	26.9	
	38 2,4-Dimethylphenol	107	5.029	5.070	(0.931)	288907	25.0000	28.0	
	40 Bis(2-Chloroethoxy)methane	93	5.132	5.163	(0.950)	415535	25.0000	29.6	
	39 O,O,O-Triethylphosphorothioat	198	5.112	5.132	(0.946)	95981	25.0000	27.8	
	42 2,4-Dichlorophenol	162	5.246	5.277	(0.971)	220736	25.0000	28.8	
	43 1,2,4-Trichlorobenzene	180	5.339	5.349	(0.989)	226301	25.0000	28.2	
*	45 Naphthalene-D8	136	5.401	5.411	(1.000)	1168407	40.0000		
	41 Benzoic acid	122	5.132	5.297	(0.950)	148301	25.0000	24.4(aQ)	
	46 Naphthalene	128	5.422	5.442	(1.004)	757473	25.0000	25.6	
	44 A,A-Dimethylphenethylamine	58	5.319	5.753	(0.985)	660296	25.0000	29.9(M)	M9
	49 Hexachloropropene	213	5.536	5.546	(1.025)	144722	25.0000	23.0	
	48 2,6-Dichlorophenol	162	5.495	5.525	(1.017)	207265	25.0000	23.7	
	47 4-Chloroaniline	127	5.484	5.525	(1.015)	319447	25.0000	27.3	
	50 Hexachlorobutadiene	225	5.588	5.598	(1.034)	123736	25.0000	24.9	
	51 N-Nitroso-Di-N-Butylamine	84	5.898	5.939	(1.092)	231434	25.0000	30.4	
	53 Caprolactam	113	5.898	6.022	(1.092)	85385	25.0000	25.7	
	52 p-Phenylenediamine	108	5.909	5.960	(1.094)	307101	25.0000	31.2	
	55 Isosafrole	162	6.136	6.157	(1.136)	187154	25.0000	26.8	
	56 2-Methylnaphthalene	142	6.229	6.250	(1.153)	490640	25.0000	28.2	
	54 4-Chloro-3-Methylphenol	107	6.074	6.125	(1.125)	234044	25.0000	28.6	
	58 1-Methylnaphthalene	142	6.343	6.364	(1.174)	461060	25.0000	28.5	
	60 1,2,4,5-Tetrachlorobenzene	216	6.436	6.457	(0.860)	182397	25.0000	24.4	
	59 Hexachlorocyclopentadiene	237	6.436	6.446	(0.860)	139813	25.0000	27.6	
	61 2,4,6-Trichlorophenol	196	6.581	6.612	(0.880)	142192	25.0000	27.6	
$	63 2-Fluorobiphenyl	172	6.685	6.705	(0.893)	507039	25.0000	28.8	
	62 2,4,5-Trichlorophenol	196	6.623	6.664	(0.885)	141888	25.0000	25.9	
	64 Safrole	104	6.757	6.788	(0.903)	96523	25.0000	26.2	
	66 2-Chloronaphthalene	162	6.809	6.840	(0.910)	431730	25.0000	24.6	
	65 1,1'-Biphenyl	154	6.799	6.829	(0.909)	569997	25.0000	28.1	
	67 1-Chloronaphthalene	162	6.840	6.860	(0.914)	491001	25.0000	29.7	
	68 Diphenylether	170	6.923	6.943	(0.925)	301910	25.0000	27.7	
	69 2-Nitroaniline	65	6.944	6.974	(0.928)	150113	25.0000	25.8	
	70 1,4-Naphthoquinone	158	7.016	7.047	(0.938)	185172	25.0000	31.5	
	71 1,4-Dinitrobenzene	75	7.099	7.150	(0.949)	91588	25.0000	24.9	
	75 Acenaphthylene	152	7.306	7.326	(0.976)	711728	25.0000	28.0	
	72 Dimethyl Phthalate	163	7.192	7.243	(0.961)	521599	25.0000	27.1	
	73 1,3-Dinitrobenzene	168	7.213	7.264	(0.964)	79664	25.0000	26.3	
	74 2,6-Dinitrotoluene	165	7.244	7.285	(0.968)	112924	25.0000	26.2	
	76 1,2-Dinitrobenzene	50	7.306	7.347	(0.976)	69820	25.0000	27.0	

12:45 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
* 78 Acenaphthene-D10	164	7.482	7.502	(1.000)	606536	40.0000		
79 Acenaphthene	153	7.523	7.543	(1.006)	437011	25.0000	28.9	
77 3-Nitroaniline	138	7.451	7.502	(0.996)	135755	25.0000	26.3	
80 2,4-Dinitrophenol	184	7.585	7.647	(1.014)	56394	25.0000	23.1(a)	
83 Dibenzofuran	168	7.730	7.761	(1.033)	555864	25.0000	27.5	
82 Pentachlorobenzene	250	7.699	7.719	(1.029)	196868	25.0000	28.2	
85 1-Naphthylamine	143	7.834	7.864	(1.047)	511491	25.0000	28.0	
84 2,4-Dinitrotoluene	165	7.741	7.802	(1.035)	138210	25.0000	25.8	
86 2,3,5,6-Tetrachlorophenol	232	7.844	7.885	(1.048)	120080	25.0000	28.5	
88 2-Naphthylamine	143	7.927	7.978	(1.059)	469235	25.0000	27.1	
81 4-Nitrophenol	139	7.678	7.750	(1.026)	81425	25.0000	23.9(a)	
87 2,3,4,6-Tetrachlorophenol	232	7.896	7.937	(1.055)	120957	25.0000	27.5	
90 Fluorene	166	8.155	8.175	(1.090)	462275	25.0000	25.3	
89 Diethylphthalate	149	8.051	8.092	(1.076)	517703	25.0000	28.1	
92 4-Chlorophenyl-phenylether	204	8.165	8.185	(1.091)	203096	25.0000	24.6	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.144	8.195	(1.089)	87933	25.0000	29.8	
93 5-Nitro-O-Toluidine	152	8.175	8.237	(1.093)	139252	25.0000	26.4	
94 4-Nitroaniline	138	8.196	8.268	(1.095)	104313	25.0000	25.1	
95 4,6-Dinitro-2-Methylphenol	198	8.237	8.289	(0.886)	74022	25.0000	26.2	
96 N-Nitrosodiphenylamine	169	8.310	8.351	(0.894)	386673	25.0000	28.6	
97 N-Nitrosodiphenylamine/DPA	169	8.310	8.351	(0.894)	386673	25.0000	28.6	
98 1,2-Diphenylhydrazine	77	8.351	8.382	(0.899)	536252	25.0000	28.2	
99 Azobenzene	77	8.351	8.382	(0.899)	536252	25.0000	28.2	
$ 100 2,4,6-Tribromophenol	330	8.444	8.485	(1.129)	88327	25.0000	27.6	
101 Sulfotepp	97	8.538	8.568	(0.919)	95613	25.0000	30.2	
103 Diallate	86	8.682	8.703	(0.934)	222060	25.0000	26.2	
106 4-Bromophenyl-phenylether	248	8.765	8.785	(0.943)	134774	25.0000	26.7	
104 Phorate	75	8.693	8.723	(0.935)	339338	25.0000	27.6(M)	M3
102 1,3,5-Trinitrobenzene	213	8.662	8.744	(0.932)	34168	25.0000	29.1(Q)	
105 Phenacetin	108	8.724	8.796	(0.939)	222118	25.0000	27.9	
107 Hexachlorobenzene	284	8.838	8.868	(0.951)	160349	25.0000	29.1	
108 Dimethoate	87	8.889	8.951	(0.957)	185305	25.0000	29.8	
109 Atrazine	200	8.993	9.034	(0.968)	109880	25.0000	32.1	
111 4-Aminobiphenyl	169	9.086	9.127	(0.978)	450261	25.0000	31.6	
110 Pentachlorophenol	266	9.086	9.117	(0.978)	91160	25.0000	28.5	
112 Pentachloronitrobenzene	237	9.107	9.148	(0.980)	58337	25.0000	28.6	
* 114 Phenanthrene-D10	188	9.293	9.313	(1.000)	898442	40.0000		
113 Pronamide	173	9.190	9.220	(0.989)	212730	25.0000	27.1	
115 Phenanthrene	178	9.324	9.355	(1.003)	587294	25.0000	24.8	
118 Anthracene	178	9.386	9.417	(1.010)	638058	25.0000	30.1	
116 Disulfoton	88	9.334	9.355	(1.004)	296474	25.0000	25.9	
117 Dinoseb	211	9.334	9.355	(1.004)	75910	25.0000	27.7	
119 Carbazole	167	9.593	9.613	(1.032)	544543	25.0000	28.6	
120 Methyl Parathion	109	9.780	9.800	(1.052)	162406	25.0000	29.2	
121 Di-n-butylphthalate	149	10.069	10.079	(1.084)	846942	25.0000	29.9	
122 4-Nitroquinoline-1-Oxide	190	10.276	10.307	(1.106)	35842	25.0000	25.1	
123 Ethyl Parathion	291	10.276	10.297	(1.106)	37312	25.0000	24.4(a)	
124 Methapyrilene	97	10.401	10.431	(1.119)	178426	25.0000	29.4	
125 Isodrin	193	10.597	10.607	(1.140)	84531	25.0000	30.2	
126 Fluoranthene	202	10.784	10.804	(1.160)	561346	25.0000	25.3	
128 Pyrene	202	11.053	11.073	(0.861)	573476	25.0000	27.2	
127 Benzidine	184	10.970	10.990	(0.854)	141408	25.0000	23.9(a)	
$ 129 Terphenyl-D14	244	11.280	11.301	(0.878)	380133	25.0000	27.2	
130 Aramite	185	11.384	11.394	(0.886)	40093	25.0000	26.8	

12:45 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Report Date: 27-Mar-2015 15:13

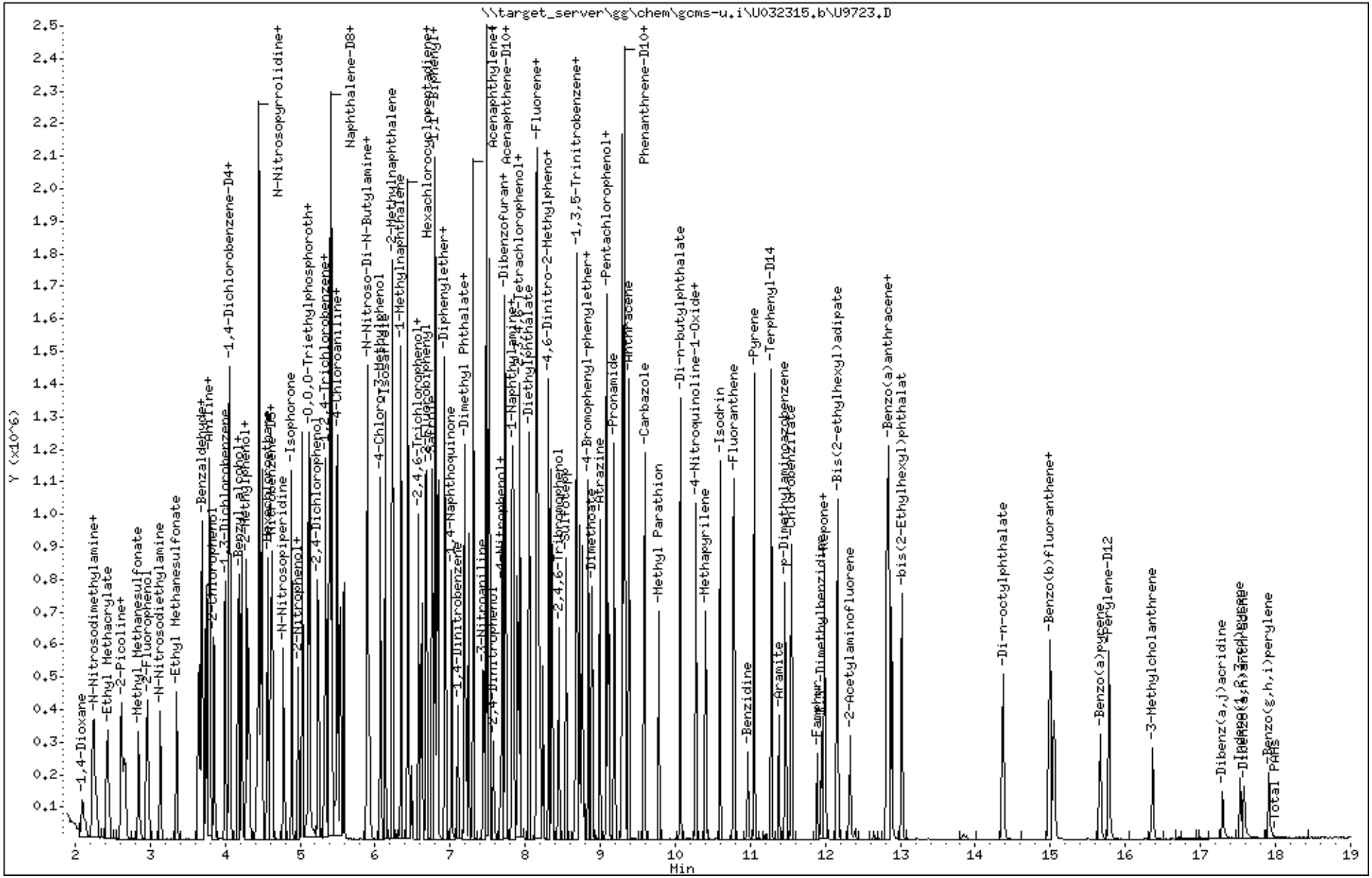
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
131 p-Dimethylaminoazobenzene	225	11.477	11.487	(0.894)	102095	25.0000	25.1	
132 Chlorobenzilate	251	11.549	11.570	(0.899)	154088	25.0000	25.7	
135 Kepone	272	11.984	11.995	(0.933)	13555	25.0000	30.7	
133 Famphur	218	11.891	11.901	(0.926)	73956	25.0000	40.6	
134 3,3'-Dimethylbenzidine	212	11.953	11.963	(0.931)	161394	25.0000	23.7	
136 Butylbenzylphthalate	149	11.994	12.004	(0.934)	282040	25.0000	25.6	
137 Bis(2-ethylhexyl)adipate	129	12.160	12.170	(0.947)	280360	25.0000	25.2	
138 2-Acetylaminofluorene	181	12.326	12.367	(0.960)	107555	25.0000	25.2	
139 Benzo(a)anthracene	228	12.822	12.853	(0.998)	378139	25.0000	26.4	
* 141 Chrysene-D12	240	12.843	12.863	(1.000)	586253	40.0000		
142 Chrysene	228	12.885	12.915	(1.003)	373440	25.0000	26.9	
140 3,3'-Dichlorobenzidine	252	12.822	12.832	(0.998)	108123	25.0000	26.3	
143 bis(2-Ethylhexyl)phthalate	149	13.019	13.029	(1.014)	371187	25.0000	25.0	
144 Di-n-octylphthalate	149	14.365	14.385	(0.910)	535380	25.0000	21.9	
145 Benzo(b)fluoranthene	252	14.986	15.027	(0.950)	289748	25.0000	25.2	
146 7,12-Dimethylbenz(A)Anthracen	256	14.996	15.027	(0.950)	155300	25.0000	25.0	
147 Benzo(k)fluoranthene	252	15.048	15.078	(0.953)	290083	25.0000	25.1(H)	
149 Benzo(a)pyrene	252	15.658	15.679	(0.992)	230569	25.0000	24.3	
* 150 Perylene-D12	264	15.783	15.782	(1.000)	376482	40.0000		
151 3-Methylcholanthrene	268	16.362	16.372	(1.037)	113692	25.0000	25.7	
152 Dibenz(a,j)acridine	279	17.294	17.304	(1.096)	112593	25.0000	24.9	
153 Indeno(1,2,3-cd)pyrene	276	17.532	17.542	(1.111)	126007	25.0000	24.6	
154 Dibenzo(a,h)anthracene	278	17.584	17.593	(1.114)	122507	25.0000	24.0	
155 Benzo(g,h,i)perylene	276	17.915	17.925	(1.135)	149683	25.0000	26.2	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Date : 23-MAR-2015 16:05
Client ID:
Sample Info: WG160080-3
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



0000486

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Lab Smp Id: WG160080-5
Inj Date : 23-MAR-2015 16:31 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-5
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 16:31 Cal File: U9724.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	58	2.100	2.099	(0.389)	245992	75.0000	78.3	
3 Pyridine	79	2.245	2.244	(0.553)	1046300	75.0000	79.6	
2 N-Nitrosodimethylamine	42	2.224	2.223	(0.548)	338510	75.0000	80.4	
4 Ethyl Methacrylate	69	2.421	2.420	(0.597)	727694	75.0000	79.3	
5 2-Picoline	93	2.617	2.617	(0.645)	1035290	75.0000	79.1	
6 N-Nitrosomethylethylamine	88	2.669	2.669	(0.658)	443760	75.0000	79.7	
7 Methyl Methanesulfonate	80	2.855	2.855	(0.704)	558063	75.0000	77.2	
$ 8 2-Fluorophenol	112	2.959	2.969	(0.730)	961228	75.0000	79.8	
9 N-Nitrosodiethylamine	102	3.135	3.145	(0.773)	456923	75.0000	80.1	
10 Ethyl Methanesulfonate	79	3.363	3.383	(0.829)	751501	75.0000	80.2	
11 Benzaldehyde	77	3.652	3.652	(0.900)	370285	75.0000	68.9	
15 Pentachloroethane	117	3.787	3.786	(0.934)	333177	75.0000	77.8	
14 Aniline	93	3.756	3.766	(0.926)	1414717	75.0000	79.0	
16 Bis(2-Chloroethyl)ether	93	3.797	3.807	(0.936)	774367	75.0000	76.7	
$ 12 Phenol-D6	99	3.704	3.714	(0.913)	1109327	75.0000	79.4	
13 Phenol	94	3.714	3.735	(0.916)	1209820	75.0000	82.9	
17 2-Chlorophenol	128	3.859	3.869	(0.952)	911484	75.0000	78.0	
18 1,3-Dichlorobenzene	146	4.004	4.004	(0.987)	943971	75.0000	78.6	
* 19 1,4-Dichlorobenzene-D4	152	4.056	4.055	(1.000)	318480	40.0000		
20 1,4-Dichlorobenzene	146	4.066	4.076	(1.003)	873021	75.0000	77.6	
22 1,2-Dichlorobenzene	146	4.222	4.231	(1.041)	880889	75.0000	79.5	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.191	4.200	(1.033)	637716	75.0000	80.9	
	24 Bis(2-Chloroisopropyl)ether	45	4.325	4.335	(1.066)	899860	75.0000	77.1(Q)	
	25 2,2'-Oxybis(1-chloropropane)	45	4.325	4.335	(1.066)	899860	75.0000	77.1	
	23 2-Methylphenol	108	4.294	4.304	(1.059)	860109	75.0000	80.0	
	27 Acetophenone	105	4.460	4.469	(0.826)	1078602	75.0000	76.0	
	32 Hexachloroethane	117	4.563	4.573	(1.125)	389872	75.0000	76.7	
	26 N-Nitrosopyrrolidine	100	4.460	4.521	(1.100)	437786	75.0000	81.0(Q)	
	31 o-Toluidine	106	4.501	4.521	(1.110)	1160451	75.0000	78.6	
	29 N-Nitrosomorpholine	56	4.491	4.521	(1.107)	330268	75.0000	70.1	
	30 N-Nitroso-di-n-propylamine	70	4.491	4.500	(1.107)	464348	75.0000	77.2(Q)	
	28 3&4-Methylphenol	108	4.480	4.511	(1.105)	701487	75.0000	79.1	
$	33 Nitrobenzene-D5	82	4.625	4.635	(0.856)	863595	75.0000	77.4	
	34 Nitrobenzene	77	4.636	4.656	(0.858)	798907	75.0000	78.1	
	35 N-Nitrosopiperidine	114	4.801	4.821	(0.889)	458409	75.0000	76.9	
	36 Isophorone	82	4.905	4.925	(0.908)	1645043	75.0000	77.0	
	37 2-Nitrophenol	139	4.988	4.997	(0.923)	486469	75.0000	79.1	
	38 2,4-Dimethylphenol	107	5.050	5.070	(0.935)	846942	75.0000	76.8	
	40 Bis(2-Chloroethoxy)methane	93	5.143	5.163	(0.952)	1163918	75.0000	77.8	
	39 O,O,O-Triethylphosphorothioat	198	5.122	5.132	(0.948)	275543	75.0000	74.8	
	42 2,4-Dichlorophenol	162	5.257	5.277	(0.973)	619495	75.0000	75.6	
	43 1,2,4-Trichlorobenzene	180	5.339	5.349	(0.989)	641237	75.0000	74.8	
*	45 Naphthalene-D8	136	5.402	5.411	(1.000)	1247358	40.0000		
	41 Benzoic acid	122	5.226	5.297	(0.967)	546830	75.0000	84.3(H)	
	46 Naphthalene	128	5.433	5.442	(1.006)	2074701	75.0000	83.9	
	44 A,A-Dimethylphenethylamine	58	5.650	5.753	(1.046)	2054452	75.0000	87.1(TM)	M9
	49 Hexachloropropene	213	5.536	5.546	(1.025)	402143	75.0000	81.3	
	48 2,6-Dichlorophenol	162	5.515	5.525	(1.021)	573201	75.0000	83.5	
	47 4-Chloroaniline	127	5.505	5.525	(1.019)	965516	75.0000	77.4	
	50 Hexachlorobutadiene	225	5.588	5.598	(1.034)	326456	75.0000	78.3	
	51 N-Nitroso-Di-N-Butylamine	84	5.909	5.939	(1.094)	617899	75.0000	76.0	
	53 Caprolactam	113	5.971	6.022	(1.105)	277652	75.0000	78.4	
	52 p-Phenylenediamine	108	5.940	5.960	(1.100)	881179	75.0000	84.0	
	55 Isosafrole	162	6.147	6.157	(1.138)	547031	75.0000	73.5	
	56 2-Methylnaphthalene	142	6.240	6.250	(1.155)	1361694	75.0000	73.4	
	54 4-Chloro-3-Methylphenol	107	6.095	6.125	(1.128)	670548	75.0000	76.7	
	58 1-Methylnaphthalene	142	6.354	6.364	(1.176)	1250892	75.0000	72.5	
	60 1,2,4,5-Tetrachlorobenzene	216	6.447	6.457	(0.860)	434687	75.0000	72.7	
	59 Hexachlorocyclopentadiene	237	6.447	6.446	(0.860)	385431	75.0000	73.0	
	61 2,4,6-Trichlorophenol	196	6.592	6.612	(0.880)	408716	75.0000	75.9	
$	63 2-Fluorobiphenyl	172	6.685	6.705	(0.892)	1405091	75.0000	76.3	
	62 2,4,5-Trichlorophenol	196	6.644	6.664	(0.887)	464048	75.0000	81.2	
	64 Safrole	104	6.778	6.788	(0.905)	296624	75.0000	77.1	
	66 2-Chloronaphthalene	162	6.820	6.840	(0.910)	1560691	75.0000	85.0	
	65 1,1'-Biphenyl	154	6.809	6.829	(0.909)	1269926	75.0000	76.1	
	67 1-Chloronaphthalene	162	6.851	6.860	(0.914)	1149711	75.0000	66.5	
	68 Diphenylether	170	6.933	6.943	(0.925)	827838	75.0000	72.7	
	69 2-Nitroaniline	65	6.964	6.974	(0.930)	477988	75.0000	78.5	
	70 1,4-Naphthoquinone	158	7.037	7.047	(0.939)	429114	75.0000	69.9	
	71 1,4-Dinitrobenzene	75	7.120	7.150	(0.950)	303504	75.0000	78.9	
	75 Acenaphthylene	152	7.316	7.326	(0.977)	1918691	75.0000	72.1	
	72 Dimethyl Phthalate	163	7.213	7.243	(0.963)	1511944	75.0000	75.0	
	73 1,3-Dinitrobenzene	168	7.234	7.264	(0.965)	242530	75.0000	76.7	
	74 2,6-Dinitrotoluene	165	7.265	7.285	(0.970)	336639	75.0000	74.6	
	76 1,2-Dinitrobenzene	50	7.327	7.347	(0.978)	207558	75.0000	76.8	

12:45 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
* 78 Acenaphthene-D10	164	7.492	7.502	(1.000)	633891	40.0000		
79 Acenaphthene	153	7.534	7.543	(1.006)	1114455	75.0000	70.5	
77 3-Nitroaniline	138	7.472	7.502	(0.997)	441121	75.0000	81.8	
80 2,4-Dinitrophenol	184	7.616	7.647	(1.017)	217537	75.0000	85.3	
83 Dibenzofuran	168	7.741	7.761	(1.033)	1629292	75.0000	77.1	
82 Pentachlorobenzene	250	7.710	7.719	(1.029)	524510	75.0000	71.9	
85 1-Naphthylamine	143	7.844	7.864	(1.047)	1440210	75.0000	75.5	
84 2,4-Dinitrotoluene	165	7.772	7.802	(1.037)	437671	75.0000	78.1	
86 2,3,5,6-Tetrachlorophenol	232	7.865	7.885	(1.050)	329046	75.0000	74.8	
88 2-Naphthylamine	143	7.948	7.978	(1.061)	1404942	75.0000	77.6	
81 4-Nitrophenol	139	7.730	7.750	(1.032)	231711	75.0000	65.1(MH)	M9
87 2,3,4,6-Tetrachlorophenol	232	7.917	7.937	(1.057)	349227	75.0000	76.0	
90 Fluorene	166	8.165	8.175	(1.090)	1142480	75.0000	81.7	
89 Diethylphthalate	149	8.072	8.092	(1.077)	1420142	75.0000	73.8	
92 4-Chlorophenyl-phenylether	204	8.175	8.185	(1.091)	455799	75.0000	79.1	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.175	8.195	(1.091)	195757	75.0000	75.5	
93 5-Nitro-O-Toluidine	152	8.206	8.237	(1.095)	434541	75.0000	78.8(Q)	
94 4-Nitroaniline	138	8.227	8.268	(1.098)	354583	75.0000	81.6	
95 4,6-Dinitro-2-Methylphenol	198	8.269	8.289	(0.889)	254340	75.0000	87.5	
96 N-Nitrosodiphenylamine	169	8.331	8.351	(0.895)	1043796	75.0000	75.0	
97 N-Nitrosodiphenylamine/DPA	169	8.331	8.351	(0.895)	1043796	75.0000	75.0	
98 1,2-Diphenylhydrazine	77	8.372	8.382	(0.900)	1542352	75.0000	78.8(H)	
99 Azobenzene	77	8.372	8.382	(0.900)	1542352	75.0000	78.8(H)	
$ 100 2,4,6-Tribromophenol	330	8.465	8.485	(1.130)	253623	75.0000	76.0	
101 Sulfotepp	97	8.558	8.568	(0.920)	247474	75.0000	76.1	
103 Diallate	86	8.693	8.703	(0.934)	578740	75.0000	82.3	
106 4-Bromophenyl-phenylether	248	8.776	8.785	(0.943)	348997	75.0000	82.1	
104 Phorate	75	8.703	8.723	(0.935)	911324	75.0000	72.1	
102 1,3,5-Trinitrobenzene	213	8.703	8.744	(0.935)	83304	75.0000	69.0(Q)	
105 Phenacetin	108	8.765	8.796	(0.942)	612417	75.0000	74.9	
107 Hexachlorobenzene	284	8.858	8.868	(0.952)	442450	75.0000	78.2	
108 Dimethoate	87	8.921	8.951	(0.959)	499972	75.0000	78.1	
109 Atrazine	200	9.014	9.034	(0.969)	265744	75.0000	75.5	
111 4-Aminobiphenyl	169	9.107	9.127	(0.979)	1070462	75.0000	73.1	
110 Pentachlorophenol	266	9.097	9.117	(0.978)	259155	75.0000	78.9	
112 Pentachloronitrobenzene	237	9.128	9.148	(0.981)	163855	75.0000	78.2	
* 114 Phenanthrene-D10	188	9.304	9.313	(1.000)	924108	40.0000		
113 Pronamide	173	9.210	9.220	(0.990)	554912	75.0000	80.2	
115 Phenanthrene	178	9.335	9.355	(1.003)	1390501	75.0000	83.5	
118 Anthracene	178	9.397	9.417	(1.010)	1650247	75.0000	75.7	
116 Disulfoton	88	9.345	9.355	(1.004)	639216	75.0000	78.9	
117 Dinoseb	211	9.355	9.355	(1.006)	211163	75.0000	75.0	
119 Carbazole	167	9.604	9.613	(1.032)	1490438	75.0000	76.0	
120 Methyl Parathion	109	9.790	9.800	(1.052)	437433	75.0000	76.6	
121 Di-n-butylphthalate	149	10.080	10.079	(1.083)	2179626	75.0000	74.7	
122 4-Nitroquinoline-1-Oxide	190	10.287	10.307	(1.106)	120685	75.0000	82.2	
123 Ethyl Parathion	291	10.287	10.297	(1.106)	107892	75.0000	81.6	
124 Methapyrilene	97	10.411	10.431	(1.119)	435362	75.0000	69.9	
125 Isodrin	193	10.608	10.607	(1.140)	217829	75.0000	75.6	
126 Fluoranthene	202	10.794	10.804	(1.160)	1479963	75.0000	84.0	
128 Pyrene	202	11.063	11.073	(0.861)	1431223	75.0000	77.5	
127 Benzidine	184	10.980	10.990	(0.854)	463262	75.0000	89.4	
$ 129 Terphenyl-D14	244	11.291	11.301	(0.878)	970115	75.0000	79.5	
130 Aramite	185	11.394	11.394	(0.886)	108418	75.0000	82.8	

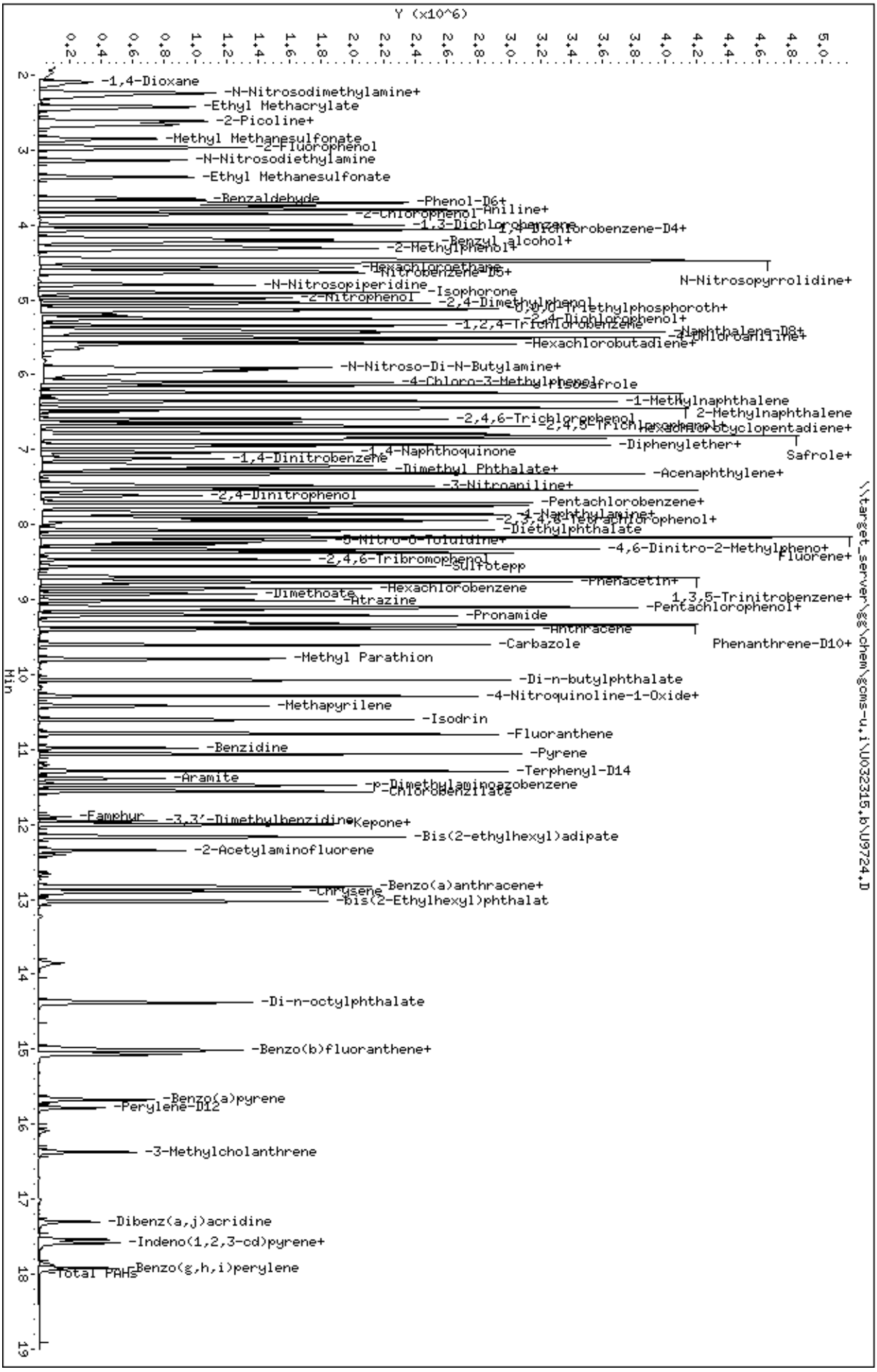
12:45 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
131 p-Dimethylaminoazobenzene	225	11.477	11.487	(0.893)	294296	75.0000	82.7	
132 Chlorobenzilate	251	11.560	11.570	(0.899)	426827	75.0000	81.5	
133 Famphur	218	11.901	11.901	(0.926)	64860	75.0000	40.7	
134 3,3'-Dimethylbenzidine	212	11.953	11.963	(0.930)	348148	75.0000	82.3	
136 Butylbenzylphthalate	149	12.005	12.004	(0.934)	773539	75.0000	80.4	
137 Bis(2-ethylhexyl)adipate	129	12.171	12.170	(0.947)	794144	75.0000	81.4	
138 2-Acetylaminofluorene	181	12.346	12.367	(0.961)	313950	75.0000	83.9	
139 Benzo(a)anthracene	228	12.843	12.853	(0.999)	1004381	75.0000	80.2	
* 141 Chrysene-D12	240	12.854	12.863	(1.000)	512783	40.0000		
142 Chrysene	228	12.905	12.915	(1.004)	959125	75.0000	79.0	
140 3,3'-Dichlorobenzidine	252	12.833	12.832	(0.998)	291814	75.0000	81.2	
143 bis(2-Ethylhexyl)phthalate	149	13.030	13.029	(1.014)	1038813	75.0000	80.0	
144 Di-n-octylphthalate	149	14.375	14.385	(0.911)	1489539	75.0000	84.9	
145 Benzo(b)fluoranthene	252	15.006	15.027	(0.951)	680198	75.0000	82.3	
146 7,12-Dimethylbenz(A)Anthracen	256	15.017	15.027	(0.951)	364196	75.0000	81.7	
147 Benzo(k)fluoranthene	252	15.069	15.078	(0.955)	685264	75.0000	82.7(H)	
149 Benzo(a)pyrene	252	15.669	15.679	(0.993)	567253	75.0000	83.2	
* 150 Perylene-D12	264	15.783	15.782	(1.000)	270201	40.0000		
151 3-Methylcholanthrene	268	16.373	16.372	(1.037)	260067	75.0000	82.0	
152 Dibenz(a,j)acridine	279	17.304	17.304	(1.096)	283282	75.0000	87.4	
153 Indeno(1,2,3-cd)pyrene	276	17.542	17.542	(1.111)	305210	75.0000	83.1	
154 Dibenzo(a,h)anthracene	278	17.584	17.593	(1.114)	327801	75.0000	89.4	
155 Benzo(g,h,i)perylene	276	17.925	17.925	(1.136)	344651	75.0000	84.2	

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Date : 23-MAR-2015 16:31
Client ID:
Sample Info: WG160080-5
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25
Y (x10^6)
Min
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Ethyl Methacrylate
-2-Picoline+
-Methyl Methanesulfonate
-2-Fluorophenol
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Benzaldehyde
-Phenol-D6+
-2-Chlorophenol
-Aniline+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-Benzyl alcohol+
-2-Methylphenol+
-Hexachloroethane
-Nitrobenzene-D5+
N-Nitrosopyrrolidine+
-N-Nitrosopiperidine
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-2,4-Dichlorophenol+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Hexachlorobutadiene+
-N-Nitroso-Di-N-Butylamine+
-4-Chloro-3-Methylphenol
-Isosafrole
-1-Methylnaphthalene
2-Methylnaphthalene
-2,4,6-Trichlorophenol
-2,4,5-Trichlorophenol+
-Hexachlorocyclopentadiene+
-Diphenylether+
Safrole+
-1,4-Naphthoquinone
-1,4-Dinitrobenzene
-Dimethyl Phthalate+
-Acenaphthylene+
-3-Nitroaniline+
-2,4-Dinitrophenol
-Pentachlorobenzene+
-1-Naphthylamine+
-2,3,4,6-Tetrachlorophenol+
-Diethylphthalate
-5-Nitro-6-Toluidine+
-4,6-Dinitro-2-Methylpheno+
Fluorene+
-2,4,6-Tribromophenol
-Sulfotepp
-Phenacetin+
-Hexachlorobenzene
-Dimethoate
-Atrazine
1,3,5-Trinitrobenzene+
-Pentachlorophenol+
-Pronamide
-Anthracene
-Carbazole
Phenanthrene-D10+
-Methyl Parathion
-Di-n-butylphthalate
-4-Nitroquinoline-1-Oxide+
-Methapyrilene
-Isodrin
-Fluoranthene
-Benzidine
-Pyrene
-Terphenyl-D14
-Aramite
-p-Dimethylaminoazobenzene
-Chlorobenzilate
-Camphur
-3,3'-Dimethylbenzidine
Kepone+
-Bis(2-ethylhexyl)adipate
-2-Acetylaminofluorene
-Chrysene
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-3-Methylcholanthrene
-Dibenz(a,j)acridine
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
-Total PAHs
\\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Lab Smp Id: WG160080-6
Inj Date : 23-MAR-2015 16:57 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-6
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 16:57 Cal File: U9725.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	1 1,4-Dioxane	58	2.100	2.099	(0.388)	368724	100.000	97.0	
	3 Pyridine	79	2.255	2.244	(0.556)	1552660	100.000	97.4	
	2 N-Nitrosodimethylamine	42	2.224	2.223	(0.548)	490732	100.000	96.2	
	4 Ethyl Methacrylate	69	2.431	2.420	(0.599)	1081759	100.000	97.3	
	5 2-Picoline	93	2.607	2.617	(0.643)	1564256	100.000	98.6	
	6 N-Nitrosomethylethylamine	88	2.669	2.669	(0.658)	659281	100.000	97.7	
	7 Methyl Methanesulfonate	80	2.855	2.855	(0.704)	864826	100.000	98.7	
$	8 2-Fluorophenol	112	2.969	2.969	(0.732)	1425884	100.000	97.7	
	9 N-Nitrosodiethylamine	102	3.145	3.145	(0.775)	673144	100.000	97.4	
	10 Ethyl Methanesulfonate	79	3.373	3.383	(0.832)	1101588	100.000	97.1	
	11 Benzaldehyde	77	3.652	3.652	(0.900)	375997	100.000	57.8	
	15 Pentachloroethane	117	3.787	3.786	(0.934)	463921	100.000	89.4	
	14 Aniline	93	3.766	3.766	(0.929)	2161461	100.000	99.6	
	16 Bis(2-Chloroethyl)ether	93	3.797	3.807	(0.936)	1038644	100.000	84.9	
$	12 Phenol-D6	99	3.714	3.714	(0.916)	1597338	100.000	94.4	
	13 Phenol	94	3.724	3.735	(0.918)	1686919	100.000	95.4(Q)	
	17 2-Chlorophenol	128	3.869	3.869	(0.954)	1339435	100.000	94.6	
	18 1,3-Dichlorobenzene	146	4.004	4.004	(0.987)	1315308	100.000	90.4	
*	19 1,4-Dichlorobenzene-D4	152	4.056	4.055	(1.000)	385823	40.0000		
	20 1,4-Dichlorobenzene	146	4.076	4.076	(1.005)	1235256	100.000	90.6	
	22 1,2-Dichlorobenzene	146	4.221	4.231	(1.041)	1184828	100.000	88.3	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.201	4.200	(1.036)	924834	100.000	96.9	
	24 Bis(2-Chloroisopropyl)ether	45	4.325	4.335	(1.066)	1221305	100.000	86.4	
	25 2,2'-Oxybis(1-chloropropane)	45	4.325	4.335	(1.066)	1221305	100.000	86.4(Q)	
	23 2-Methylphenol	108	4.304	4.304	(1.061)	1231303	100.000	94.5	
	27 Acetophenone	105	4.470	4.469	(0.826)	1573530	100.000	91.6	
	32 Hexachloroethane	117	4.573	4.573	(1.128)	549450	100.000	89.2	
	26 N-Nitrosopyrrolidine	100	4.490	4.521	(1.107)	514181	100.000	78.5	
	31 o-Toluidine	106	4.521	4.521	(1.115)	1455779	100.000	81.4(Q)	
	29 N-Nitrosomorpholine	56	4.511	4.521	(1.112)	460741	100.000	80.7	
	30 N-Nitroso-di-n-propylamine	70	4.490	4.500	(1.107)	570707	100.000	78.4	
	28 3&4-Methylphenol	108	4.501	4.511	(1.110)	821592	100.000	76.5(Q)	
$	33 Nitrobenzene-D5	82	4.625	4.635	(0.855)	1263291	100.000	93.5	
	34 Nitrobenzene	77	4.646	4.656	(0.858)	1105325	100.000	89.3	
	35 N-Nitrosopiperidine	114	4.822	4.821	(0.891)	710869	100.000	98.5	
	36 Isophorone	82	4.915	4.925	(0.908)	2425482	100.000	93.8	
	37 2-Nitrophenol	139	4.987	4.997	(0.922)	701888	100.000	94.4	
	38 2,4-Dimethylphenol	107	5.060	5.070	(0.935)	1177722	100.000	88.2	
	40 Bis(2-Chloroethoxy)methane	93	5.153	5.163	(0.952)	1666002	100.000	92.0	
	39 O,O,O-Triethylphosphorothioat	198	5.132	5.132	(0.948)	396124	100.000	88.9	
	42 2,4-Dichlorophenol	162	5.267	5.277	(0.973)	851409	100.000	85.9	
	43 1,2,4-Trichlorobenzene	180	5.349	5.349	(0.989)	893692	100.000	86.2	
*	45 Naphthalene-D8	136	5.412	5.411	(1.000)	1509520	40.0000		
	41 Benzoic acid	122	5.236	5.297	(0.967)	885177	100.000	113(M)	M9
	46 Naphthalene	128	5.432	5.442	(1.004)	2761078	100.000	95.6	
	44 A,A-Dimethylphenethylamine	58	5.701	5.753	(1.054)	1858421	100.000	65.1(M)	M9
	49 Hexachloropropene	213	5.536	5.546	(1.023)	561105	100.000	102	
	48 2,6-Dichlorophenol	162	5.525	5.525	(1.021)	783011	100.000	100	
	47 4-Chloroaniline	127	5.515	5.525	(1.019)	1289037	100.000	85.3	
	50 Hexachlorobutadiene	225	5.588	5.598	(1.033)	465980	100.000	98.6	
	51 N-Nitroso-Di-N-Butylamine	84	5.929	5.939	(1.096)	853861	100.000	86.7	
	53 Caprolactam	113	5.991	6.022	(1.107)	397288	100.000	92.7(M)	M9
	52 p-Phenylenediamine	108	5.950	5.960	(1.099)	842381	100.000	66.3	
	55 Isosafrole	162	6.157	6.157	(1.138)	802950	100.000	89.2	
	56 2-Methylnaphthalene	142	6.250	6.250	(1.155)	1958892	100.000	87.2	
	54 4-Chloro-3-Methylphenol	107	6.115	6.125	(1.130)	924680	100.000	87.4	
	58 1-Methylnaphthalene	142	6.364	6.364	(1.176)	1768367	100.000	84.7	
	60 1,2,4,5-Tetrachlorobenzene	216	6.457	6.457	(0.862)	638633	100.000	108	
	59 Hexachlorocyclopentadiene	237	6.447	6.446	(0.860)	544361	100.000	92.2	
	61 2,4,6-Trichlorophenol	196	6.602	6.612	(0.881)	568593	100.000	94.5	
$	63 2-Fluorobiphenyl	172	6.695	6.705	(0.894)	1815594	100.000	88.2	
	62 2,4,5-Trichlorophenol	196	6.654	6.664	(0.888)	577225	100.000	90.3	
	64 Safrole	104	6.788	6.788	(0.906)	414734	100.000	96.4	
	66 2-Chloronaphthalene	162	6.830	6.840	(0.912)	1737372	100.000	84.7	
	65 1,1'-Biphenyl	154	6.819	6.829	(0.910)	1658318	100.000	94.6	
	67 1-Chloronaphthalene	162	6.861	6.860	(0.916)	2031926	100.000	105	
	68 Diphenylether	170	6.943	6.943	(0.927)	1206771	100.000	94.8	
	69 2-Nitroaniline	65	6.974	6.974	(0.931)	661430	100.000	97.1	
	70 1,4-Naphthoquinone	158	7.047	7.047	(0.941)	544714	100.000	79.4	
	71 1,4-Dinitrobenzene	75	7.140	7.150	(0.953)	443879	100.000	103	
	75 Acenaphthylene	152	7.326	7.326	(0.978)	2590779	100.000	87.1	
	72 Dimethyl Phthalate	163	7.233	7.243	(0.965)	2162762	100.000	96.0(M)	M6
	73 1,3-Dinitrobenzene	168	7.254	7.264	(0.968)	349957	100.000	99.0	
	74 2,6-Dinitrotoluene	165	7.275	7.285	(0.971)	493247	100.000	97.8	
	76 1,2-Dinitrobenzene	50	7.337	7.347	(0.979)	282975	100.000	93.7	

12:45 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
* 78 Acenaphthene-D10	164	7.492	7.502	(1.000)	708729	40.0000		
79 Acenaphthene	153	7.544	7.543	(1.007)	1602584	100.000	90.7	
77 3-Nitroaniline	138	7.492	7.502	(1.000)	542216	100.000	89.9	
80 2,4-Dinitrophenol	184	7.626	7.647	(1.018)	292214	100.000	102	
83 Dibenzofuran	168	7.751	7.761	(1.035)	1946128	100.000	82.4	
82 Pentachlorobenzene	250	7.720	7.719	(1.030)	750721	100.000	92.0	
85 1-Naphthylamine	143	7.854	7.864	(1.048)	1909787	100.000	89.6	
84 2,4-Dinitrotoluene	165	7.782	7.802	(1.039)	599681	100.000	95.8	
86 2,3,5,6-Tetrachlorophenol	232	7.875	7.885	(1.051)	403112	100.000	81.9	
88 2-Naphthylamine	143	7.968	7.978	(1.064)	1890868	100.000	93.5	
81 4-Nitrophenol	139	7.740	7.750	(1.033)	475841	100.000	120(QM)	M3
87 2,3,4,6-Tetrachlorophenol	232	7.927	7.937	(1.058)	471294	100.000	91.7	
90 Fluorene	166	8.165	8.175	(1.090)	1471190	100.000	101	
89 Diethylphthalate	149	8.082	8.092	(1.079)	1869019	100.000	86.8	
92 4-Chlorophenyl-phenylether	204	8.175	8.185	(1.091)	590788	100.000	101	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.185	8.195	(1.093)	269941	100.000	99.0	
93 5-Nitro-O-Toluidine	152	8.227	8.237	(1.098)	594449	100.000	96.4	
94 4-Nitroaniline	138	8.247	8.268	(1.101)	493989	100.000	102	
95 4,6-Dinitro-2-Methylphenol	198	8.279	8.289	(0.889)	323409	100.000	94.4	
96 N-Nitrosodiphenylamine	169	8.341	8.351	(0.896)	1417184	100.000	86.4	
97 N-Nitrosodiphenylamine/DPA	169	8.341	8.351	(0.896)	1417184	100.000	86.4	
98 1,2-Diphenylhydrazine	77	8.372	8.382	(0.899)	1905109	100.000	82.6(H)	
99 Azobenzene	77	8.372	8.382	(0.899)	1905109	100.000	82.6(H)	
$ 100 2,4,6-Tribromophenol	330	8.475	8.485	(1.131)	345796	100.000	92.6	
101 Sulfotepp	97	8.558	8.568	(0.919)	319654	100.000	83.4	
103 Diallate	86	8.703	8.703	(0.934)	747310	100.000	92.9	
106 4-Bromophenyl-phenylether	248	8.775	8.785	(0.942)	450014	100.000	92.3	
104 Phorate	75	8.713	8.723	(0.936)	1368272	100.000	91.8	
102 1,3,5-Trinitrobenzene	213	8.724	8.744	(0.937)	129837	100.000	91.2(Q)	
105 Phenacetin	108	8.786	8.796	(0.943)	832574	100.000	86.4	
107 Hexachlorobenzene	284	8.858	8.868	(0.951)	551374	100.000	82.6	
108 Dimethoate	87	8.941	8.951	(0.960)	569981	100.000	75.5	
109 Atrazine	200	9.024	9.034	(0.969)	285487	100.000	68.8	
111 4-Aminobiphenyl	169	9.117	9.127	(0.979)	1291069	100.000	74.9	
110 Pentachlorophenol	266	9.107	9.117	(0.978)	328594	100.000	84.9	
112 Pentachloronitrobenzene	237	9.138	9.148	(0.981)	209651	100.000	84.9	
* 114 Phenanthrene-D10	188	9.314	9.313	(1.000)	1089048	40.0000		
113 Pronamide	173	9.220	9.220	(0.990)	729964	100.000	91.8	
115 Phenanthrene	178	9.345	9.355	(1.003)	1766050	100.000	94.0	
118 Anthracene	178	9.407	9.417	(1.010)	2059345	100.000	80.2	
116 Disulfoton	88	9.355	9.355	(1.004)	875145	100.000	101	
117 Dinoseb	211	9.355	9.355	(1.004)	265825	100.000	80.1	
119 Carbazole	167	9.614	9.613	(1.032)	1936721	100.000	83.8	
120 Methyl Parathion	109	9.800	9.800	(1.052)	540882	100.000	80.4	
121 Di-n-butylphthalate	149	10.079	10.079	(1.082)	2678048	100.000	77.9	
122 4-Nitroquinoline-1-Oxide	190	10.297	10.307	(1.106)	181687	100.000	105	
123 Ethyl Parathion	291	10.286	10.297	(1.104)	151900	100.000	103(Q)	
124 Methapyrilene	97	10.421	10.431	(1.119)	569416	100.000	77.6	
125 Isodrin	193	10.607	10.607	(1.139)	268056	100.000	78.9	
126 Fluoranthene	202	10.794	10.804	(1.159)	1933344	100.000	97.1	
128 Pyrene	202	11.073	11.073	(0.861)	2055909	100.000	89.6	
127 Benzidine	184	10.980	10.990	(0.854)	621647	100.000	96.6	
$ 129 Terphenyl-D14	244	11.290	11.301	(0.878)	1284172	100.000	84.7	
130 Aramite	185	11.394	11.394	(0.886)	148356	100.000	91.2	

29

12:46 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
131 p-Dimethylaminoazobenzene	225	11.487	11.487	(0.893)	409634	100.000	92.7	
132 Chlorobenzilate	251	11.560	11.570	(0.899)	587734	100.000	90.4	
133 Famphur	218	11.901	11.901	(0.925)	57103	100.000	28.8	
134 3,3'-Dimethylbenzidine	212	11.963	11.963	(0.930)	471945	100.000	94.0	
136 Butylbenzylphthalate	149	12.005	12.004	(0.933)	1101297	100.000	92.1	
137 Bis(2-ethylhexyl)adipate	129	12.170	12.170	(0.946)	1111658	100.000	91.8	
138 2-Acetylaminofluorene	181	12.356	12.367	(0.961)	495010	100.000	106	
139 Benzo(a)anthracene	228	12.843	12.853	(0.998)	1443300	100.000	92.8	
* 141 Chrysene-D12	240	12.864	12.863	(1.000)	637030	40.0000		
142 Chrysene	228	12.915	12.915	(1.004)	1390846	100.000	92.2	
140 3,3'-Dichlorobenzidine	252	12.833	12.832	(0.998)	426487	100.000	95.5	
143 bis(2-Ethylhexyl)phthalate	149	13.029	13.029	(1.013)	1547796	100.000	96.0	
144 Di-n-octylphthalate	149	14.385	14.385	(0.911)	2243613	100.000	104	
145 Benzo(b)fluoranthene	252	15.027	15.027	(0.952)	984127	100.000	96.7	
146 7,12-Dimethylbenz(A)Anthracen	256	15.027	15.027	(0.952)	525266	100.000	95.7	
147 Benzo(k)fluoranthene	252	15.079	15.078	(0.955)	983879	100.000	96.4(MH)	M6
149 Benzo(a)pyrene	252	15.679	15.679	(0.993)	844697	100.000	100	
* 150 Perylene-D12	264	15.793	15.782	(1.000)	332706	40.0000		
151 3-Methylcholanthrene	268	16.372	16.372	(1.037)	377407	100.000	96.6	
152 Dibenz(a,j)acridine	279	17.304	17.304	(1.096)	392247	100.000	98.3	
153 Indeno(1,2,3-cd)pyrene	276	17.542	17.542	(1.111)	450130	100.000	99.6	
154 Dibenzo(a,h)anthracene	278	17.594	17.593	(1.114)	456194	100.000	101	
155 Benzo(g,h,i)perylene	276	17.925	17.925	(1.135)	455837	100.000	90.5	

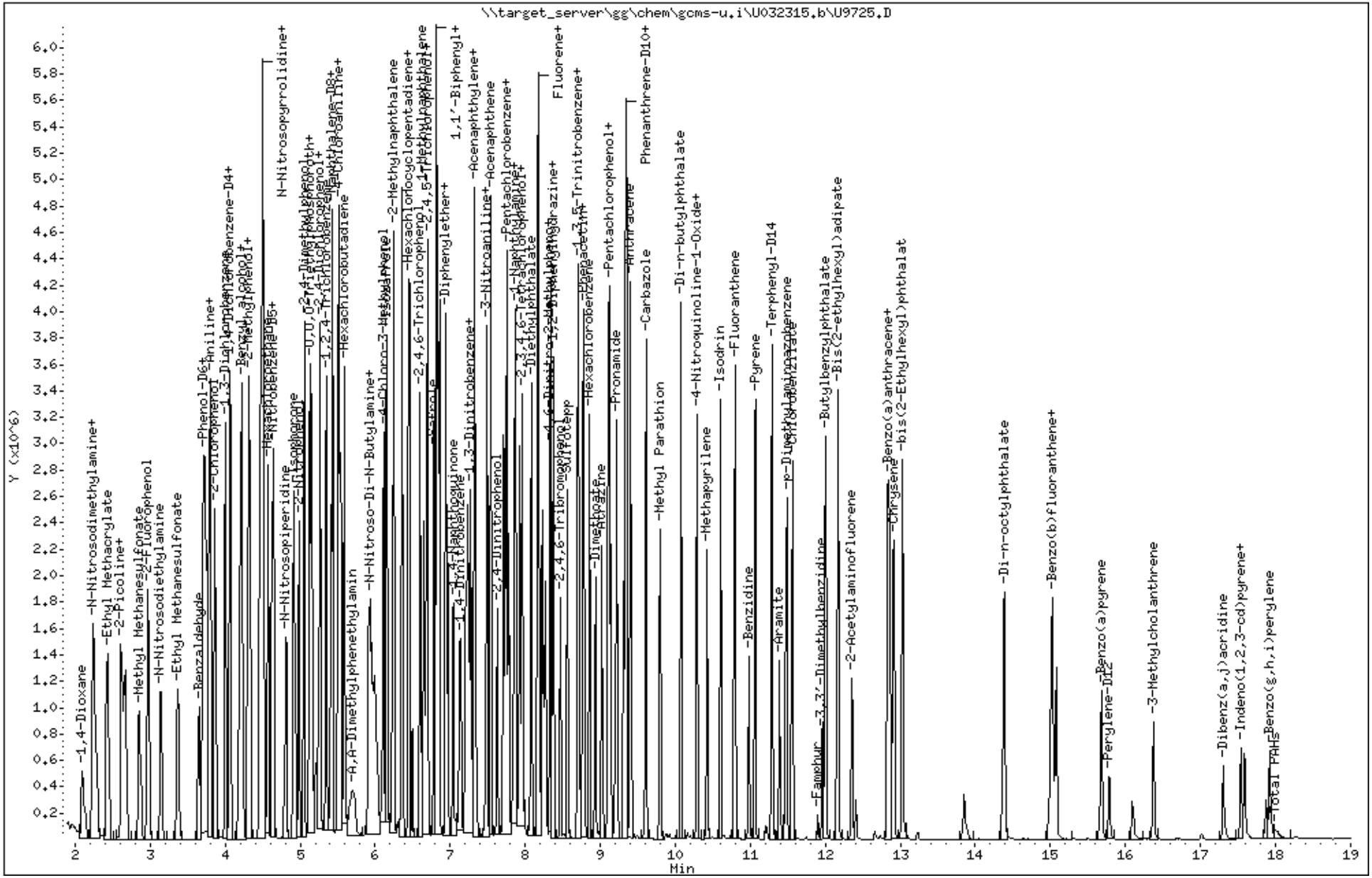
QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

12:46 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Date : 23-MAR-2015 16:57
Client ID:
Sample Info: WG160080-6
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



0000496

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Lab Smp Id: WG160080-7
Inj Date : 23-MAR-2015 17:23 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-7
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	58	2.099	2.099	(0.388)	441905	125.000	116	
3 Pyridine	79	2.244	2.244	(0.553)	1897532	125.000	126(A)	
2 N-Nitrosodimethylamine	42	2.223	2.223	(0.548)	603827	125.000	126(A)	
4 Ethyl Methacrylate	69	2.420	2.420	(0.597)	1293367	125.000	124	
5 2-Picoline	93	2.617	2.617	(0.645)	1923333	125.000	129(A)	
6 N-Nitrosomethylethylamine	88	2.669	2.669	(0.658)	806965	125.000	127(A)	
7 Methyl Methanesulfonate	80	2.855	2.855	(0.704)	1088077	125.000	132(A)	
$ 8 2-Fluorophenol	112	2.969	2.969	(0.732)	1726550	125.000	126(A)	
9 N-Nitrosodiethylamine	102	3.145	3.145	(0.775)	857626	125.000	132(A)	
10 Ethyl Methanesulfonate	79	3.383	3.383	(0.834)	1410791	125.000	132(A)	
11 Benzaldehyde	77	3.652	3.652	(0.900)	545038	125.000	89.0	
15 Pentachloroethane	117	3.786	3.786	(0.934)	537558	125.000	110	
14 Aniline	93	3.766	3.766	(0.929)	2369081	125.000	116	
16 Bis(2-Chloroethyl)ether	93	3.807	3.807	(0.939)	1314090	125.000	114	
$ 12 Phenol-D6	99	3.714	3.714	(0.916)	1970410	125.000	124	
13 Phenol	94	3.735	3.735	(0.921)	2185592	125.000	131(A)	
17 2-Chlorophenol	128	3.869	3.869	(0.954)	1607031	125.000	121	
18 1,3-Dichlorobenzene	146	4.004	4.004	(0.987)	1552254	125.000	113	
* 19 1,4-Dichlorobenzene-D4	152	4.055	4.055	(1.000)	363051	40.0000		
20 1,4-Dichlorobenzene	146	4.076	4.076	(1.005)	1421246	125.000	111	
22 1,2-Dichlorobenzene	146	4.231	4.231	(1.043)	1345467	125.000	106	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.200	4.200	(1.036)	1110454	125.000	124	
	24 Bis(2-Chloroisopropyl)ether	45	4.335	4.335	(1.069)	1428326	125.000	107	
	25 2,2'-Oxybis(1-chloropropane)	45	4.335	4.335	(1.069)	1428326	125.000	107	
	23 2-Methylphenol	108	4.304	4.304	(1.061)	1540649	125.000	126(A)	
	27 Acetophenone	105	4.469	4.469	(0.826)	1973751	125.000	114	
	32 Hexachloroethane	117	4.573	4.573	(1.128)	650590	125.000	112	
	26 N-Nitrosopyrrolidine	100	4.521	4.521	(1.115)	628522	125.000	102(MH)	M9
	31 o-Toluidine	106	4.521	4.521	(1.115)	1798862	125.000	107	
	29 N-Nitrosomorpholine	56	4.521	4.521	(1.115)	582258	125.000	108	
	30 N-Nitroso-di-n-propylamine	70	4.500	4.500	(1.110)	711357	125.000	104	
	28 3&4-Methylphenol	108	4.511	4.511	(1.112)	1062655	125.000	105	
$	33 Nitrobenzene-D5	82	4.635	4.635	(0.857)	1559064	125.000	115	
	34 Nitrobenzene	77	4.656	4.656	(0.860)	1270860	125.000	102	
	35 N-Nitrosopiperidine	114	4.821	4.821	(0.891)	886244	125.000	122	
	36 Isophorone	82	4.925	4.925	(0.910)	3133532	125.000	121	
	37 2-Nitrophenol	139	4.997	4.997	(0.924)	874247	125.000	117	
	38 2,4-Dimethylphenol	107	5.070	5.070	(0.937)	1482239	125.000	110	
	40 Bis(2-Chloroethoxy)methane	93	5.163	5.163	(0.954)	2080382	125.000	114	
	39 O,O,O-Triethylphosphorothioat	198	5.132	5.132	(0.948)	506486	125.000	113	
	42 2,4-Dichlorophenol	162	5.277	5.277	(0.975)	1071916	125.000	108	
	43 1,2,4-Trichlorobenzene	180	5.349	5.349	(0.989)	1090638	125.000	105	
*	45 Naphthalene-D8	136	5.411	5.411	(1.000)	1516164	40.0000		
	41 Benzoic acid	122	5.297	5.297	(0.979)	1084113	125.000	138(AM)	M9
	46 Naphthalene	128	5.442	5.442	(1.006)	3329736	125.000	124	
	44 A,A-Dimethylphenethylamine	58	5.753	5.753	(1.063)	2812447	125.000	98.1(M)	M9
	49 Hexachloropropene	213	5.546	5.546	(1.025)	622509	125.000	121	
	48 2,6-Dichlorophenol	162	5.525	5.525	(1.021)	892244	125.000	121	
	47 4-Chloroaniline	127	5.525	5.525	(1.021)	1622668	125.000	107	
	50 Hexachlorobutadiene	225	5.598	5.598	(1.034)	551647	125.000	125	
	51 N-Nitroso-Di-N-Butylamine	84	5.939	5.939	(1.098)	1102884	125.000	112	
	53 Caprolactam	113	6.022	6.022	(1.113)	562905	125.000	131(AM)	M9
	52 p-Phenylenediamine	108	5.960	5.960	(1.101)	1064711	125.000	83.5	
	55 Isosafrole	162	6.157	6.157	(1.138)	1011717	125.000	112	
	56 2-Methylnaphthalene	142	6.250	6.250	(1.155)	2334717	125.000	104	
	54 4-Chloro-3-Methylphenol	107	6.125	6.125	(1.132)	1104629	125.000	104	
	58 1-Methylnaphthalene	142	6.364	6.364	(1.176)	2195605	125.000	105	
	60 1,2,4,5-Tetrachlorobenzene	216	6.457	6.457	(0.861)	685677	125.000	118	
	59 Hexachlorocyclopentadiene	237	6.446	6.446	(0.859)	661897	125.000	111	
	61 2,4,6-Trichlorophenol	196	6.612	6.612	(0.881)	698792	125.000	115	
$	63 2-Fluorobiphenyl	172	6.705	6.705	(0.894)	2241115	125.000	108	
	62 2,4,5-Trichlorophenol	196	6.664	6.664	(0.888)	754736	125.000	117	
	64 Safrole	104	6.788	6.788	(0.905)	501972	125.000	115(Q)	
	66 2-Chloronaphthalene	162	6.840	6.840	(0.912)	2319241	125.000	112(M)	M3
	65 1,1'-Biphenyl	154	6.829	6.829	(0.910)	2067118	125.000	128(A)	
	67 1-Chloronaphthalene	162	6.860	6.860	(0.914)	2081604	125.000	106(M)	M6
	68 Diphenylether	170	6.943	6.943	(0.925)	1362808	125.000	106	
	69 2-Nitroaniline	65	6.974	6.974	(0.930)	866391	125.000	126(A)	
	70 1,4-Naphthoquinone	158	7.047	7.047	(0.939)	591335	125.000	85.2	
	71 1,4-Dinitrobenzene	75	7.150	7.150	(0.953)	585356	125.000	134(A)	
	75 Acenaphthylene	152	7.326	7.326	(0.977)	3410735	125.000	113	
	72 Dimethyl Phthalate	163	7.243	7.243	(0.966)	2719924	125.000	119(M)	M9
	73 1,3-Dinitrobenzene	168	7.264	7.264	(0.968)	431569	125.000	120	
	74 2,6-Dinitrotoluene	165	7.285	7.285	(0.971)	612019	125.000	120	
	76 1,2-Dinitrobenzene	50	7.347	7.347	(0.979)	377343	125.000	123	

12:46 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
* 78 Acenaphthene-D10	164	7.502	7.502	(1.000)	717389	40.0000		
79 Acenaphthene	153	7.543	7.543	(1.006)	1935336	125.000	108	
77 3-Nitroaniline	138	7.502	7.502	(1.000)	746674	125.000	122	
80 2,4-Dinitrophenol	184	7.647	7.647	(1.019)	411095	125.000	142(A)	
83 Dibenzofuran	168	7.761	7.761	(1.034)	2544057	125.000	106	
82 Pentachlorobenzene	250	7.719	7.719	(1.029)	925047	125.000	112	
85 1-Naphthylamine	143	7.864	7.864	(1.048)	2356606	125.000	109	
84 2,4-Dinitrotoluene	165	7.802	7.802	(1.040)	783700	125.000	124	
86 2,3,5,6-Tetrachlorophenol	232	7.885	7.885	(1.051)	546011	125.000	110	
88 2-Naphthylamine	143	7.978	7.978	(1.063)	2314756	125.000	113	
81 4-Nitrophenol	139	7.750	7.750	(1.033)	702797	125.000	174(AM)	M3
87 2,3,4,6-Tetrachlorophenol	232	7.937	7.937	(1.058)	617615	125.000	119	
90 Fluorene	166	8.175	8.175	(1.090)	1679457	125.000	122	
89 Diethylphthalate	149	8.092	8.092	(1.079)	2321755	125.000	106	
92 4-Chlorophenyl-phenylether	204	8.185	8.185	(1.091)	669007	125.000	122	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.195	8.195	(1.092)	327221	125.000	126(A)	
93 5-Nitro-O-Toluidine	152	8.237	8.237	(1.098)	712453	125.000	114	
94 4-Nitroaniline	138	8.268	8.268	(1.102)	604905	125.000	123	
95 4,6-Dinitro-2-Methylphenol	198	8.289	8.289	(0.890)	420674	125.000	120	
96 N-Nitrosodiphenylamine	169	8.351	8.351	(0.897)	1810441	125.000	108	
97 N-Nitrosodiphenylamine/DPA	169	8.351	8.351	(0.897)	1810441	125.000	108	
98 1,2-Diphenylhydrazine	77	8.382	8.382	(0.900)	2616660	125.000	111	
99 Azobenzene	77	8.382	8.382	(0.900)	2616660	125.000	111	
$ 100 2,4,6-Tribromophenol	330	8.485	8.485	(1.131)	442279	125.000	117	
101 Sulfotepp	97	8.568	8.568	(0.920)	371709	125.000	95.0	
103 Diallate	86	8.703	8.703	(0.934)	954459	125.000	126(A)	
106 4-Bromophenyl-phenylether	248	8.785	8.785	(0.943)	580619	125.000	126(A)	
104 Phorate	75	8.723	8.723	(0.937)	1741366	125.000	114	
102 1,3,5-Trinitrobenzene	213	8.744	8.744	(0.939)	170779	125.000	118(Q)	
105 Phenacetin	108	8.796	8.796	(0.944)	1003846	125.000	102	
107 Hexachlorobenzene	284	8.868	8.868	(0.952)	695887	125.000	102	
108 Dimethoate	87	8.951	8.951	(0.961)	652061	125.000	84.6	
109 Atrazine	200	9.034	9.034	(0.970)	308782	125.000	72.9	
111 4-Aminobiphenyl	169	9.127	9.127	(0.980)	1480386	125.000	84.1	
110 Pentachlorophenol	266	9.117	9.117	(0.979)	406178	125.000	103	
112 Pentachloronitrobenzene	237	9.148	9.148	(0.982)	257130	125.000	102	
* 114 Phenanthrene-D10	188	9.313	9.313	(1.000)	1111842	40.0000		
113 Pronamide	173	9.220	9.220	(0.990)	967899	125.000	127(A)	
115 Phenanthrene	178	9.355	9.355	(1.004)	2147135	125.000	125	
118 Anthracene	178	9.417	9.417	(1.011)	2617560	125.000	99.8	
116 Disulfoton	88	9.355	9.355	(1.004)	1009538	125.000	123	
119 Carbazole	167	9.613	9.613	(1.032)	2587536	125.000	110	
120 Methyl Parathion	109	9.800	9.800	(1.052)	607373	125.000	88.4	
121 Di-n-butylphthalate	149	10.079	10.079	(1.082)	3412114	125.000	97.2	
122 4-Nitroquinoline-1-Oxide	190	10.307	10.307	(1.107)	215441	125.000	122	
123 Ethyl Parathion	291	10.297	10.297	(1.106)	175172	125.000	120(Q)	
124 Methapyrilene	97	10.431	10.431	(1.120)	621470	125.000	82.9	
125 Isodrin	193	10.607	10.607	(1.139)	334365	125.000	96.4	
126 Fluoranthene	202	10.804	10.804	(1.160)	2326366	125.000	123	
128 Pyrene	202	11.073	11.073	(0.861)	2249773	125.000	114	
127 Benzidine	184	10.990	10.990	(0.854)	735781	125.000	133(A)	
$ 129 Terphenyl-D14	244	11.301	11.301	(0.879)	1534045	125.000	118	
130 Aramite	185	11.394	11.394	(0.886)	165705	125.000	118	
131 p-Dimethylaminoazobenzene	225	11.487	11.487	(0.893)	465453	125.000	122	

12:46 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
132 Chlorobenzilate	251	11.570	11.570	(0.899)	696084	125.000	124	
133 Famphur	218	11.901	11.901	(0.925)	42024	125.000	24.7(a)	
134 3,3'-Dimethylbenzidine	212	11.963	11.963	(0.930)	488201	125.000	125(A)	
136 Butylbenzylphthalate	149	12.004	12.004	(0.933)	1229758	125.000	120	
137 Bis(2-ethylhexyl)adipate	129	12.170	12.170	(0.946)	1306595	125.000	125(A)	
138 2-Acetylaminofluorene	181	12.367	12.367	(0.961)	504217	125.000	126(A)	
139 Benzo(a)anthracene	228	12.853	12.853	(0.999)	1549239	125.000	116	
* 141 Chrysene-D12	240	12.863	12.863	(1.000)	548025	40.0000		
142 Chrysene	228	12.915	12.915	(1.004)	1480238	125.000	114	
140 3,3'-Dichlorobenzidine	252	12.832	12.832	(0.998)	450489	125.000	117	
143 bis(2-Ethylhexyl)phthalate	149	13.029	13.029	(1.013)	1707516	125.000	123	
144 Di-n-octylphthalate	149	14.385	14.385	(0.911)	2328476	125.000	136(A)	
145 Benzo(b)fluoranthene	252	15.027	15.027	(0.952)	1011636	125.000	125(A)	
146 7,12-Dimethylbenz(A)Anthracen	256	15.027	15.027	(0.952)	542632	125.000	124	
147 Benzo(k)fluoranthene	252	15.078	15.078	(0.955)	1039949	125.000	128(AMH)	M6
149 Benzo(a)pyrene	252	15.679	15.679	(0.993)	850838	125.000	128(A)	
* 150 Perylene-D12	264	15.782	15.782	(1.000)	264317	40.0000		
151 3-Methylcholanthrene	268	16.372	16.372	(1.037)	383261	125.000	123	
152 Dibenz(a,j)acridine	279	17.304	17.304	(1.096)	400869	125.000	126(A)	
153 Indeno(1,2,3-cd)pyrene	276	17.542	17.542	(1.111)	467579	125.000	130(A)	
154 Dibenzo(a,h)anthracene	278	17.593	17.593	(1.115)	465493	125.000	130(A)	
155 Benzo(g,h,i)perylene	276	17.925	17.925	(1.136)	458557	125.000	114	

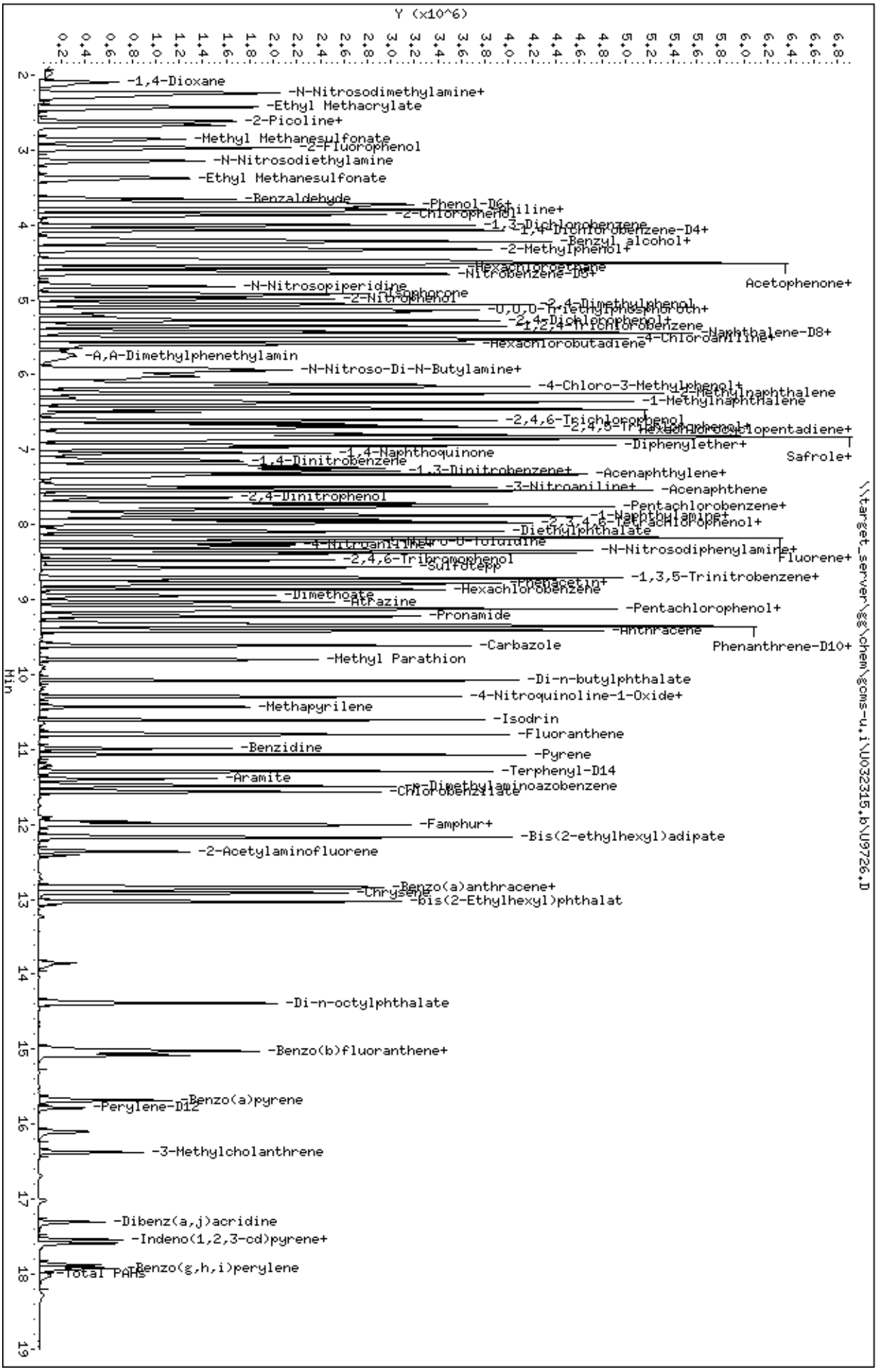
QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

12:46 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u,i\U032315,b\U9726,D
Date : 23-MAR-2015 17:23
Client ID:
Sample Info: WG160080-7
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Lab Smp Id: WG160080-8
Inj Date : 23-MAR-2015 17:49 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-8
Misc Info : WG160080,WG160080,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 8 QC Sample: INDCHECK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
1	1,4-Dioxane	58	2.100	2.099	(0.389)	164678	49.0525	49.0	
3	Pyridine	79	2.255	2.244	(0.557)	758630	51.8653	51.9	
2	N-Nitrosodimethylamine	42	2.224	2.223	(0.550)	210317	44.9238	44.9	
5	2-Picoline	93	2.618	2.617	(0.647)	780347	53.5865	53.6	
6	N-Nitrosomethylethylamine	88	2.659	2.669	(0.657)	305329	49.3016	49.3	
7	Methyl Methanesulfonate	80	2.845	2.855	(0.703)	343462	42.7016	42.7	
9	N-Nitrosodiethylamine	102	3.135	3.145	(0.775)	324240	51.0873	51.1	
10	Ethyl Methanesulfonate	79	3.352	3.383	(0.829)	507425	48.7097	48.7	
14	Aniline	93	3.746	3.766	(0.926)	1065542	53.4839	53.5	
16	Bis(2-Chloroethyl)ether	93	3.787	3.807	(0.936)	705419	62.8088	62.8(R)	
13	Phenol	94	3.704	3.735	(0.916)	854243	52.6314	52.6(Q)	
17	2-Chlorophenol	128	3.860	3.869	(0.954)	665418	51.1835	51.2	
18	1,3-Dichlorobenzene	146	4.005	4.004	(0.990)	714842	53.5462	53.5	
* 19	1,4-Dichlorobenzene-D4	152	4.046	4.055	(1.000)	354228	40.0000		
20	1,4-Dichlorobenzene	146	4.067	4.076	(1.005)	665399	53.1608	53.2	
22	1,2-Dichlorobenzene	146	4.222	4.231	(1.043)	666921	54.1274	54.1	
21	Benzyl alcohol	108	4.180	4.200	(1.033)	452397	51.6068	51.6	
24	Bis(2-Chloroisopropyl)ether	45	4.315	4.335	(1.067)	629223	48.4869	48.5	
25	2,2'-Oxybis(1-chloropropane)	45	4.315	4.335	(1.067)	629223	48.4869	48.5	
23	2-Methylphenol	108	4.305	4.304	(1.064)	601393	50.2789	50.3	
27	Acetophenone	105	4.460	4.469	(0.826)	1352479	89.1481	89.1	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	32 Hexachloroethane	117	4.563	4.573	(1.128)	293218	51.8763	51.9	
	26 N-Nitrosopyrrolidine	100	4.450	4.521	(1.100)	318500	52.9784	53.0(Q)	
	31 o-Toluidine	106	4.501	4.521	(1.113)	879981	53.5906	53.6(Q)	
	29 N-Nitrosomorpholine	56	4.481	4.521	(1.107)	271223	51.7374	51.7	
	30 N-Nitroso-di-n-propylamine	70	4.470	4.500	(1.105)	304088	45.4886	45.5(Q)	
	28 3&4-Methylphenol	108	4.470	4.511	(1.105)	448178	45.4520	45.4(QH)	
	34 Nitrobenzene	77	4.636	4.656	(0.858)	626176	57.2480	57.2	
	35 N-Nitrosopiperidine	114	4.791	4.821	(0.887)	334455	52.4608	52.5	
	36 Isophorone	82	4.895	4.925	(0.906)	1208711	52.9247	52.9	
	37 2-Nitrophenol	139	4.977	4.997	(0.921)	342349	52.1032	52.1	
	38 2,4-Dimethylphenol	107	5.040	5.070	(0.933)	593807	50.3756	50.4	
	40 Bis(2-Chloroethoxy)methane	93	5.133	5.163	(0.950)	877674	54.8574	54.8	
	39 O,O,O-Triethylphosphorothioat	198	5.122	5.132	(0.948)	221157	56.2033	56.2	
	42 2,4-Dichlorophenol	162	5.247	5.277	(0.971)	462462	52.8135	52.8	
	43 1,2,4-Trichlorobenzene	180	5.340	5.349	(0.989)	480768	52.4797	52.5	
*	45 Naphthalene-D8	136	5.402	5.411	(1.000)	1333404	40.0000		
	41 Benzoic acid	122	5.226	5.297	(0.967)	583034	84.1191	84.1(R)	
	46 Naphthalene	128	5.422	5.442	(1.004)	1601065	54.3973	54.4	
	49 Hexachloropropene	213	5.536	5.546	(1.025)	300662	47.5841	47.6	
	48 2,6-Dichlorophenol	162	5.505	5.525	(1.019)	429981	50.6509	50.6	
	47 4-Chloroaniline	127	5.495	5.525	(1.017)	686791	51.4740	51.5	
	50 Hexachlorobutadiene	225	5.588	5.598	(1.034)	266568	54.6294	54.6	
	51 N-Nitroso-Di-N-Butylamine	84	5.909	5.939	(1.094)	486665	55.9654	56.0(H)	
	53 Caprolactam	113	5.940	6.022	(1.100)	189780	50.1250	50.1(QH)	
	52 p-Phenylenediamine	108	5.940	5.960	(1.100)	58239	5.19303	5.19(aR)	
	55 Isosafrole	162	6.147	6.157	(1.138)	386686	48.6052	48.6	
	56 2-Methylnaphthalene	142	6.240	6.250	(1.155)	1116223	56.2780	56.3	
	54 4-Chloro-3-Methylphenol	107	6.085	6.125	(1.126)	492879	52.7258	52.7	
	58 1-Methylnaphthalene	142	6.354	6.364	(1.176)	979731	53.1245	53.1	
	60 1,2,4,5-Tetrachlorobenzene	216	6.447	6.457	(0.862)	603530	99.0290	99.0	
	59 Hexachlorocyclopentadiene	237	6.437	6.446	(0.860)	214919	36.2303	36.2(R)	
	61 2,4,6-Trichlorophenol	196	6.592	6.612	(0.881)	307626	50.8968	50.9	
	62 2,4,5-Trichlorophenol	196	6.633	6.664	(0.887)	336599	52.4493	52.4	
	64 Safrole	104	6.768	6.788	(0.905)	203511	47.0962	47.1(Q)	
	66 2-Chloronaphthalene	162	6.820	6.840	(0.911)	1056234	51.2570	51.2(H)	
	65 1,1'-Biphenyl	154	6.799	6.829	(0.909)	1046732	50.0441	50.0	
	67 1-Chloronaphthalene	162	6.840	6.860	(0.914)	809385	41.7032	41.7	
	69 2-Nitroaniline	65	6.954	6.974	(0.929)	291414	42.6168	42.6	
	70 1,4-Naphthoquinone	158	7.027	7.047	(0.939)	377962	54.8651	54.9	
	75 Acenaphthylene	152	7.306	7.326	(0.976)	1401174	46.9210	46.9	
	72 Dimethyl Phthalate	163	7.203	7.243	(0.963)	1101735	48.7077	48.7	
	73 1,3-Dinitrobenzene	168	7.223	7.264	(0.965)	170760	48.0771	48.1	
	74 2,6-Dinitrotoluene	165	7.254	7.285	(0.970)	246202	48.5870	48.6	
*	78 Acenaphthene-D10	164	7.482	7.502	(1.000)	711806	40.0000		
	79 Acenaphthene	153	7.524	7.543	(1.006)	895714	50.4758	50.5	
	77 3-Nitroaniline	138	7.461	7.502	(0.997)	305771	50.4760	50.5	
	80 2,4-Dinitrophenol	184	7.596	7.647	(1.015)	148926	52.0156	52.0	
	83 Dibenzofuran	168	7.741	7.761	(1.035)	1218652	51.3507	51.4	
	82 Pentachlorobenzene	250	7.699	7.719	(1.029)	391898	47.8162	47.8	
	85 1-Naphthylamine	143	7.834	7.864	(1.047)	960144	44.8374	44.8	
	84 2,4-Dinitrotoluene	165	7.751	7.802	(1.036)	314463	49.9955	50.0	
	88 2-Naphthylamine	143	7.938	7.978	(1.061)	946793	46.6012	46.6	
	81 4-Nitrophenol	139	7.689	7.750	(1.028)	162920	40.7635	40.8	
	87 2,3,4,6-Tetrachlorophenol	232	7.907	7.937	(1.057)	246085	47.6621	47.7	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
90 Fluorene	166	8.155	8.175	(1.090)	847934	45.2766	45.3	
89 Diethylphthalate	149	8.062	8.092	(1.077)	1082766	50.0960	50.1	
92 4-Chlorophenyl-phenylether	204	8.165	8.185	(1.091)	380758	49.2670	49.3	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.165	8.195	(1.091)	166150	53.1524	53.2(H)	
93 5-Nitro-O-Toluidine	152	8.196	8.237	(1.095)	303129	48.9650	49.0	
94 4-Nitroaniline	138	8.217	8.268	(1.098)	250447	51.3509	51.4	
95 4,6-Dinitro-2-Methylphenol	198	8.248	8.289	(0.887)	180930	55.2188	55.2	
96 N-Nitrosodiphenylamine	169	8.331	8.351	(0.895)	1336572	85.1837	85.2	
97 N-Nitrosodiphenylamine/DPA	169	8.331	8.351	(0.895)	1336572	85.1837	85.2	
98 1,2-Diphenylhydrazine	77	8.362	8.382	(0.899)	1104233	50.0281	50.0	
99 Azobenzene	77	8.362	8.382	(0.899)	1104233	50.0281	50.0	
101 Sulfotepp	97	8.548	8.568	(0.919)	186927	51.0004	51.0	
103 Diallate	86	8.693	8.703	(0.934)	425634	47.8075	47.8	
106 4-Bromophenyl-phenylether	248	8.766	8.785	(0.942)	273344	51.8703	51.9	
104 Phorate	75	8.693	8.723	(0.934)	530815	37.2297	37.2(R)	
102 1,3,5-Trinitrobenzene	213	8.693	8.744	(0.934)	67213	49.3649	49.4(Q)	
105 Phenacetin	108	8.745	8.796	(0.940)	520979	56.5150	56.5	
107 Hexachlorobenzene	284	8.848	8.868	(0.951)	320780	50.2631	50.3	
108 Dimethoate	87	8.910	8.951	(0.958)	395741	54.8159	54.8	
109 Atrazine	200	9.004	9.034	(0.968)	73439	18.5131	18.5(QRH)	
111 4-Aminobiphenyl	169	9.097	9.127	(0.978)	735452	44.5769	44.6	
110 Pentachlorophenol	266	9.097	9.117	(0.978)	210906	56.9370	56.9	
112 Pentachloronitrobenzene	237	9.117	9.148	(0.980)	121645	51.4828	51.5	
* 114 Phenanthrene-D10	188	9.304	9.313	(1.000)	1041855	40.0000		
113 Pronamide	173	9.200	9.220	(0.989)	422771	50.3070	50.3	
115 Phenanthrene	178	9.335	9.355	(1.003)	1167324	53.0703	53.1	
118 Anthracene	178	9.397	9.417	(1.010)	1308292	53.2518	53.2	
116 Disulfoton	88	9.335	9.355	(1.003)	522144	47.6985	47.7	
117 Dinoseb	211	9.345	9.355	(1.004)	197737	62.2562	62.2(R)	
119 Carbazole	167	9.604	9.613	(1.032)	1207170	54.5962	54.6	
120 Methyl Parathion	109	9.790	9.800	(1.052)	386252	59.9902	60.0	
121 Di-n-butylphthalate	149	10.070	10.079	(1.082)	1757297	53.4547	53.4	
122 4-Nitroquinoline-1-Oxide	190	10.287	10.307	(1.106)	103343	62.4096	62.4(R)	
123 Ethyl Parathion	291	10.287	10.297	(1.106)	92360	58.0729	58.1	
124 Methapyrilene	97	10.411	10.431	(1.119)	309311	44.0344	44.0	
125 Isodrin	193	10.598	10.607	(1.139)	160908	49.5241	49.5	
126 Fluoranthene	202	10.784	10.804	(1.159)	1164645	51.8394	51.8	
128 Pyrene	202	11.063	11.073	(0.861)	1262973	48.6735	48.7	
127 Benzidine	184	10.970	10.990	(0.853)	282428	38.8076	38.8(aR)	
131 p-Dimethylaminoazobenzene	225	11.477	11.487	(0.893)	239703	47.9668	48.0	
132 Chlorobenzilate	251	11.550	11.570	(0.899)	354337	48.1680	48.2	
133 Famphur	218	11.891	11.901	(0.925)	85612	38.2200	38.2(R)	
134 3,3'-Dimethylbenzidine	212	11.953	11.963	(0.930)	364626	53.4850	53.5	
136 Butylbenzylphthalate	149	11.995	12.004	(0.933)	683496	50.5371	50.5	
137 Bis(2-ethylhexyl)adipate	129	12.160	12.170	(0.946)	629708	45.9682	46.0	
138 2-Acetylaminofluorene	181	12.336	12.367	(0.960)	294645	56.0664	56.1	
139 Benzo(a)anthracene	228	12.833	12.853	(0.998)	905174	51.4415	51.4	
* 141 Chrysene-D12	240	12.854	12.863	(1.000)	720516	40.0000		
142 Chrysene	228	12.895	12.915	(1.003)	853745	50.0224	50.0	
140 3,3'-Dichlorobenzidine	252	12.823	12.832	(0.998)	249236	49.3535	49.4(R)	
143 bis(2-Ethylhexyl)phthalate	149	13.019	13.029	(1.013)	955105	52.3682	52.4	
144 Di-n-octylphthalate	149	14.365	14.385	(0.910)	1425437	49.9304	49.9	
145 Benzo(b)fluoranthene	252	15.007	15.027	(0.951)	662056	49.2243	49.2	
146 7,12-Dimethylbenz(A)Anthracen	256	15.007	15.027	(0.951)	338296	46.6160	46.6	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

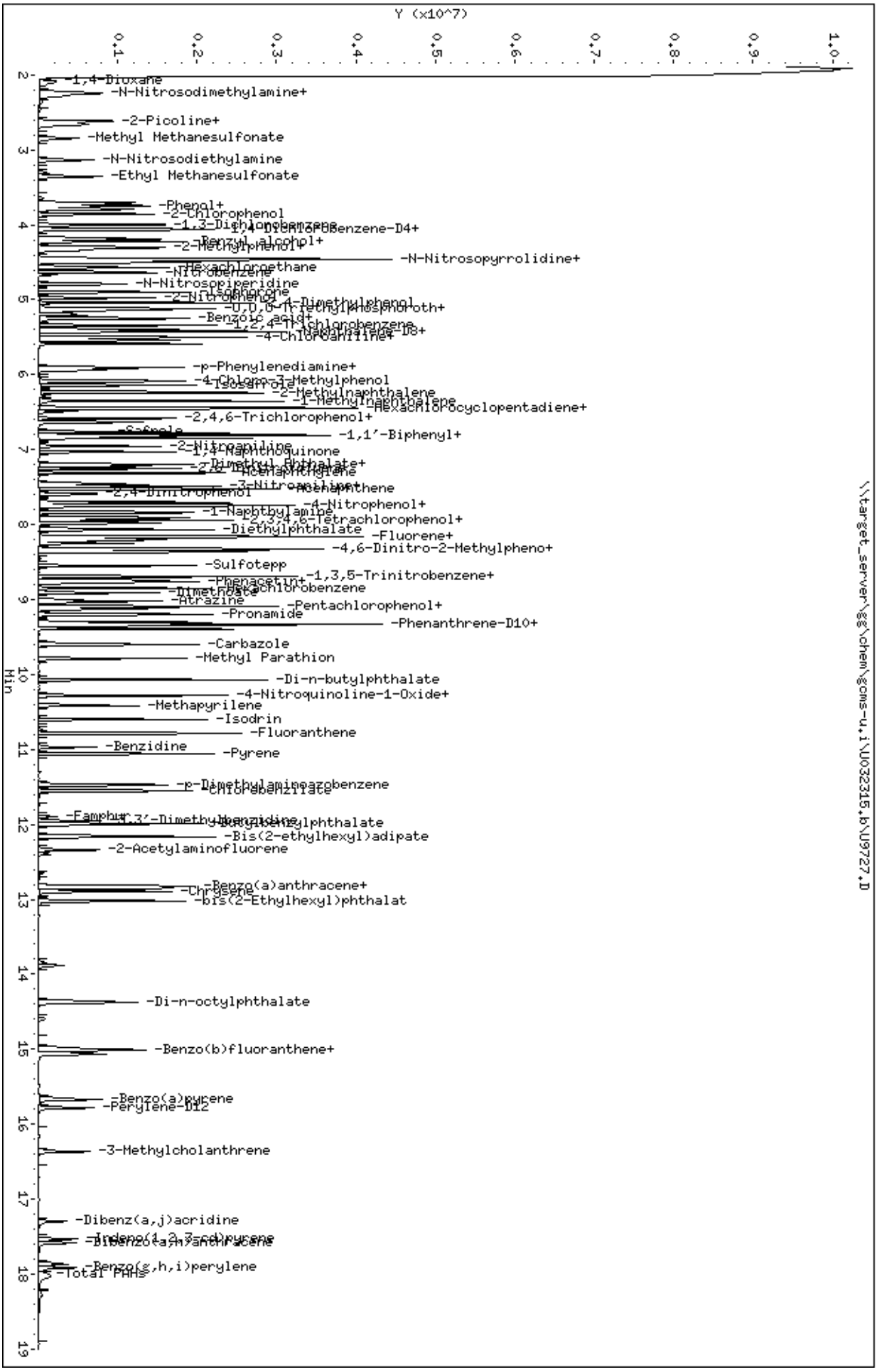
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
147 Benzo(k)fluoranthene	252	15.058	15.078	(0.954)	716934	53.1594	53.2(H)	
149 Benzo(a)pyrene	252	15.669	15.679	(0.993)	547056	49.2781	49.3	
* 150 Perylene-D12	264	15.783	15.782	(1.000)	439858	40.0000		
151 3-Methylcholanthrene	268	16.363	16.372	(1.037)	267904	51.8731	51.9	
152 Dibenz(a,j)acridine	279	17.294	17.304	(1.096)	261000	49.4578	49.4	
153 Indeno(1,2,3-cd)pyrene	276	17.532	17.542	(1.111)	324429	54.2820	54.3	
154 Dibenzo(a,h)anthracene	278	17.584	17.593	(1.114)	310608	52.0221	52.0	
155 Benzo(g,h,i)perylene	276	17.925	17.925	(1.136)	337948	50.7349	50.7	
M 156 Total PAHs	100				16403025	923.473	923	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Date : 23-MAR-2015 17:49
Client ID:
Sample Info: WG160080-8
Volume Injected (uL): 1.0
Column phase: ZB5-MS

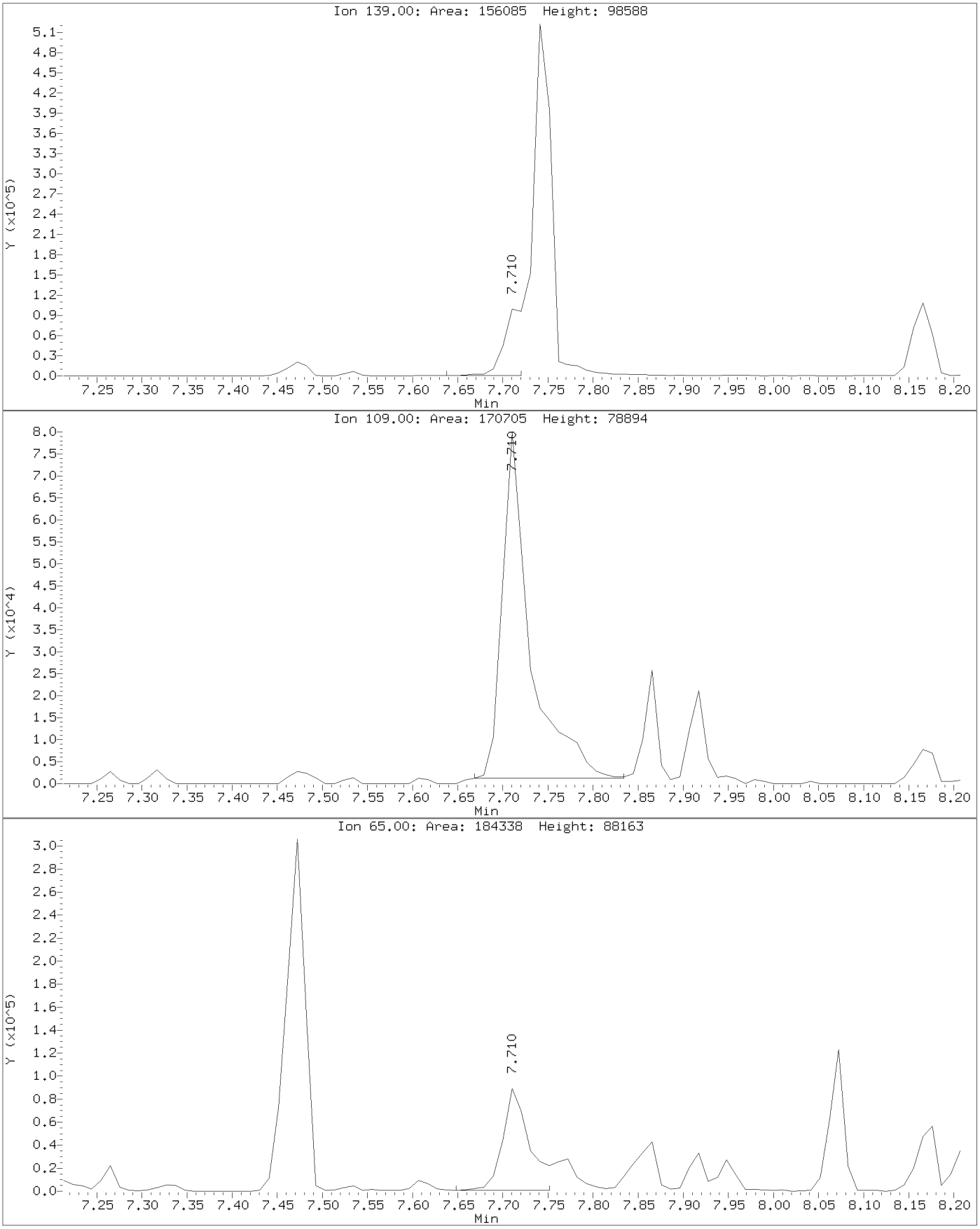
Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Injection Date: 23-MAR-2015 16:31
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

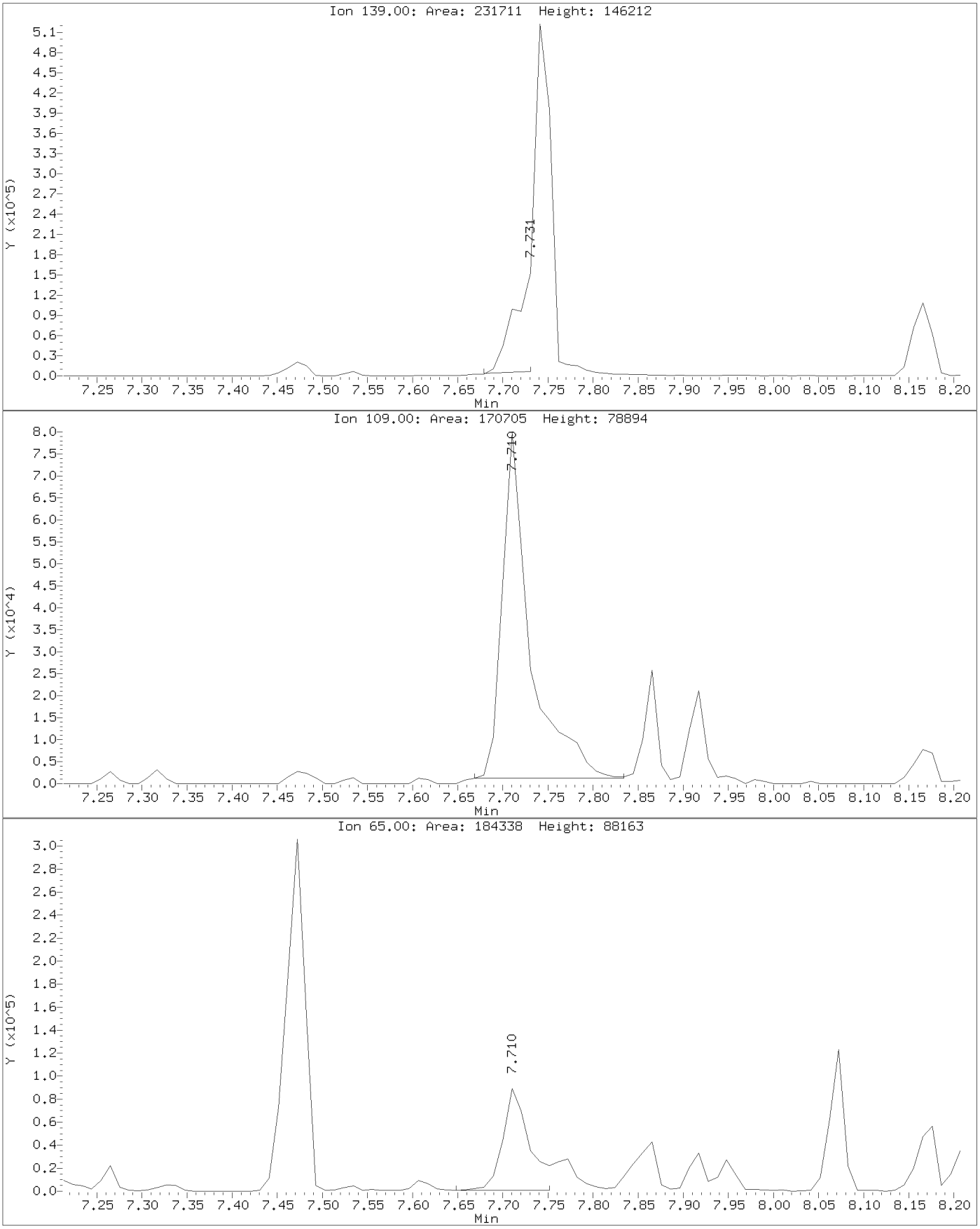
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Injection Date: 23-MAR-2015 16:31
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

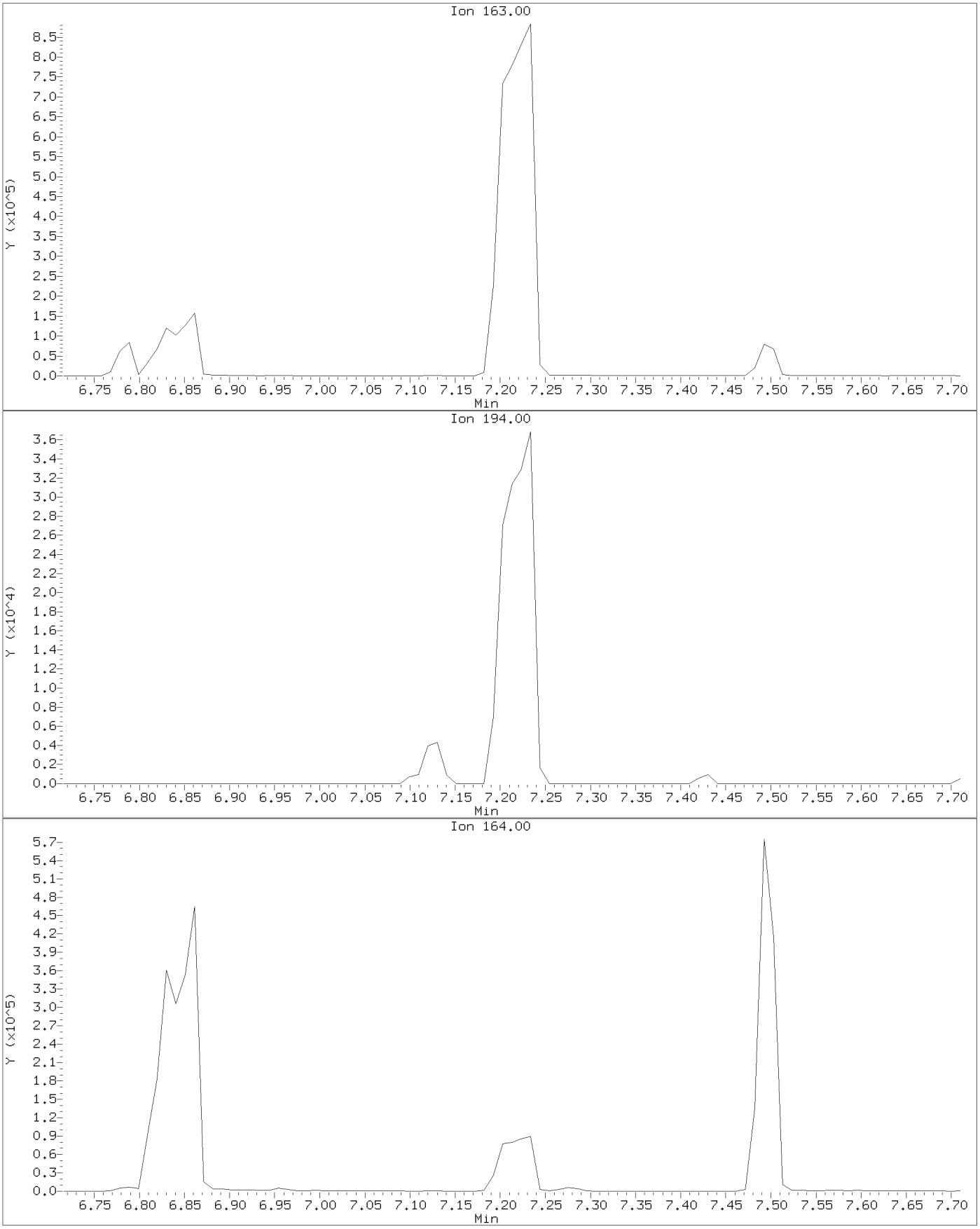
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

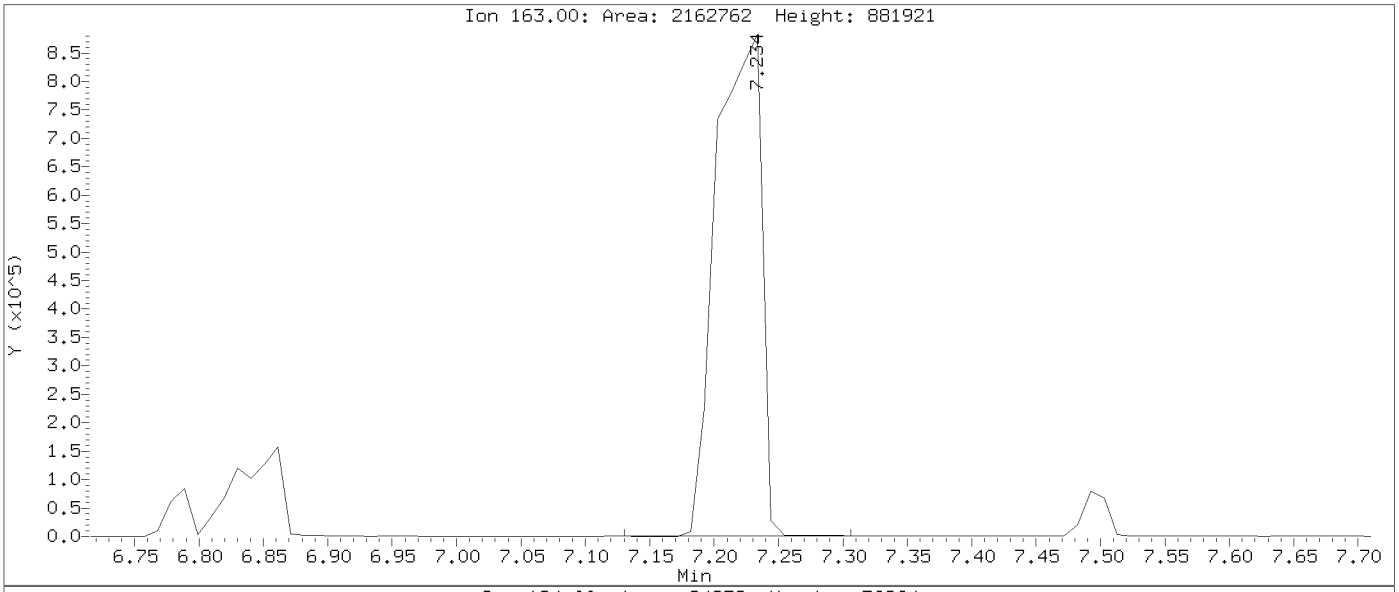
BEFORE MANUAL INTEGRATION

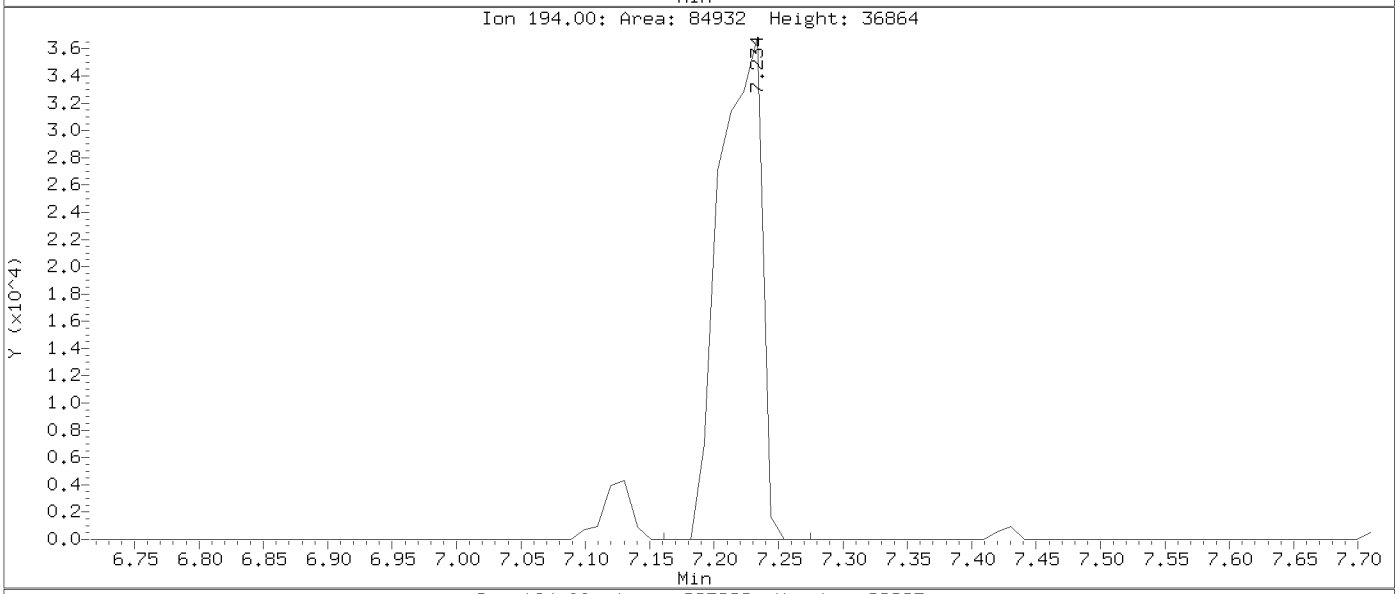


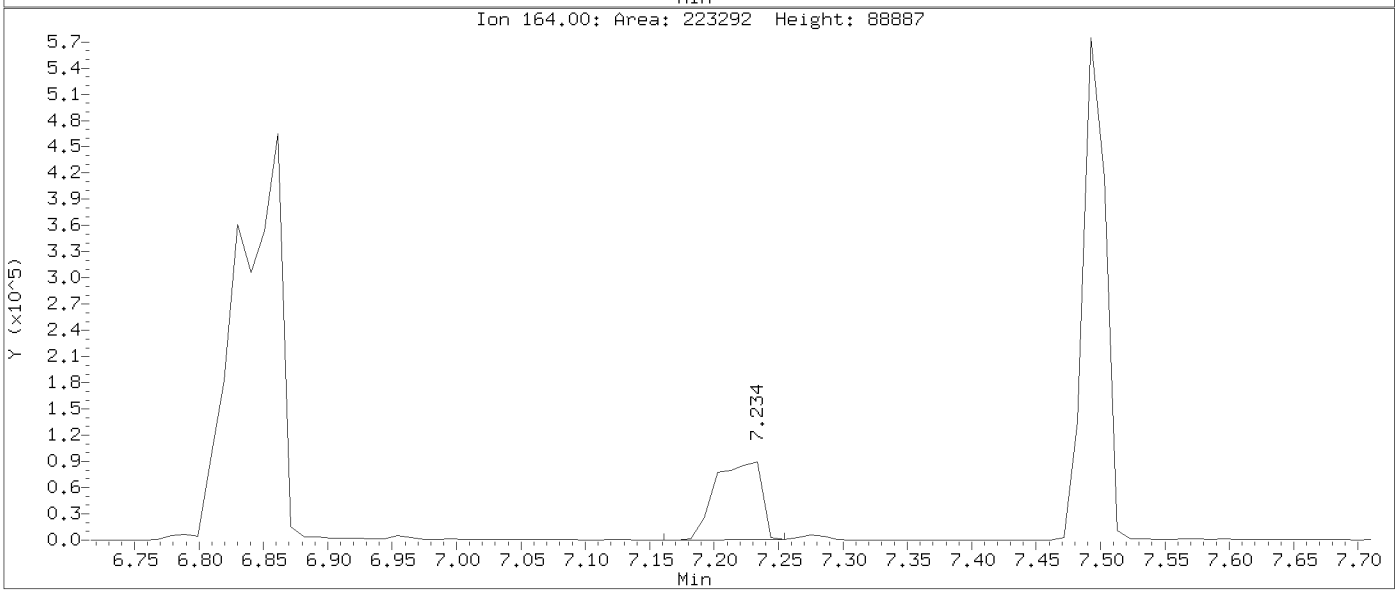
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

AFTER MANUAL INTEGRATION



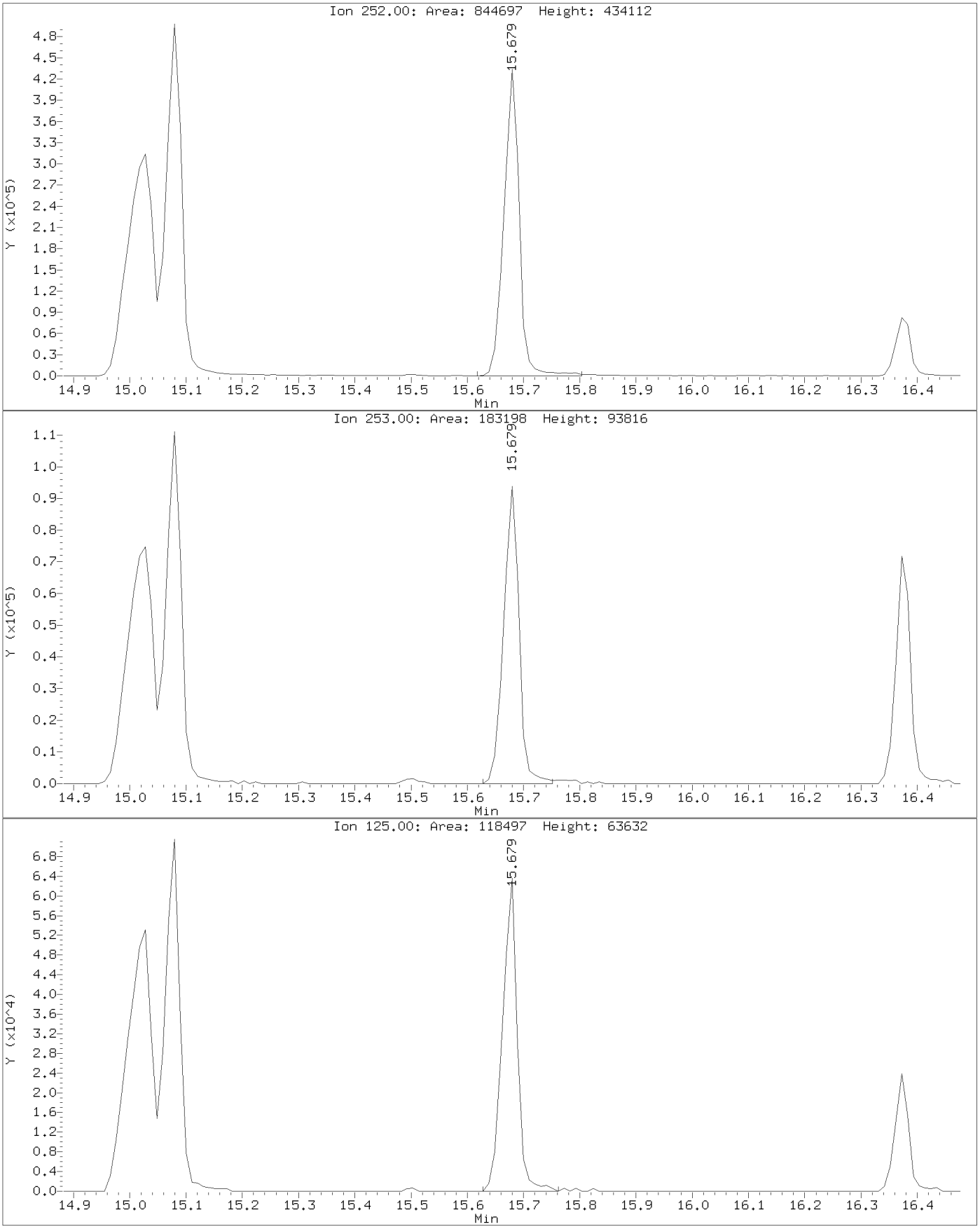




Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

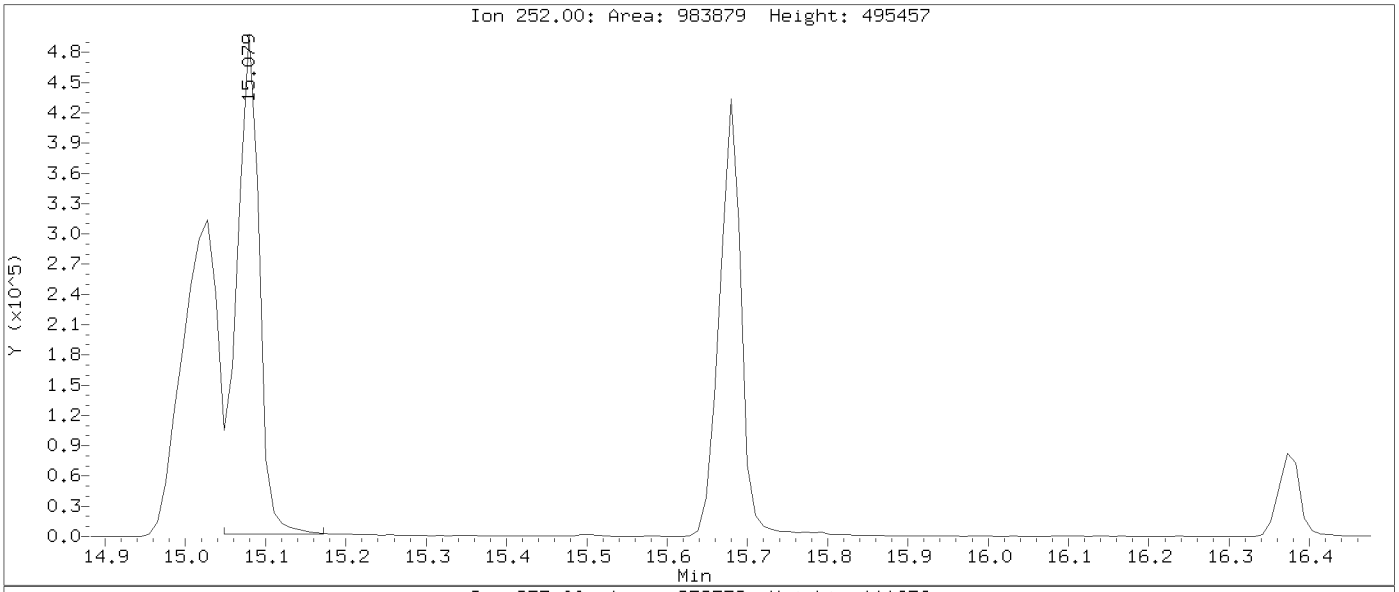
BEFORE MANUAL INTEGRATION

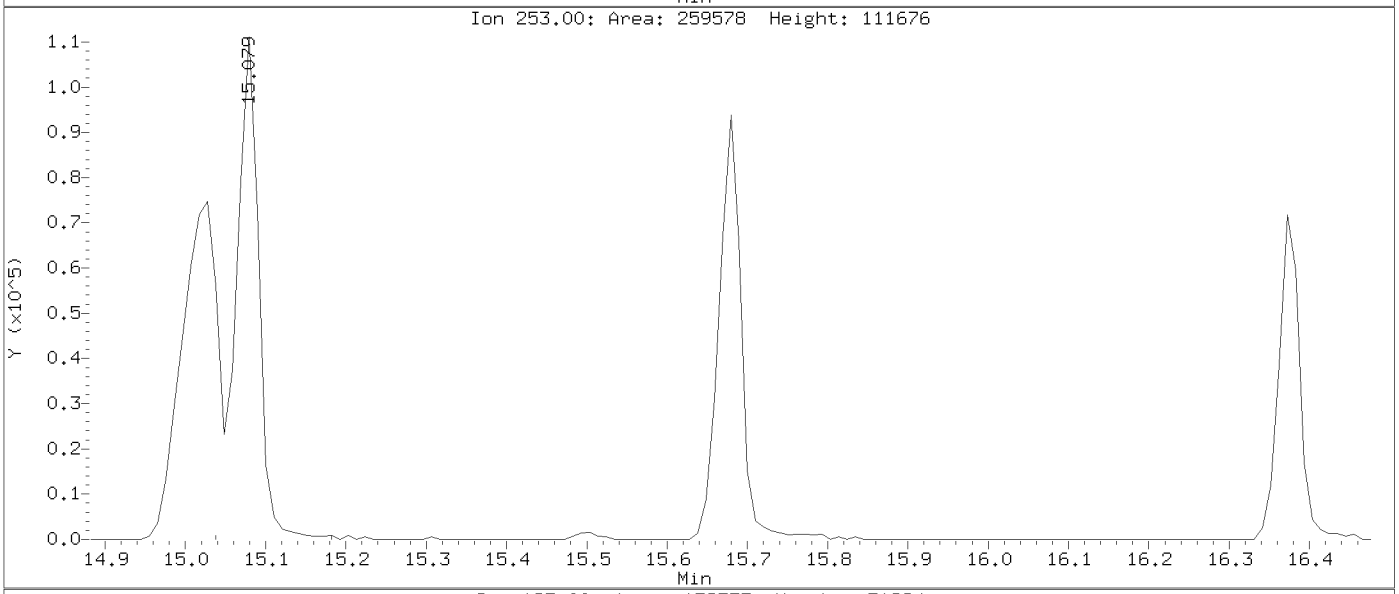


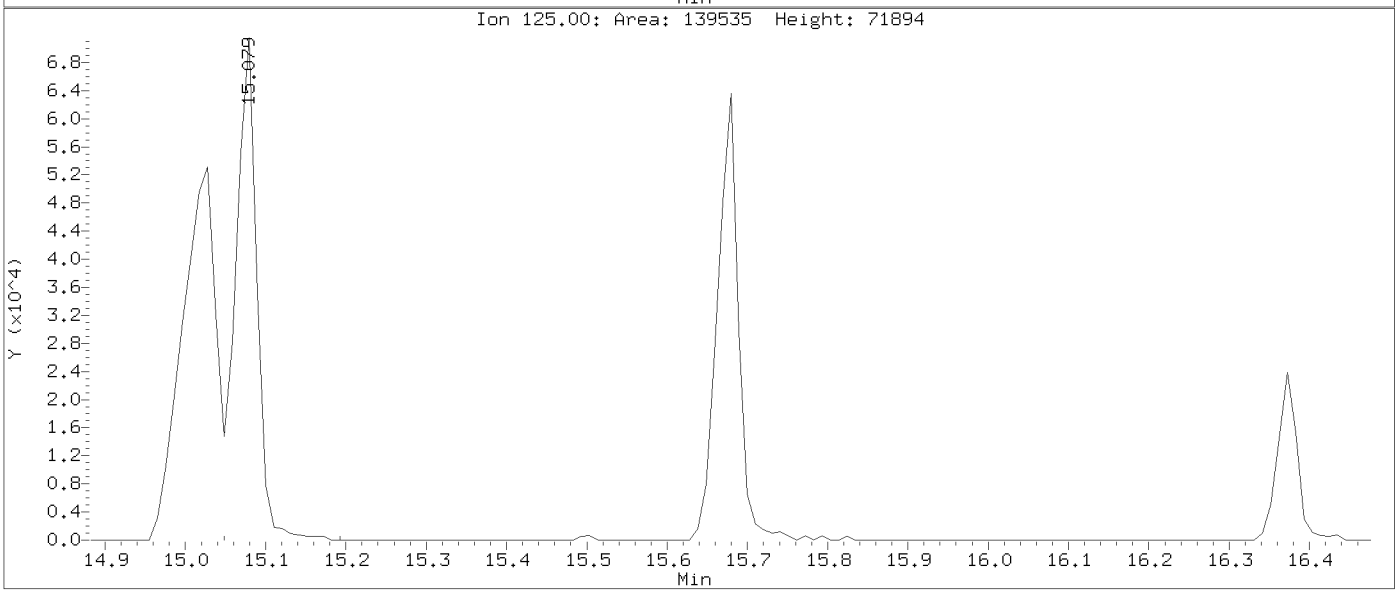
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

AFTER MANUAL INTEGRATION



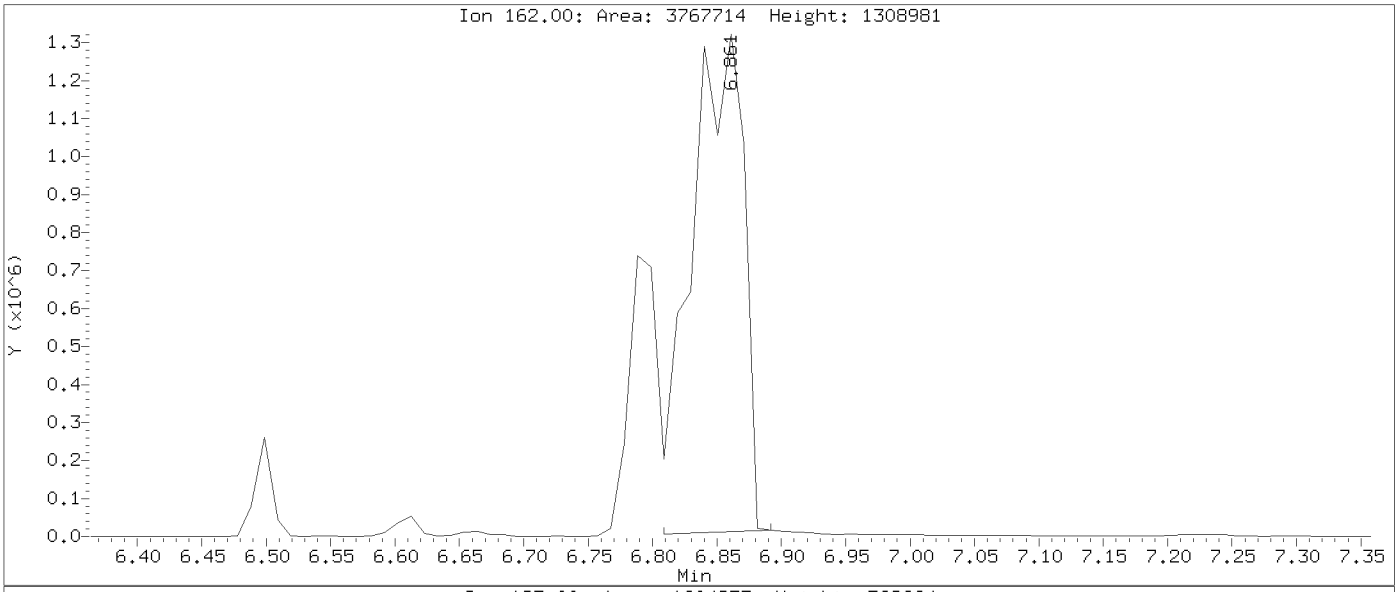


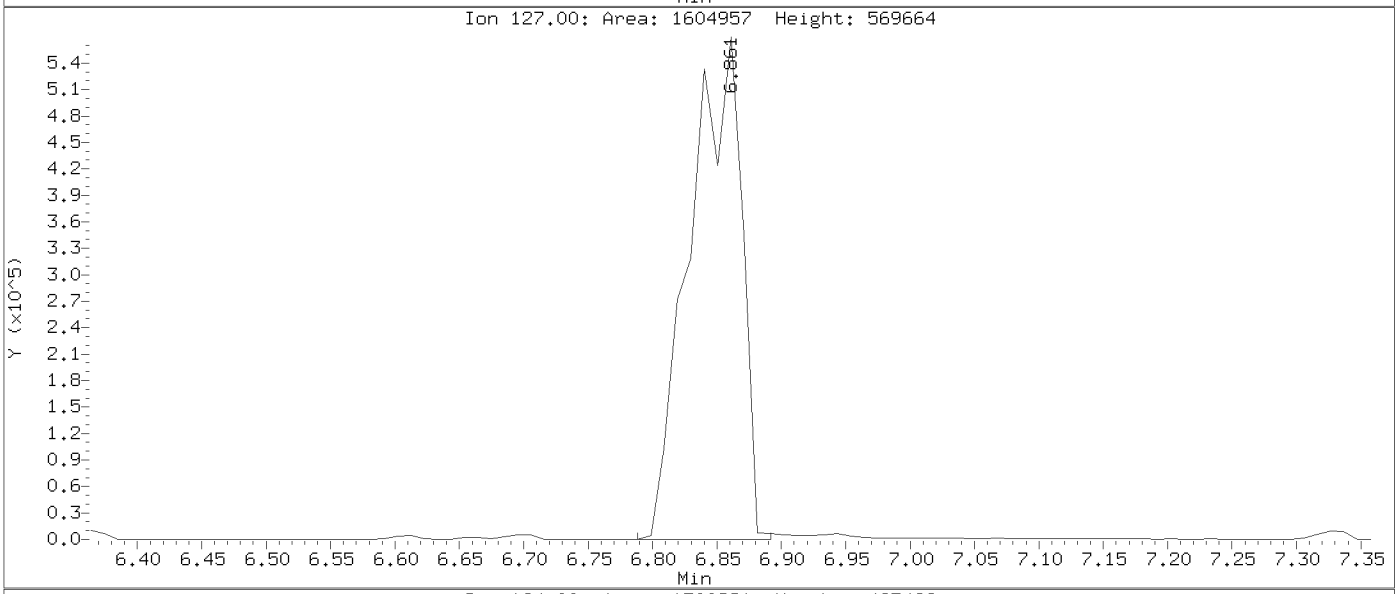


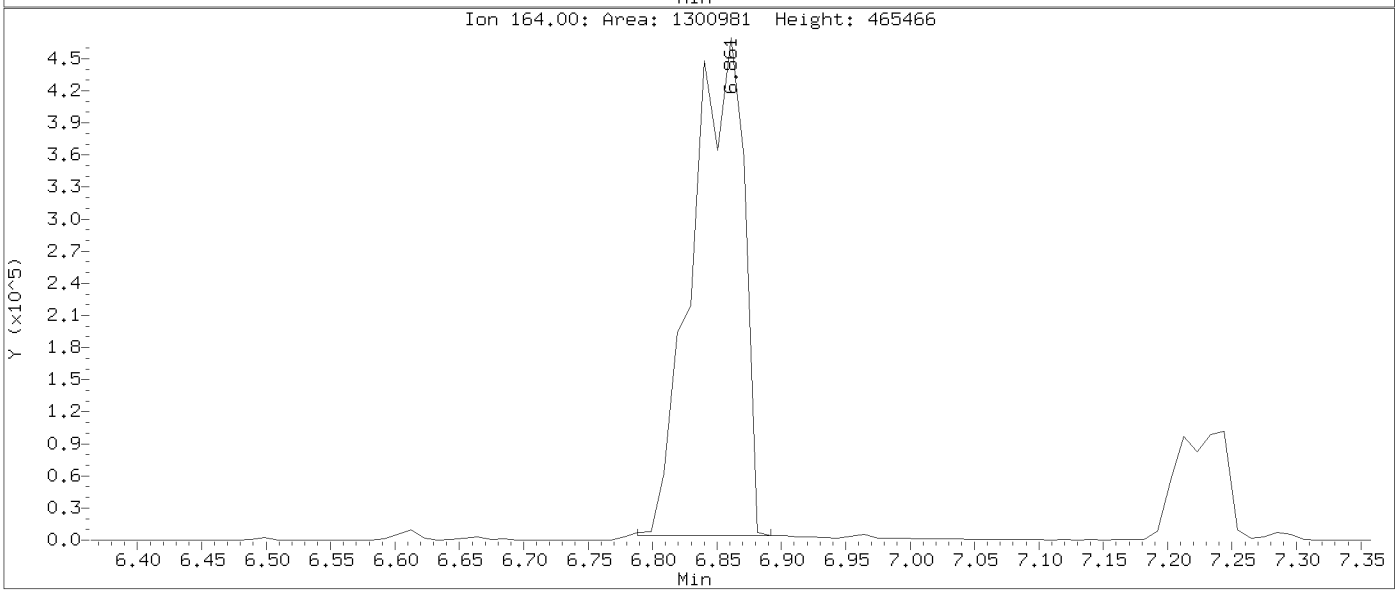
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: 2-Chloronaphthalene
CAS Number: 91-58-7

BEFORE MANUAL INTEGRATION



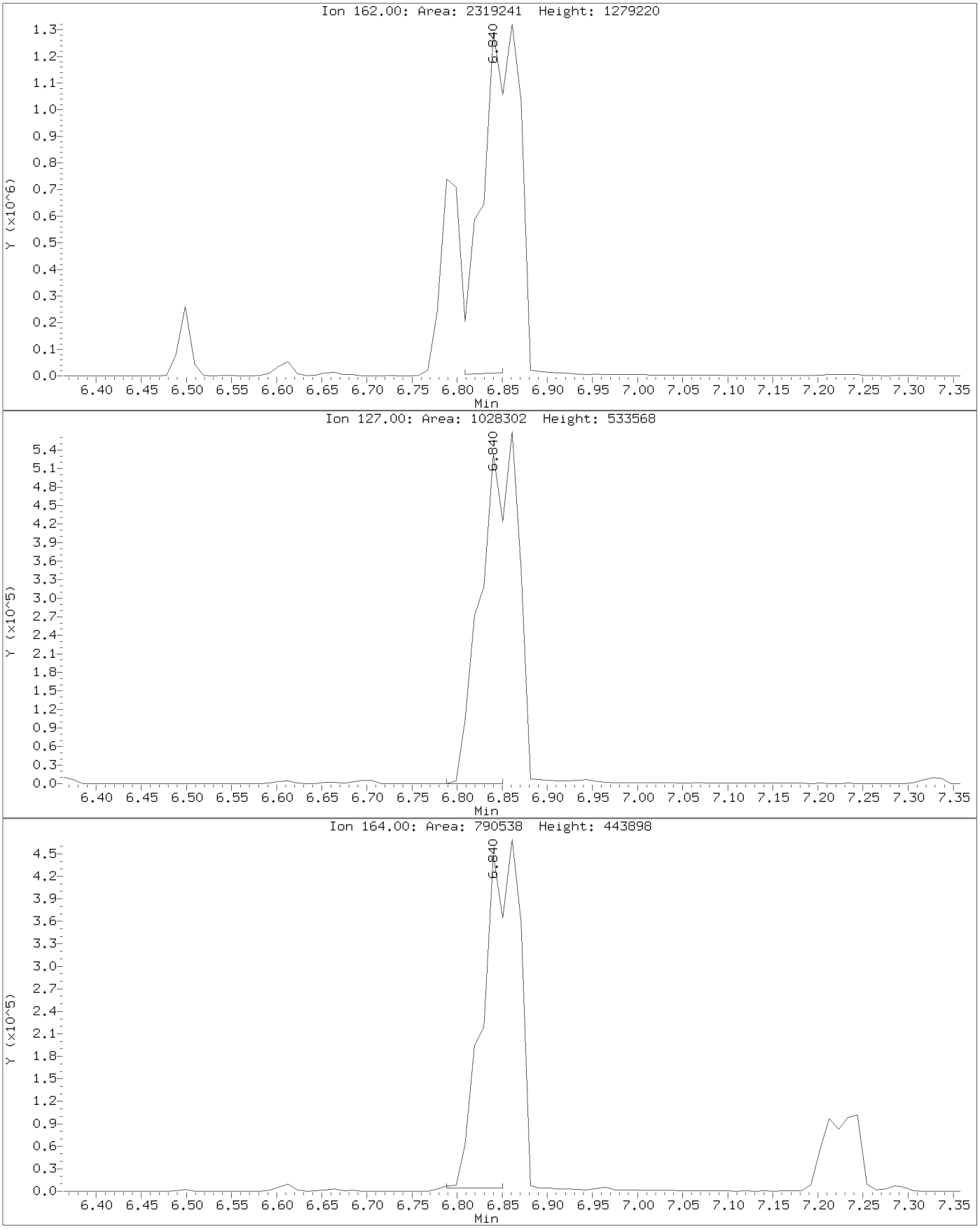




Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: 2-Chloronaphthalene
CAS Number: 91-58-7

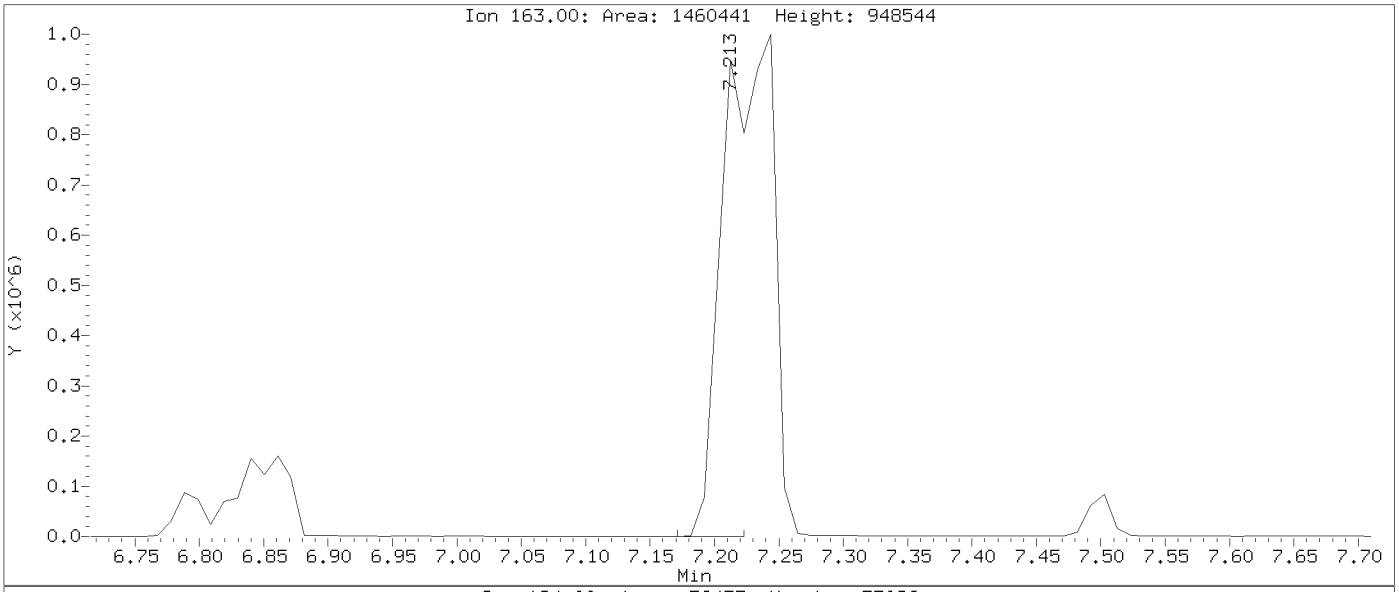
AFTER MANUAL INTEGRATION

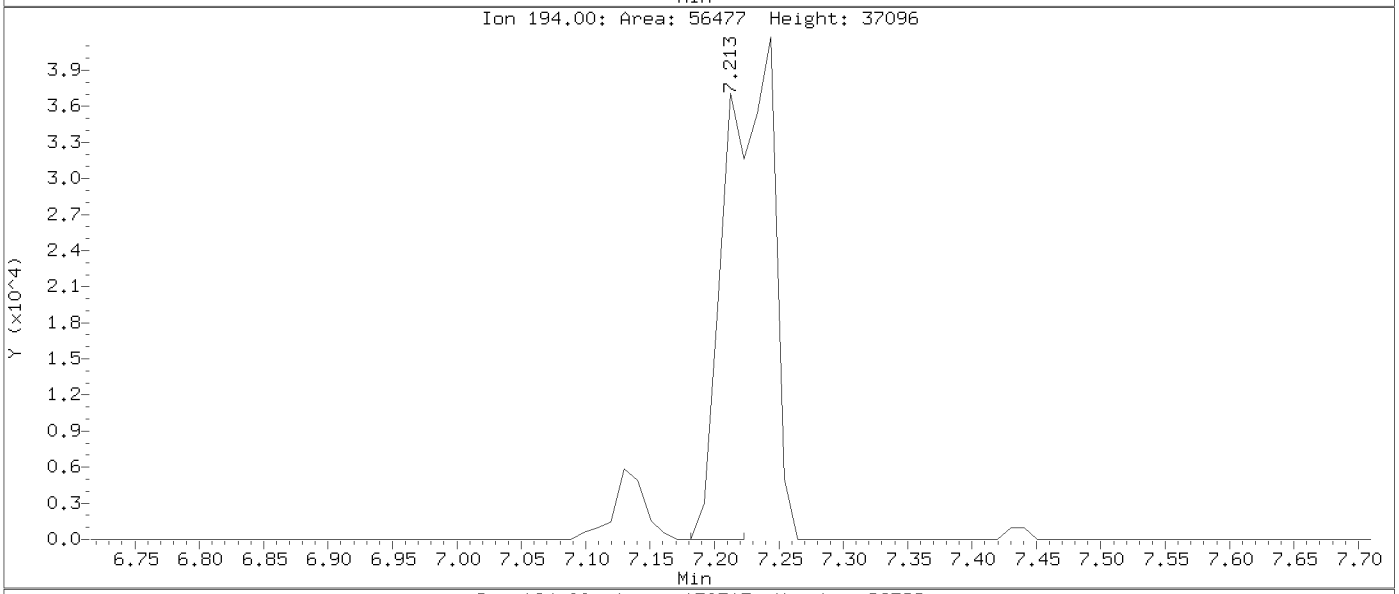


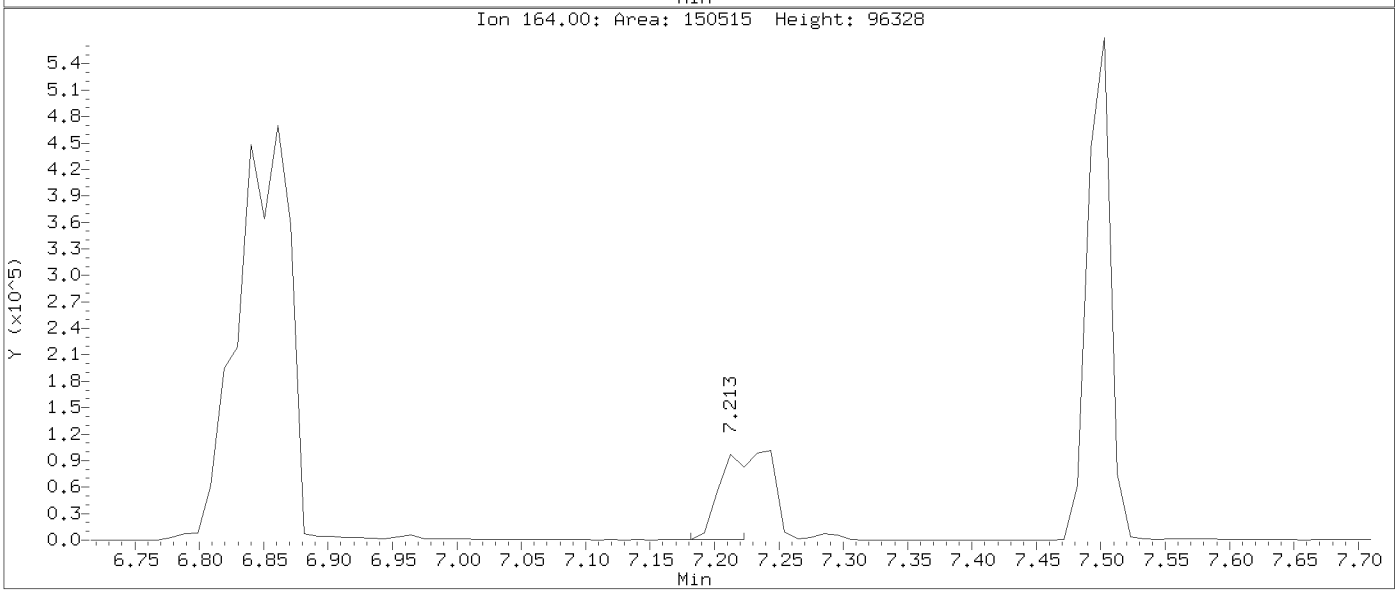
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

BEFORE MANUAL INTEGRATION



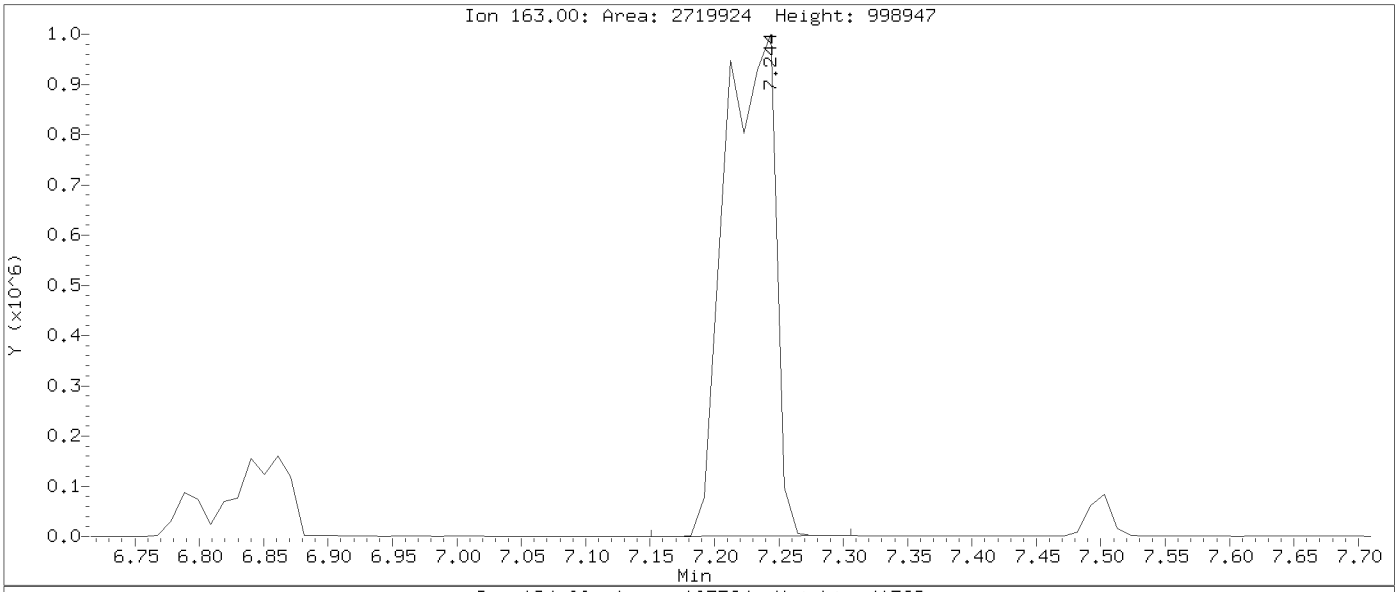


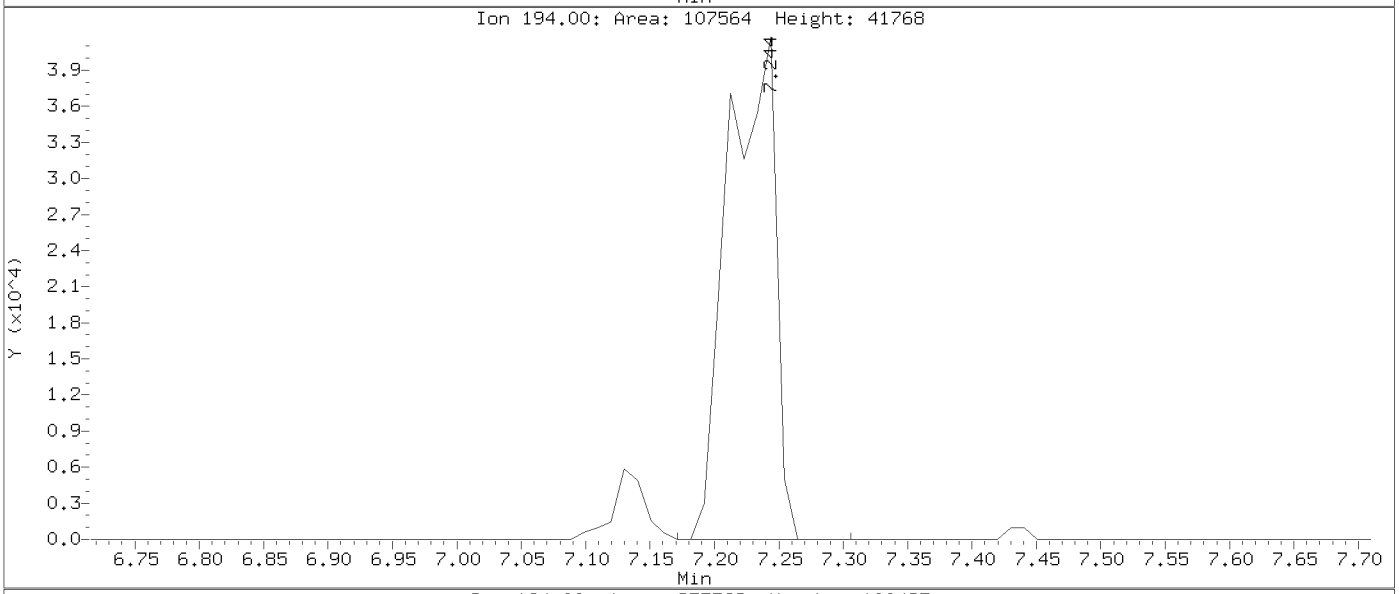


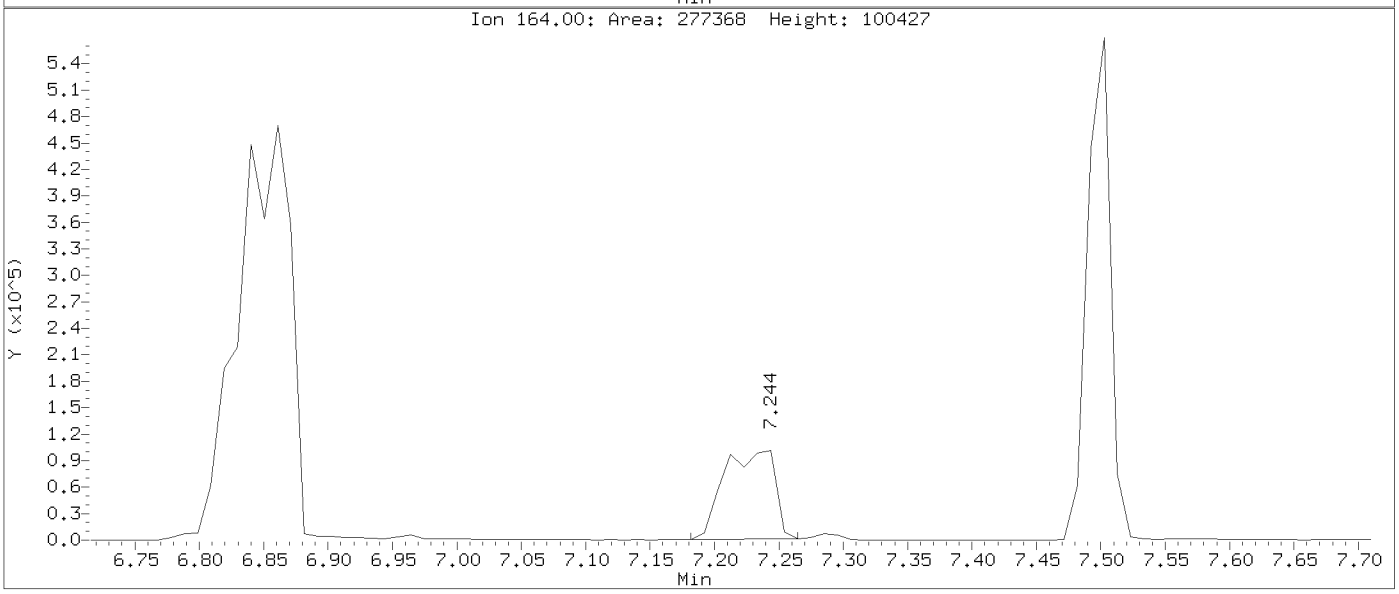
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

AFTER MANUAL INTEGRATION



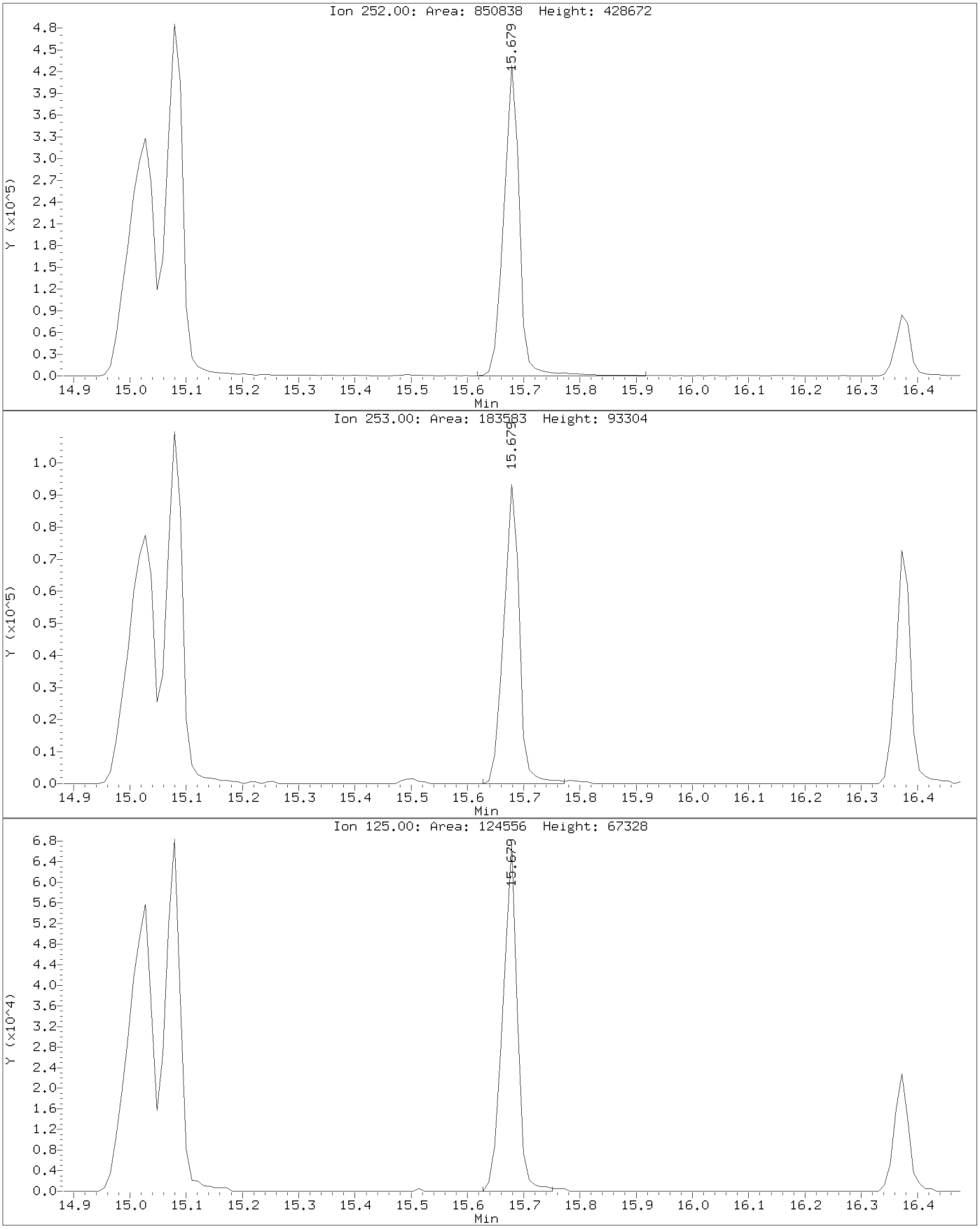




Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

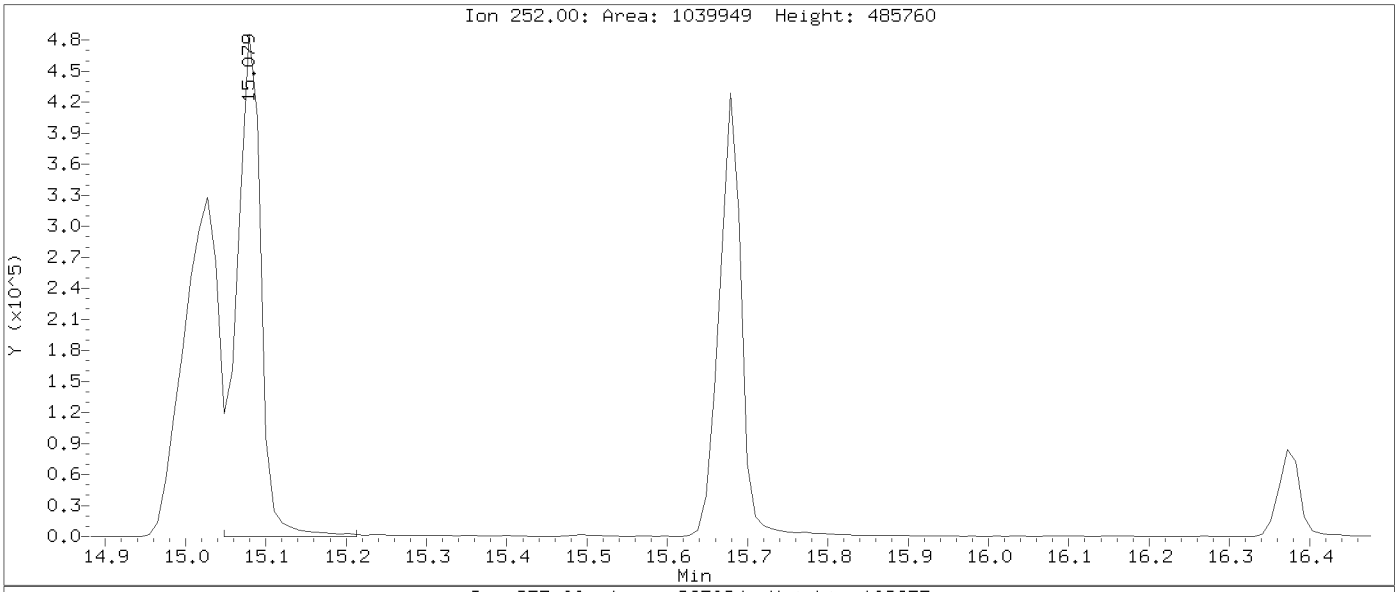
BEFORE MANUAL INTEGRATION

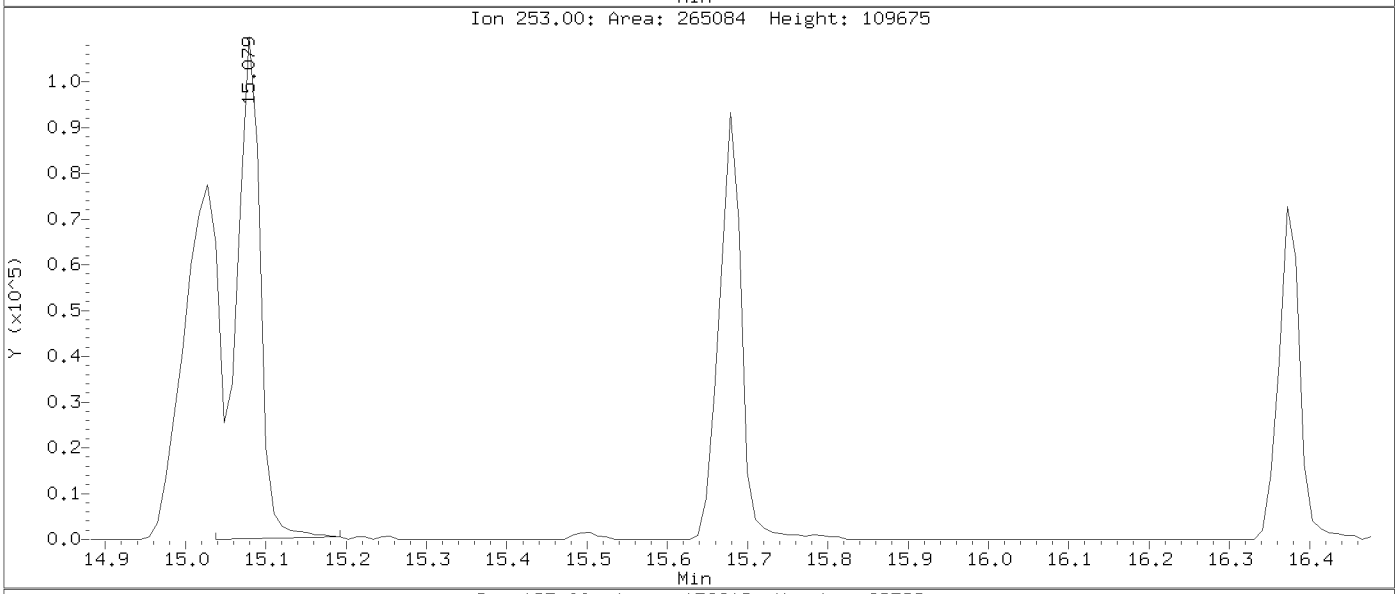


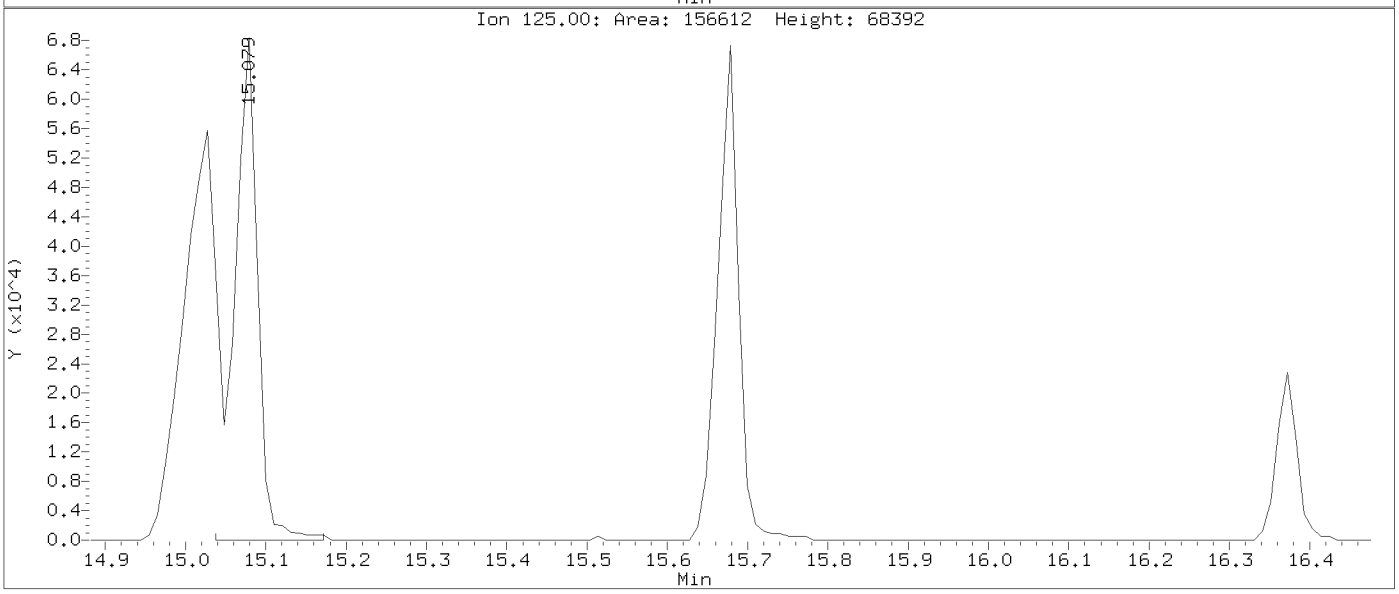
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

AFTER MANUAL INTEGRATION



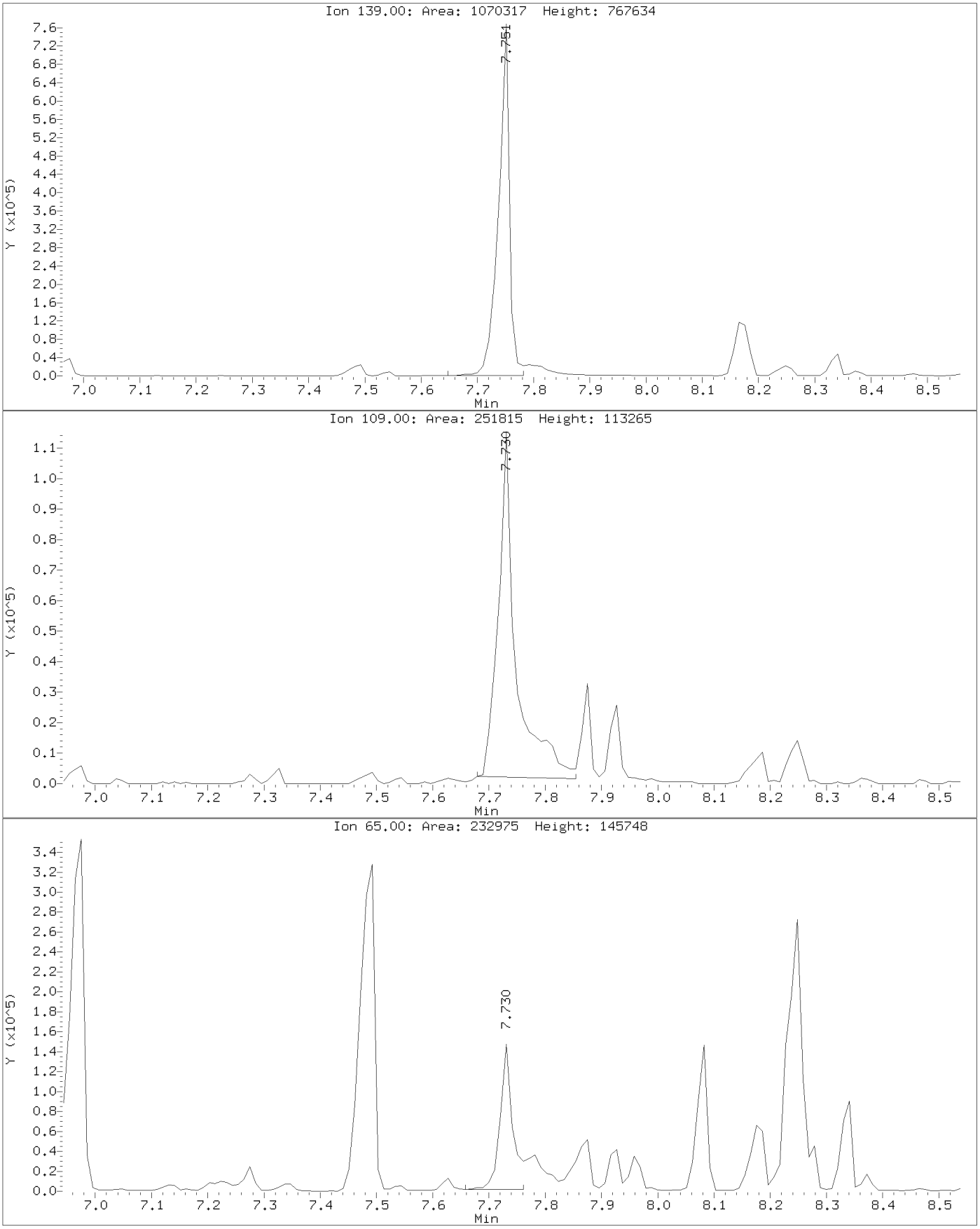




Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

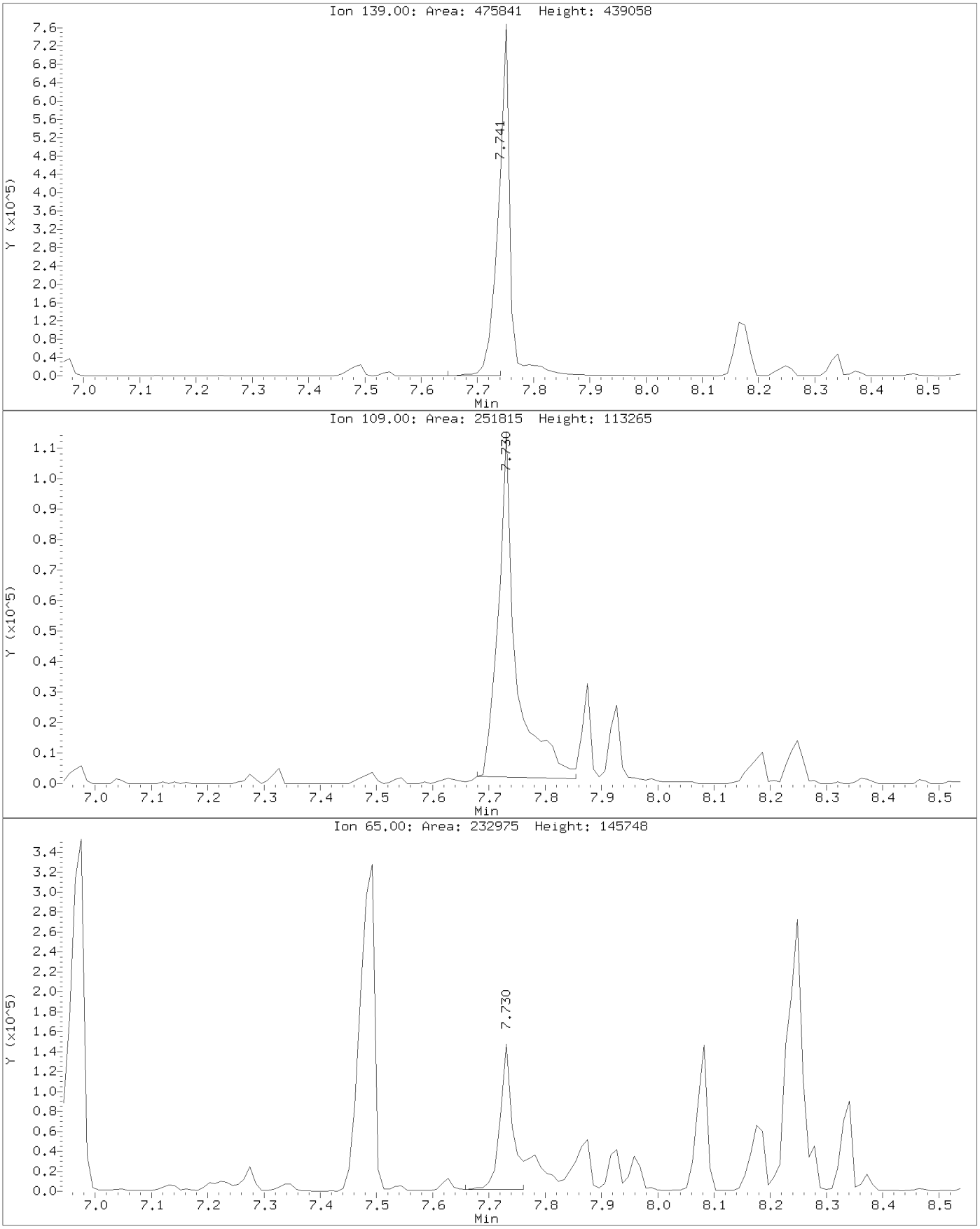
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

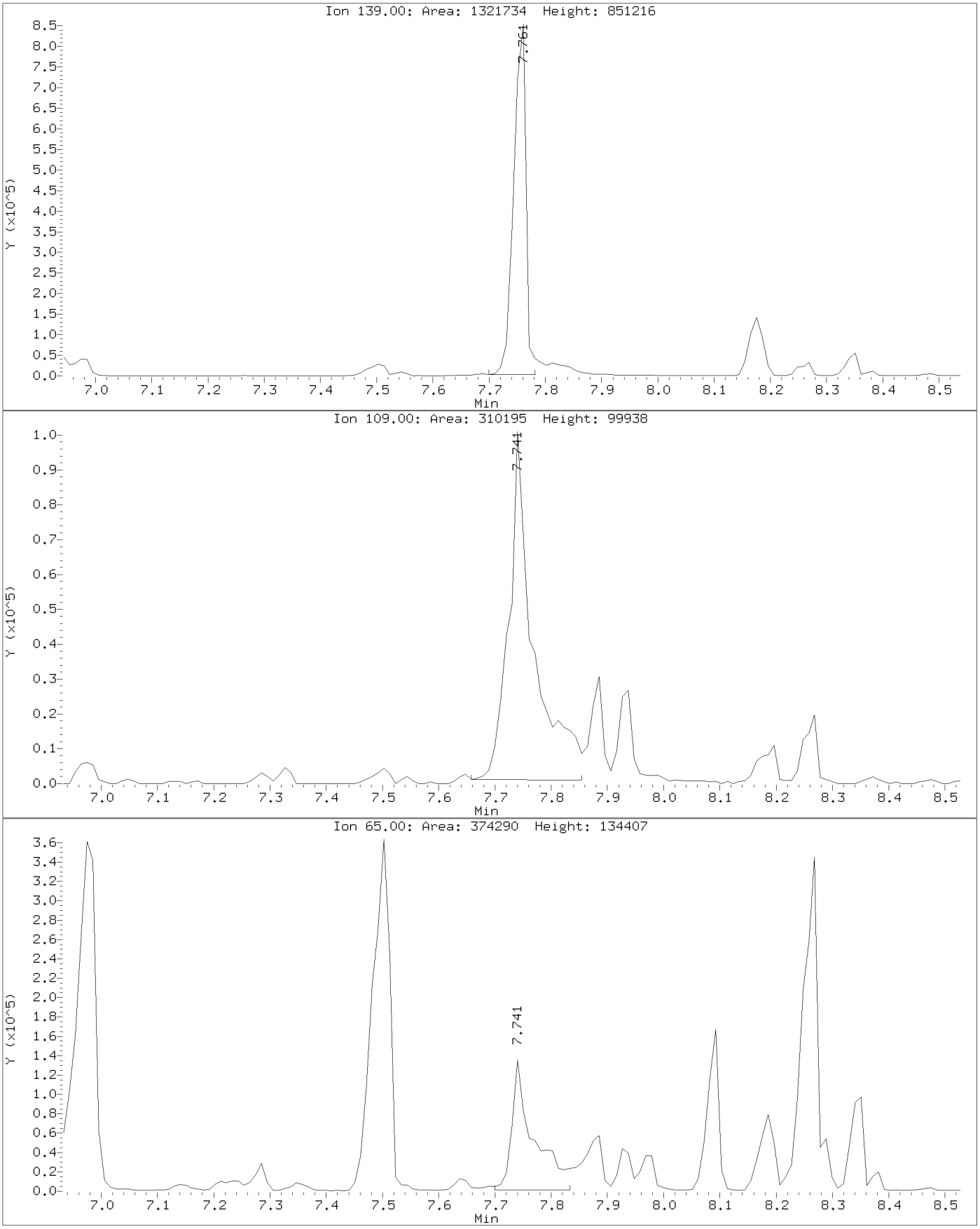
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

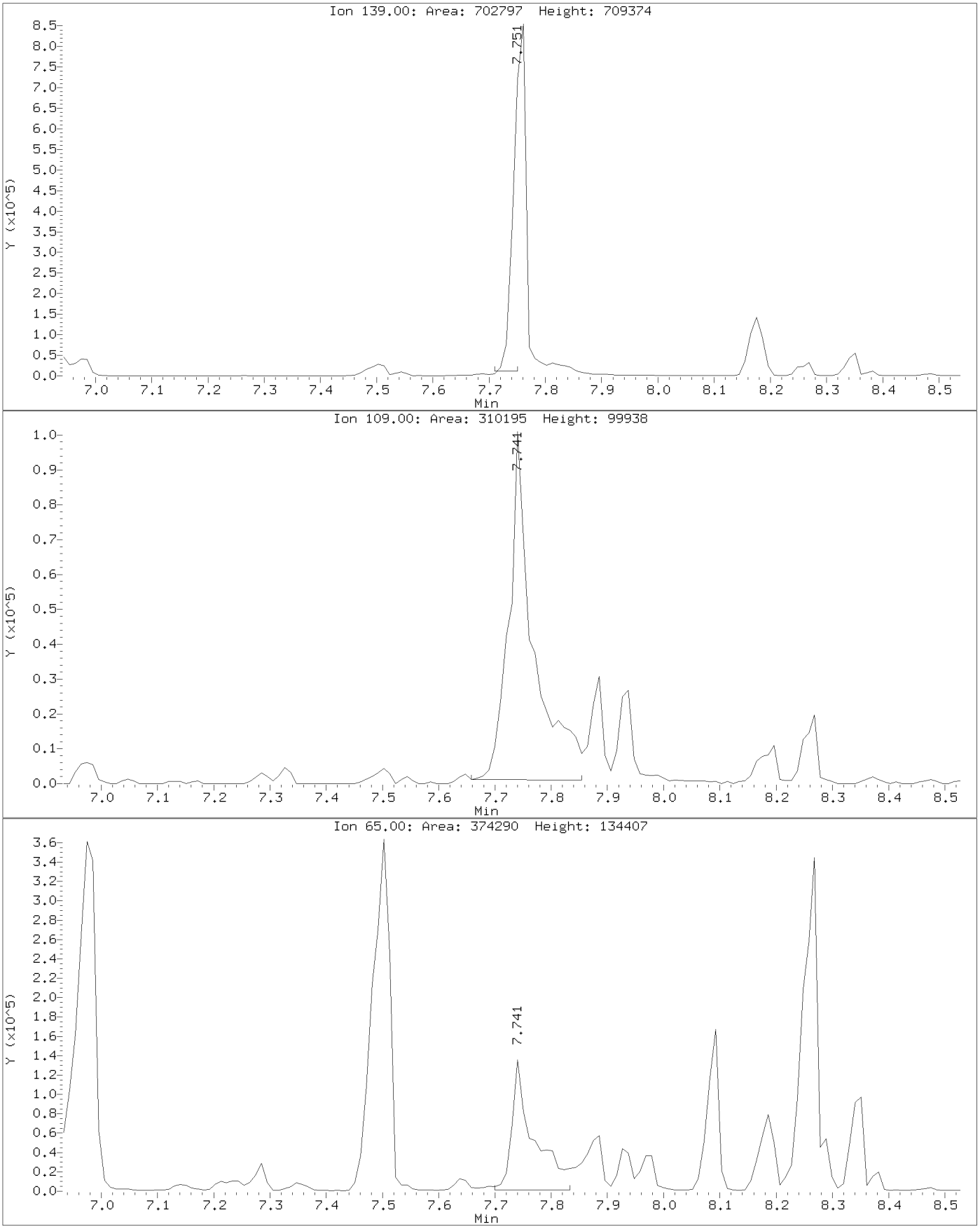
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

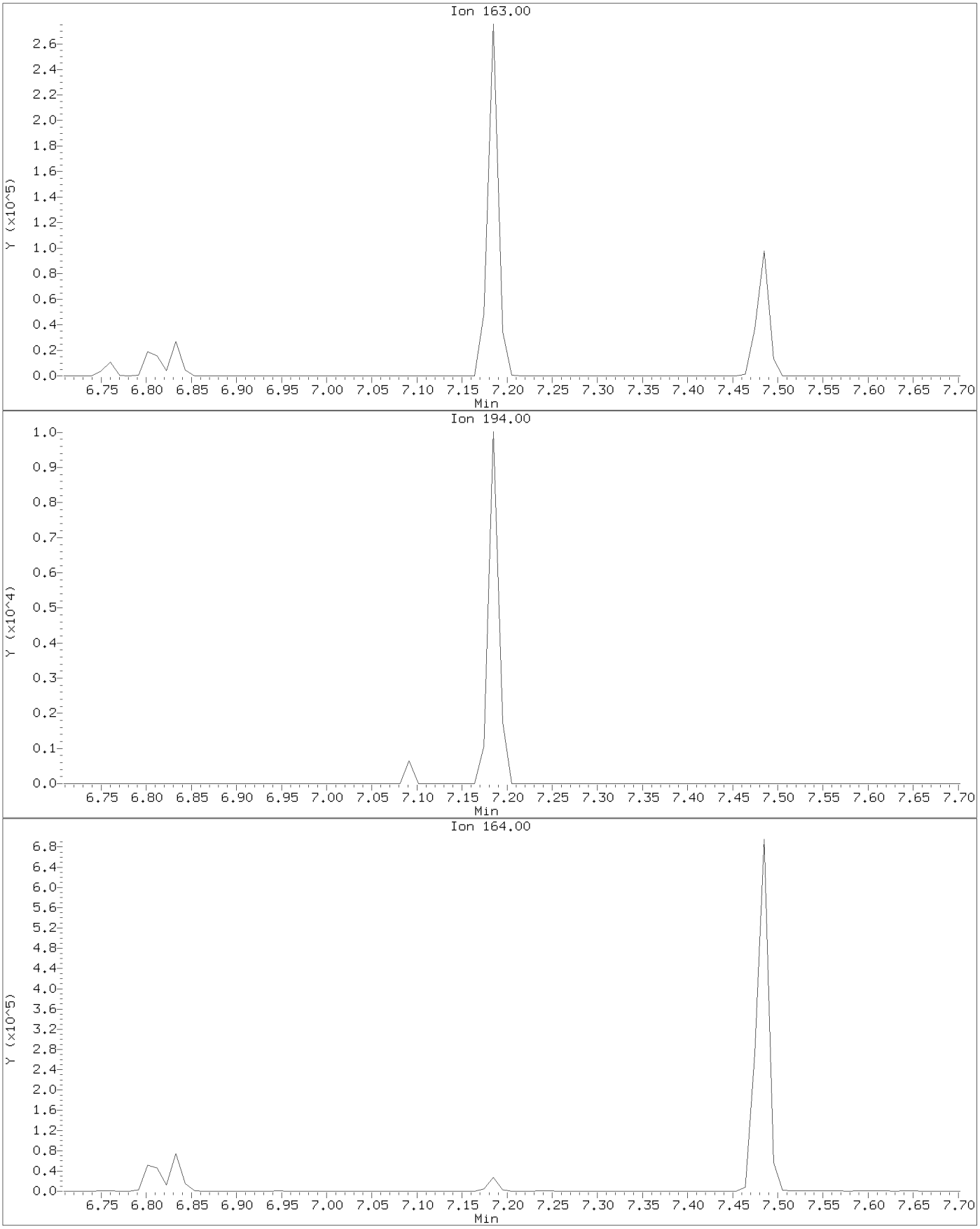
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Injection Date: 23-MAR-2015 15:39
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

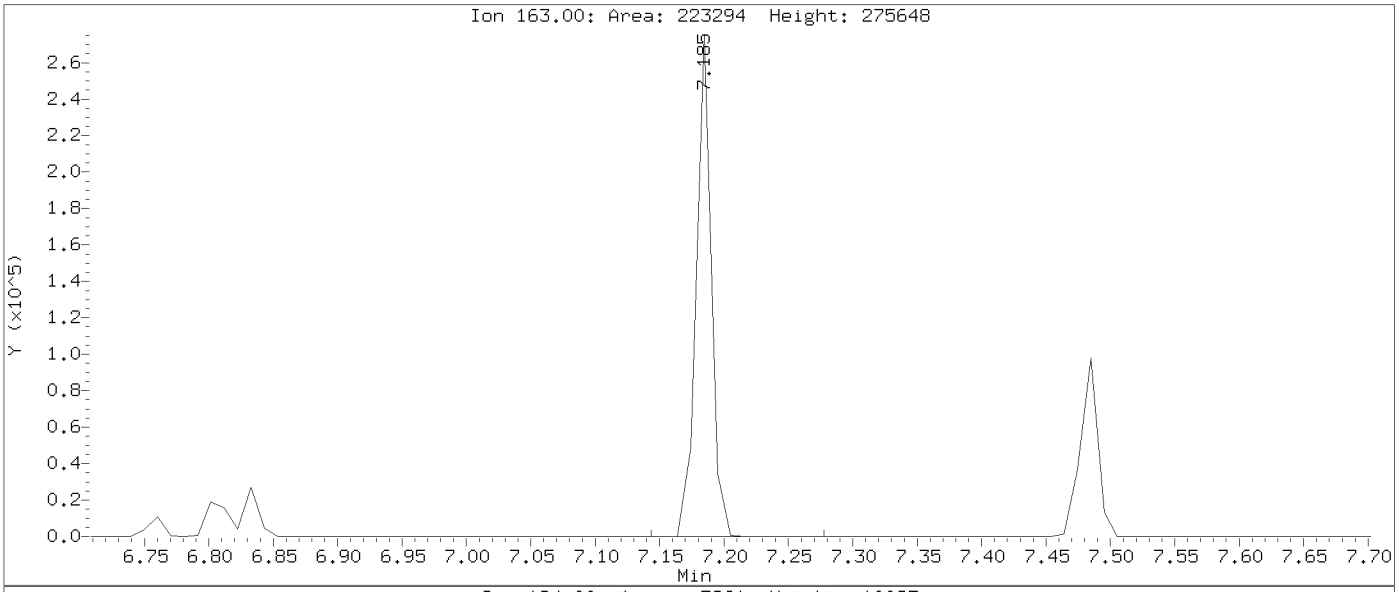
BEFORE MANUAL INTEGRATION

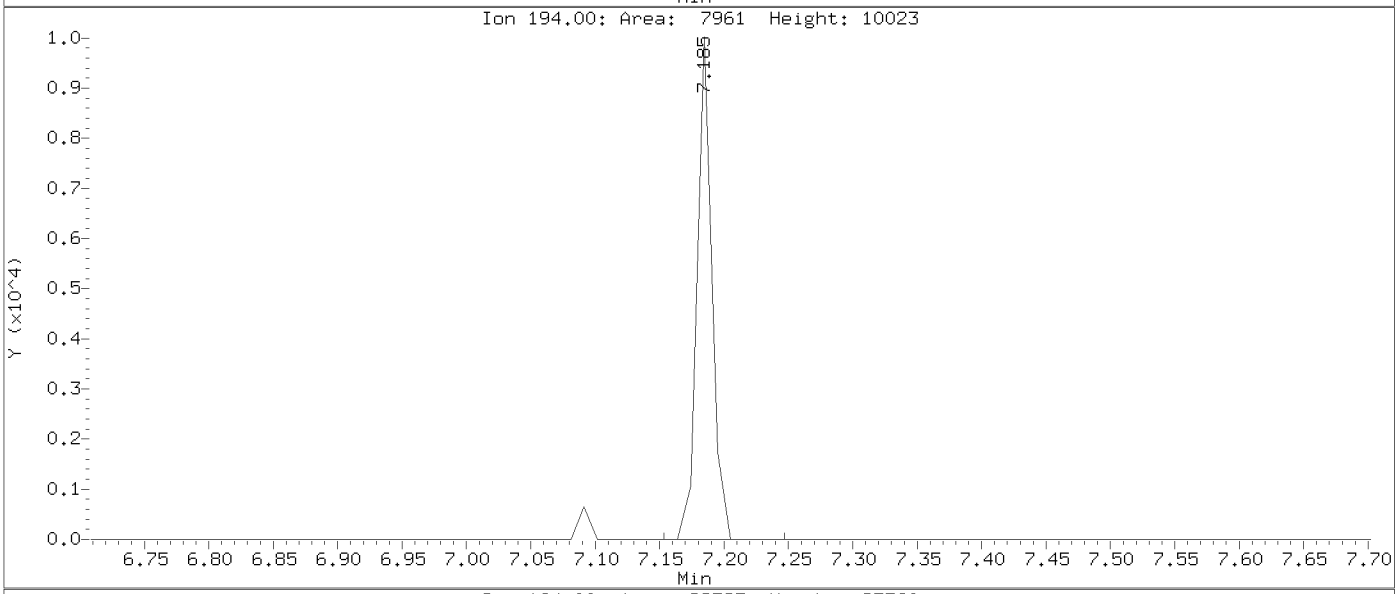


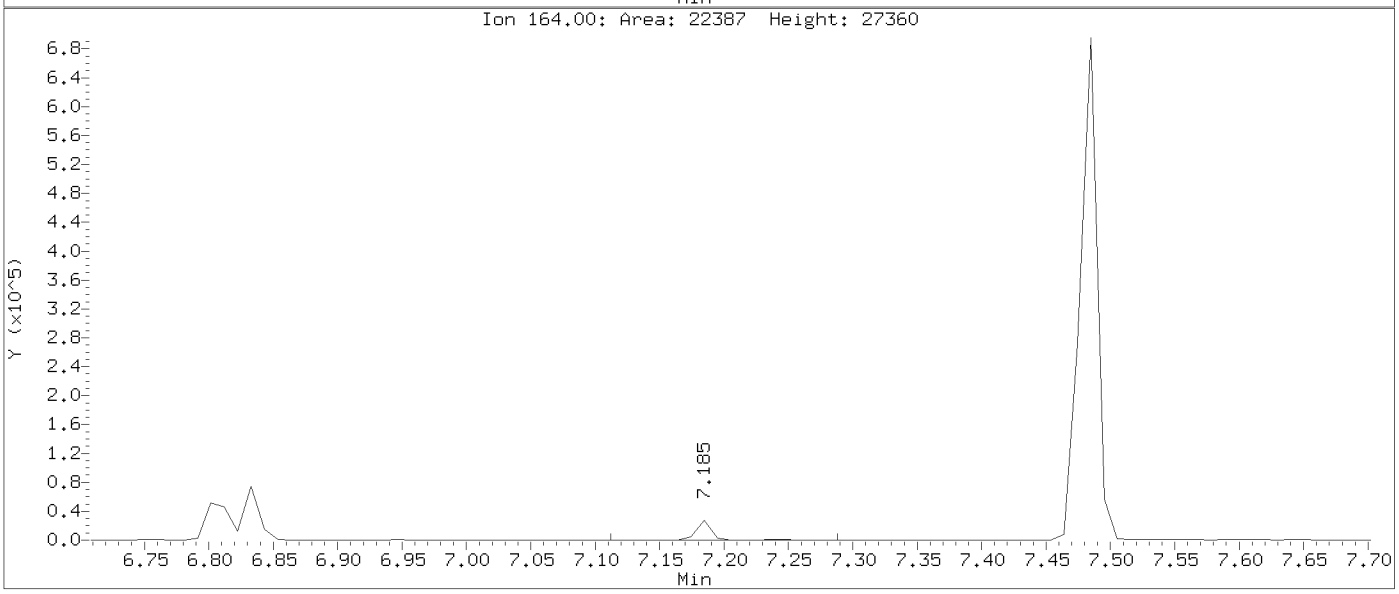
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Injection Date: 23-MAR-2015 15:39
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

AFTER MANUAL INTEGRATION







Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG160781-2
Analytical Date: 04/06/15 15:10
Lab File ID : U9932.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
13 Phenol	1.83280	1.83502	1.83502	0.010	0.12128	20.01000	Averaged	
16 Bis(2-Chloroethyl)ether	1.26825	1.32820	1.32820	0.010	4.72708	20.00000	Averaged	
17 2-Chlorophenol	1.46805	1.43016	1.43016	0.010	-2.58137	20.00000	Averaged	
18 1,3-Dichlorobenzene	1.50750	1.45617	1.45617	0.010	-3.40508	20.00000	Averaged	
20 1,4-Dichlorobenzene	1.41341	1.39400	1.39400	0.010	-1.37357	20.01000	Averaged	
22 1,2-Dichlorobenzene	1.39134	1.37567	1.37567	0.010	-1.12631	20.00000	Averaged	
23 2-Methylphenol	1.35067	1.29392	1.29392	0.010	-4.20154	20.00000	Averaged	
25 2,2'-Oxybis(1-chloropropane	1.46540	1.41168	1.41168	0.010	-3.66625	20.00000	Averaged	
28 3&4-Methylphenol	1.11346	1.25375	1.25375	0.010	12.59927	20.00000	Averaged	
30 N-Nitroso-di-n-propylamine	0.75487	0.75614	0.75614	0.050	0.16804	20.00000	Averaged	
32 Hexachloroethane	0.63826	0.62514	0.62514	0.010	-2.05539	20.00000	Averaged	
34 Nitrobenzene	0.32812	0.32525	0.32525	0.010	-0.87611	20.00000	Averaged	
36 Isophorone	0.68511	0.66238	0.66238	0.010	-3.31762	20.00000	Averaged	
37 2-Nitrophenol	0.19711	0.19219	0.19219	0.010	-2.49360	20.01000	Averaged	
38 2,4-Dimethylphenol	0.35361	0.34121	0.34121	0.010	-3.50778	20.00000	Averaged	
40 Bis(2-Chloroethoxy)methane	0.47995	0.49847	0.49847	0.010	3.85811	20.00000	Averaged	
42 2,4-Dichlorophenol	0.26268	0.27573	0.27573	0.010	4.96607	20.01000	Averaged	
43 1,2,4-Trichlorobenzene	0.27482	0.27973	0.27973	0.010	1.78789	20.00000	Averaged	
46 Naphthalene	50.00000	47.73953	0.86728	0.010	-4.52094	20.00000	Quadratic	
47 4-Chloroaniline	0.40025	0.37782	0.37782	0.010	-5.60465	20.00000	Averaged	
50 Hexachlorobutadiene	50.00000	48.13131	0.14503	0.010	-3.73737	20.01000	Quadratic	
54 4-Chloro-3-Methylphenol	0.28042	0.28288	0.28288	0.010	0.87590	20.01000	Averaged	
56 2-Methylnaphthalene	0.59499	0.61107	0.61107	0.010	2.70240	20.00000	Averaged	
59 Hexachlorocyclopentadiene	0.33335	0.29686	0.29686	0.050	-10.94620	20.00000	Averaged	
61 2,4,6-Trichlorophenol	0.33965	0.34826	0.34826	0.010	2.53637	20.01000	Averaged	
62 2,4,5-Trichlorophenol	0.36064	0.38350	0.38350	0.010	6.33882	20.00000	Averaged	
66 2-Chloronaphthalene	1.15799	1.20620	1.20620	0.010	4.16323	20.00000	Averaged	
69 2-Nitroaniline	0.38426	0.31345	0.31345	0.010	-18.42717	20.00000	Averaged	
72 Dimethyl Phthalate	1.27109	1.29971	1.29971	0.010	2.25102	20.00000	Averaged	
74 2,6-Dinitrotoluene	0.28475	0.29891	0.29891	0.010	4.97059	20.00000	Averaged	
75 Acenaphthylene	1.67812	1.70545	1.70545	0.010	1.62882	20.00000	Averaged	
77 3-Nitroaniline	0.34042	0.34293	0.34293	0.010	0.73954	20.00000	Averaged	
79 Acenaphthene	0.99720	0.98002	0.98002	0.010	-1.72310	20.01000	Averaged	
80 2,4-Dinitrophenol	0.16089	0.16001	0.16001	0.050	-0.54906	20.00000	Averaged	
81 4-Nitrophenol	0.22460	0.13937	0.13937	0.050	-37.94663	20.00000	Averaged	*
83 Dibenzofuran	1.33362	1.42438	1.42438	0.010	6.80532	20.00000	Averaged	
84 2,4-Dinitrotoluene	0.35346	0.38767	0.38767	0.010	9.68090	20.00000	Averaged	
89 Diethylphthalate	1.21459	1.33999	1.33999	0.010	10.32404	20.00000	Averaged	
90 Fluorene	50.00000	48.83274	1.00688	0.010	-2.33451	20.00000	Quadratic	
92 4-Chlorophenyl-phenylether	50.00000	56.61973	0.46754	0.010	13.23946	20.00000	Quadratic	
94 4-Nitroaniline	0.27407	0.27999	0.27999	0.010	2.15795	20.00000	Averaged	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG160781-2
Analytical Date: 04/06/15 15:10
Lab File ID : U9932.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

	Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
95	4,6-Dinitro-2-Methylphenol	0.12580	0.12676	0.12676	0.010	0.76272	20.00000	Averaged	
96	N-Nitrosodiphenylamine	0.60240	0.63099	0.63099	0.010	4.74448	20.01000	Averaged	
106	4-Bromophenyl-phenylether	50.00000	48.35542	0.19818	0.010	-3.28916	20.00000	Quadratic	
107	Hexachlorobenzene	0.24503	0.25059	0.25059	0.010	2.27211	20.00000	Averaged	
110	Pentachlorophenol	0.14222	0.11211	0.11211	0.010	-21.17084	20.01000	Averaged	*
115	Phenanthrene	50.00000	43.51252	0.78342	0.010	-12.97497	20.00000	Quadratic	
118	Anthracene	0.94324	0.91063	0.91063	0.010	-3.45712	20.00000	Averaged	
119	Carbazole	0.84890	0.84067	0.84067	0.010	-0.97050	20.00000	Averaged	
121	Di-n-butylphthalate	1.26215	1.19499	1.19499	0.010	-5.32087	20.00000	Averaged	
126	Fluoranthene	50.00000	47.07796	0.82999	0.010	-5.84408	20.01000	Quadratic	
128	Pyrene	1.44051	1.42276	1.42276	0.010	-1.23258	20.00000	Averaged	
136	Butylbenzylphthalate	0.75083	0.72235	0.72235	0.010	-3.79291	20.00000	Averaged	
139	Benzo(a)anthracene	0.97686	0.95056	0.95056	0.010	-2.69275	20.00000	Averaged	
140	3,3'-Dichlorobenzidine	0.28036	0.27779	0.27779	0.010	-0.91472	20.00000	Averaged	
142	Chrysene	0.94750	0.90422	0.90422	0.010	-4.56806	20.00000	Averaged	
143	bis(2-Ethylhexyl)phthalate	1.01251	0.99517	0.99517	0.010	-1.71240	20.00000	Averaged	
144	Di-n-octylphthalate	2.59615	2.38987	2.38987	0.010	-7.94557	20.01000	Averaged	
145	Benzo(b)fluoranthene	1.22310	1.14631	1.14631	0.010	-6.27838	20.00000	Averaged	
147	Benzo(k)fluoranthene	1.22644	1.16937	1.16937	0.010	-4.65329	20.00000	Averaged	
149	Benzo(a)pyrene	1.00954	0.97006	0.97006	0.010	-3.91128	20.01000	Averaged	
153	Indeno(1,2,3-cd)pyrene	0.54351	0.60838	0.60838	0.010	11.93498	20.00000	Averaged	
154	Dibenzo(a,h)anthracene	0.54297	0.59735	0.59735	0.010	10.01633	20.00000	Averaged	
155	Benzo(g,h,i)perylene	0.60575	0.68599	0.68599	0.010	13.24683	20.00000	Averaged	
8	2-Fluorophenol	1.51266	1.37274	1.37274	0.010	-9.25015	20.00000	Averaged	
12	Phenol-D6	1.75431	1.70942	1.70942	0.010	-2.55896	20.00000	Averaged	
33	Nitrobenzene-D5	0.35791	0.34806	0.34806	0.010	-2.75157	20.00000	Averaged	
63	2-Fluorobiphenyl	1.16214	1.19792	1.19792	0.010	3.07877	20.00000	Averaged	
100	2,4,6-Tribromophenol	0.21066	0.21463	0.21463	0.010	1.88494	20.00000	Averaged	
129	Terphenyl-D14	0.95170	0.95182	0.95182	0.010	0.01239	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG160781-2
Analytical Date: 04/06/15 15:10
Lab File ID : U9932.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Report Date: 09-Apr-2015 10:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Lab Smp Id: WG160781-2
Inj Date : 06-APR-2015 15:10 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160781-2,SI2008
Misc Info : WG160781,WG160781,WG160080-4,SI2008-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.931	2.931	(0.730)	515725	50.0000	45.4	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	642213	50.0000	48.7	
13 Phenol	94	3.676	3.676	(0.915)	689398	50.0000	50.1	
16 Bis(2-Chloroethyl)ether	93	3.759	3.759	(0.936)	498991	50.0000	52.4	
17 2-Chlorophenol	128	3.831	3.831	(0.954)	537296	50.0000	48.7	
18 1,3-Dichlorobenzene	146	3.966	3.966	(0.987)	547069	50.0000	48.3	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	300552	40.0000		
20 1,4-Dichlorobenzene	146	4.038	4.038	(1.005)	523710	50.0000	49.3	
22 1,2-Dichlorobenzene	146	4.194	4.194	(1.044)	516826	50.0000	49.4	
23 2-Methylphenol	108	4.266	4.266	(1.062)	486114	50.0000	47.9	
25 2,2'-Oxybis(1-chloropropane)	45	4.287	4.287	(1.067)	530353	50.0000	48.2	
28 3&4-Methylphenol	108	4.442	4.442	(1.106)	471021	50.0000	56.3	
30 N-Nitroso-di-n-propylamine	70	4.442	4.442	(1.106)	284075	50.0000	50.1	
32 Hexachloroethane	117	4.535	4.535	(1.129)	234860	50.0000	49.0	
$ 33 Nitrobenzene-D5	82	4.587	4.587	(0.854)	504356	50.0000	48.6	
34 Nitrobenzene	77	4.608	4.608	(0.857)	471296	50.0000	49.6	
36 Isophorone	82	4.866	4.866	(0.906)	959823	50.0000	48.3	
37 2-Nitrophenol	139	4.949	4.949	(0.921)	278495	50.0000	48.8	
38 2,4-Dimethylphenol	107	5.011	5.011	(0.933)	494421	50.0000	48.2	
40 Bis(2-Chloroethoxy)methane	93	5.104	5.104	(0.950)	722300	50.0000	51.9	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Report Date: 09-Apr-2015 10:49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.229	5.229	(0.973)	399539	50.0000	52.5	
	43 1,2,4-Trichlorobenzene	180	5.311	5.311	(0.988)	405340	50.0000	50.9	
*	45 Naphthalene-D8	136	5.373	5.373	(1.000)	1159234	40.0000		
	46 Naphthalene	128	5.394	5.394	(1.004)	1256723	50.0000	47.7	
	47 4-Chloroaniline	127	5.467	5.467	(1.017)	547478	50.0000	47.2	
	50 Hexachlorobutadiene	225	5.549	5.549	(1.033)	210154	50.0000	48.1	
	54 4-Chloro-3-Methylphenol	107	6.067	6.067	(1.129)	409906	50.0000	50.4	
	56 2-Methylnaphthalene	142	6.201	6.201	(1.154)	885467	50.0000	51.4	
	59 Hexachlorocyclopentadiene	237	6.408	6.408	(0.860)	223686	50.0000	44.5	
	61 2,4,6-Trichlorophenol	196	6.564	6.564	(0.881)	262418	50.0000	51.3	
	62 2,4,5-Trichlorophenol	196	6.605	6.605	(0.886)	288967	50.0000	53.2	
$	63 2-Fluorobiphenyl	172	6.657	6.657	(0.893)	902639	50.0000	51.5	
	66 2-Chloronaphthalene	162	6.781	6.781	(0.910)	908875	50.0000	52.1	
	69 2-Nitroaniline	65	6.926	6.926	(0.929)	236188	50.0000	40.8	
	72 Dimethyl Phthalate	163	7.174	7.174	(0.963)	979332	50.0000	51.1	
	75 Acenaphthylene	152	7.278	7.278	(0.976)	1285063	50.0000	50.8	
	74 2,6-Dinitrotoluene	165	7.226	7.226	(0.969)	225228	50.0000	52.5	
*	78 Acenaphthene-D10	164	7.454	7.454	(1.000)	602802	40.0000		
	77 3-Nitroaniline	138	7.443	7.443	(0.999)	258401	50.0000	50.4	
	79 Acenaphthene	153	7.495	7.495	(1.006)	738449	50.0000	49.1	
	80 2,4-Dinitrophenol	184	7.578	7.578	(1.017)	120567	50.0000	49.7	
	81 4-Nitrophenol	139	7.692	7.692	(1.032)	105015	50.0000	31.0(M)	
	83 Dibenzofuran	168	7.702	7.702	(1.033)	1073271	50.0000	53.4	
	84 2,4-Dinitrotoluene	165	7.733	7.733	(1.037)	292114	50.0000	54.8	
	89 Diethylphthalate	149	8.033	8.033	(1.078)	1009683	50.0000	55.2	
	92 4-Chlorophenyl-phenylether	204	8.137	8.137	(1.092)	352293	50.0000	56.6	
	90 Fluorene	166	8.127	8.127	(1.090)	758689	50.0000	48.8	
	94 4-Nitroaniline	138	8.189	8.189	(1.099)	210971	50.0000	51.1	
	95 4,6-Dinitro-2-Methylphenol	198	8.230	8.230	(0.888)	152775	50.0000	50.4	
	96 N-Nitrosodiphenylamine	169	8.292	8.292	(0.895)	760494	50.0000	52.4	
$	100 2,4,6-Tribromophenol	330	8.427	8.427	(1.131)	161725	50.0000	50.9	
	106 4-Bromophenyl-phenylether	248	8.727	8.727	(0.942)	238860	50.0000	48.4	
	107 Hexachlorobenzene	284	8.820	8.820	(0.952)	302026	50.0000	51.1	
	110 Pentachlorophenol	266	9.068	9.068	(0.979)	135117	50.0000	39.4	
*	114 Phenanthrene-D10	188	9.265	9.265	(1.000)	964198	40.0000		
	115 Phenanthrene	178	9.296	9.296	(1.003)	944209	50.0000	43.5	
	118 Anthracene	178	9.358	9.358	(1.010)	1097539	50.0000	48.3	
	119 Carbazole	167	9.565	9.565	(1.032)	1013210	50.0000	49.5	
	121 Di-n-butylphthalate	149	10.031	10.031	(1.083)	1440264	50.0000	47.3	
	126 Fluoranthene	202	10.755	10.755	(1.161)	1000340	50.0000	47.1	
	128 Pyrene	202	11.025	11.025	(0.861)	971113	50.0000	49.4	
$	129 Terphenyl-D14	244	11.242	11.242	(0.878)	649671	50.0000	50.0	
	136 Butylbenzylphthalate	149	11.946	11.946	(0.933)	493046	50.0000	48.1	
*	141 Chrysene-D12	240	12.805	12.805	(1.000)	546045	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.774	12.774	(0.998)	189608	50.0000	49.5	
	139 Benzo(a)anthracene	228	12.784	12.784	(0.998)	648811	50.0000	48.6	
	142 Chrysene	228	12.846	12.846	(1.003)	617181	50.0000	47.7	
	143 bis(2-Ethylhexyl)phthalate	149	12.960	12.960	(1.012)	679262	50.0000	49.1	
	144 Di-n-octylphthalate	149	14.295	14.295	(0.908)	986958	50.0000	46.0	
	145 Benzo(b)fluoranthene	252	14.958	14.958	(0.950)	473398	50.0000	46.9	
	147 Benzo(k)fluoranthene	252	15.009	15.009	(0.953)	482921	50.0000	47.7(H)	
	149 Benzo(a)pyrene	252	15.630	15.630	(0.993)	400610	50.0000	48.0	
*	150 Perylene-D12	264	15.744	15.744	(1.000)	330380	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.504	17.504	(1.112)	251247	50.0000	56.0	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Report Date: 09-Apr-2015 10:49

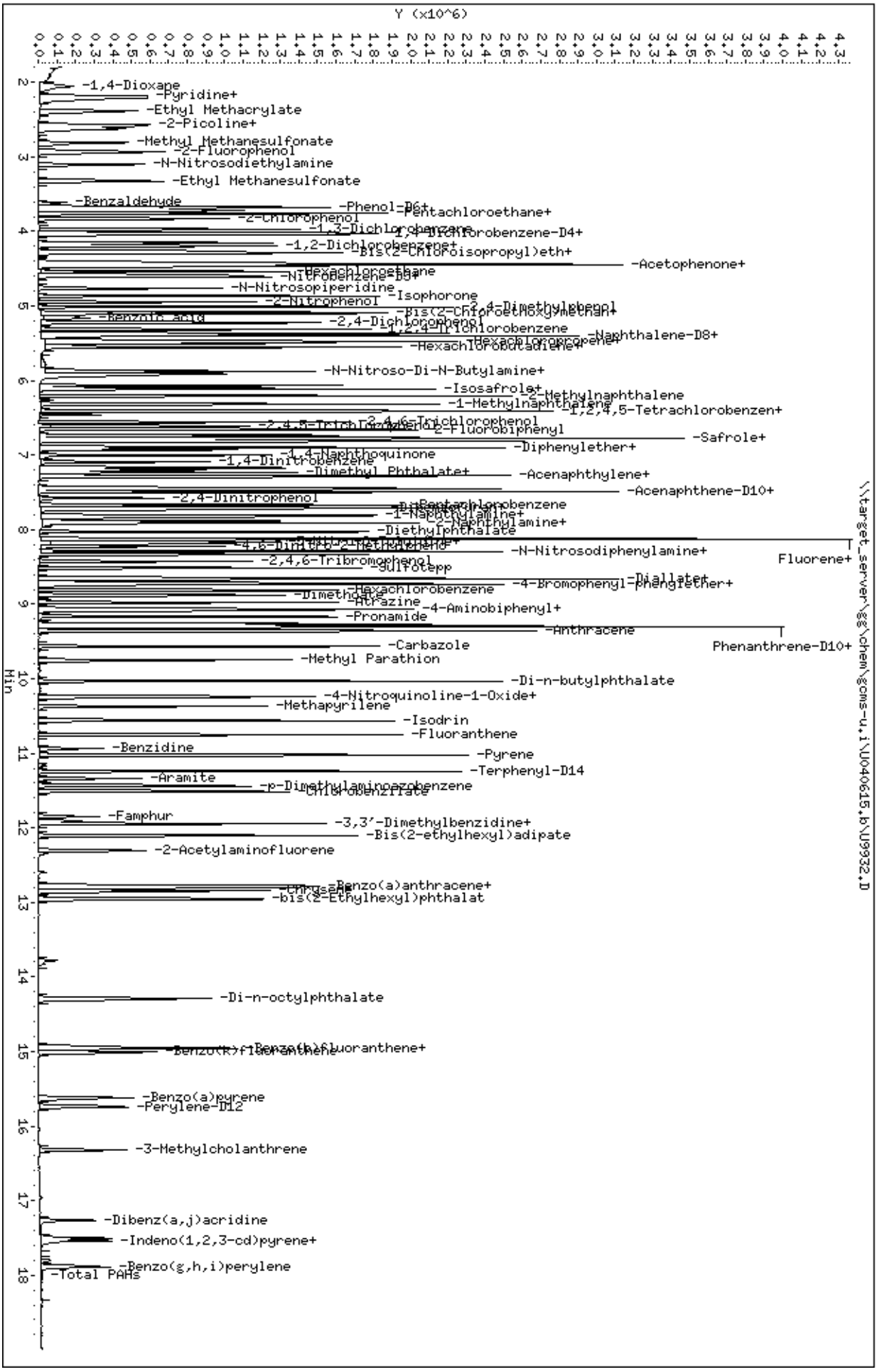
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.545	17.545	(1.114)	246691	50.0000	55.0	
155 Benzo(g,h,i)perylene	276	17.887	17.887	(1.136)	283296	50.0000	56.6	

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Date : 06-APR-2015 15:10
Client ID:
Sample Info: WG160781-2,SI2008
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG160877-2
Analytical Date: 04/08/15 13:30
Lab File ID : U9982.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
13 Phenol	1.83280	1.83811	1.83811	0.010	0.28994	20.01000	Averaged	
16 Bis(2-Chloroethyl)ether	1.26825	1.27522	1.27522	0.010	0.54975	20.00000	Averaged	
17 2-Chlorophenol	1.46805	1.43339	1.43339	0.010	-2.36143	20.00000	Averaged	
18 1,3-Dichlorobenzene	1.50750	1.50663	1.50663	0.010	-0.05787	20.00000	Averaged	
20 1,4-Dichlorobenzene	1.41341	1.41210	1.41210	0.010	-0.09242	20.01000	Averaged	
22 1,2-Dichlorobenzene	1.39134	1.40312	1.40312	0.010	0.84651	20.00000	Averaged	
23 2-Methylphenol	1.35067	1.29369	1.29369	0.010	-4.21844	20.00000	Averaged	
25 2,2'-Oxybis(1-chloropropane	1.46540	1.40244	1.40244	0.010	-4.29674	20.00000	Averaged	
28 3&4-Methylphenol	1.11346	1.24918	1.24918	0.010	12.18853	20.00000	Averaged	
30 N-Nitroso-di-n-propylamine	0.75487	0.71744	0.71744	0.050	-4.95908	20.00000	Averaged	
32 Hexachloroethane	0.63826	0.63581	0.63581	0.010	-0.38447	20.00000	Averaged	
34 Nitrobenzene	0.32812	0.33730	0.33730	0.010	2.79677	20.00000	Averaged	
36 Isophorone	0.68511	0.64516	0.64516	0.010	-5.83127	20.00000	Averaged	
37 2-Nitrophenol	0.19711	0.20010	0.20010	0.010	1.51824	20.01000	Averaged	
38 2,4-Dimethylphenol	0.35361	0.32879	0.32879	0.010	-7.02005	20.00000	Averaged	
40 Bis(2-Chloroethoxy)methane	0.47995	0.49317	0.49317	0.010	2.75459	20.00000	Averaged	
42 2,4-Dichlorophenol	0.26268	0.27039	0.27039	0.010	2.93315	20.01000	Averaged	
43 1,2,4-Trichlorobenzene	0.27482	0.27854	0.27854	0.010	1.35352	20.00000	Averaged	
46 Naphthalene	50.00000	48.27019	0.87488	0.010	-3.45962	20.00000	Quadratic	
47 4-Chloroaniline	0.40025	0.37902	0.37902	0.010	-5.30524	20.00000	Averaged	
50 Hexachlorobutadiene	50.00000	46.73758	0.14174	0.010	-6.52484	20.01000	Quadratic	
54 4-Chloro-3-Methylphenol	0.28042	0.27520	0.27520	0.010	-1.86394	20.01000	Averaged	
56 2-Methylnaphthalene	0.59499	0.57528	0.57528	0.010	-3.31239	20.00000	Averaged	
59 Hexachlorocyclopentadiene	0.33335	0.31325	0.31325	0.050	-6.03127	20.00000	Averaged	
61 2,4,6-Trichlorophenol	0.33965	0.34236	0.34236	0.010	0.79916	20.01000	Averaged	
62 2,4,5-Trichlorophenol	0.36064	0.37574	0.37574	0.010	4.18884	20.00000	Averaged	
66 2-Chloronaphthalene	1.15799	1.28041	1.28041	0.010	10.57193	20.00000	Averaged	
69 2-Nitroaniline	0.38426	0.29004	0.29004	0.010	-24.51932	20.00000	Averaged	*
72 Dimethyl Phthalate	1.27109	1.20380	1.20380	0.010	-5.29399	20.00000	Averaged	
74 2,6-Dinitrotoluene	0.28475	0.25361	0.25361	0.010	-10.93679	20.00000	Averaged	
75 Acenaphthylene	1.67812	1.59278	1.59278	0.010	-5.08563	20.00000	Averaged	
77 3-Nitroaniline	0.34042	0.29942	0.29942	0.010	-12.04151	20.00000	Averaged	
79 Acenaphthene	0.99720	0.99036	0.99036	0.010	-0.68665	20.01000	Averaged	
80 2,4-Dinitrophenol	0.16089	0.14012	0.14012	0.050	-12.90927	20.00000	Averaged	
81 4-Nitrophenol	0.22460	0.18090	0.18090	0.050	-19.45376	20.00000	Averaged	
83 Dibenzofuran	1.33362	1.28062	1.28062	0.010	-3.97415	20.00000	Averaged	
84 2,4-Dinitrotoluene	0.35346	0.33720	0.33720	0.010	-4.59884	20.00000	Averaged	
89 Diethylphthalate	1.21459	1.08017	1.08017	0.010	-11.06685	20.00000	Averaged	
90 Fluorene	50.00000	44.38835	0.93926	0.010	-11.22329	20.00000	Quadratic	
92 4-Chlorophenyl-phenylether	50.00000	48.03723	0.42104	0.010	-3.92555	20.00000	Quadratic	
94 4-Nitroaniline	0.27407	0.23328	0.23328	0.010	-14.88279	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG160877-2
Analytical Date: 04/08/15 13:30
Lab File ID : U9982.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

	Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
95	4,6-Dinitro-2-Methylphenol	0.12580	0.12937	0.12937	0.010	2.83823	20.00000	Averaged
96	N-Nitrosodiphenylamine	0.60240	0.62728	0.62728	0.010	4.12908	20.01000	Averaged
106	4-Bromophenyl-phenylether	50.00000	51.60947	0.20903	0.010	3.21894	20.00000	Quadratic
107	Hexachlorobenzene	0.24503	0.24609	0.24609	0.010	0.43350	20.00000	Averaged
110	Pentachlorophenol	0.14222	0.12465	0.12465	0.010	-12.35155	20.01000	Averaged
115	Phenanthrene	50.00000	48.07170	0.83856	0.010	-3.85659	20.00000	Quadratic
118	Anthracene	0.94324	0.98352	0.98352	0.010	4.27000	20.00000	Averaged
119	Carbazole	0.84890	0.80901	0.80901	0.010	-4.69914	20.00000	Averaged
121	Di-n-butylphthalate	1.26215	1.16534	1.16534	0.010	-7.67065	20.00000	Averaged
126	Fluoranthene	50.00000	43.84457	0.78497	0.010	-12.31085	20.01000	Quadratic
128	Pyrene	1.44051	1.39012	1.39012	0.010	-3.49860	20.00000	Averaged
136	Butylbenzylphthalate	0.75083	0.70579	0.70579	0.010	-5.99862	20.00000	Averaged
139	Benzo(a)anthracene	0.97686	0.97939	0.97939	0.010	0.25801	20.00000	Averaged
140	3,3'-Dichlorobenzidine	0.28036	0.28951	0.28951	0.010	3.26546	20.00000	Averaged
142	Chrysene	0.94750	0.92413	0.92413	0.010	-2.46683	20.00000	Averaged
143	bis(2-Ethylhexyl)phthalate	1.01251	0.95097	0.95097	0.010	-6.07847	20.00000	Averaged
144	Di-n-octylphthalate	2.59615	2.24176	2.24176	0.010	-13.65085	20.01000	Averaged
145	Benzo(b)fluoranthene	1.22310	1.13905	1.13905	0.010	-6.87203	20.00000	Averaged
147	Benzo(k)fluoranthene	1.22644	1.16191	1.16191	0.010	-5.26139	20.00000	Averaged
149	Benzo(a)pyrene	1.00954	0.97218	0.97218	0.010	-3.70121	20.01000	Averaged
153	Indeno(1,2,3-cd)pyrene	0.54351	0.56275	0.56275	0.010	3.53904	20.00000	Averaged
154	Dibenzo(a,h)anthracene	0.54297	0.55672	0.55672	0.010	2.53233	20.00000	Averaged
155	Benzo(g,h,i)perylene	0.60575	0.54832	0.54832	0.010	-9.48031	20.00000	Averaged
8	2-Fluorophenol	1.51266	1.41646	1.41646	0.010	-6.35992	20.00000	Averaged
12	Phenol-D6	1.75431	1.69344	1.69344	0.010	-3.46999	20.00000	Averaged
33	Nitrobenzene-D5	0.35791	0.35588	0.35588	0.010	-0.56706	20.00000	Averaged
63	2-Fluorobiphenyl	1.16214	1.13096	1.13096	0.010	-2.68325	20.00000	Averaged
100	2,4,6-Tribromophenol	0.21066	0.19581	0.19581	0.010	-7.05130	20.00000	Averaged
129	Terphenyl-D14	0.95170	0.93493	0.93493	0.010	-1.76217	20.00000	Averaged

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2008
Lab ID : WG160877-2
Analytical Date: 04/08/15 13:30
Lab File ID : U9982.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9982.D
Report Date: 09-Apr-2015 10:56

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9982.D
Lab Smp Id: WG160877-2
Inj Date : 08-APR-2015 13:30 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160877-2,SI2008
Misc Info : WG160877,WG160877,WG160080-4,SI2008-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.911	2.911	(0.726)	639422	50.0000	46.8	
$ 12 Phenol-D6	99	3.656	3.656	(0.912)	764457	50.0000	48.3	
13 Phenol	94	3.677	3.677	(0.917)	829764	50.0000	50.1	
16 Bis(2-Chloroethyl)ether	93	3.750	3.750	(0.935)	575663	50.0000	50.3	
17 2-Chlorophenol	128	3.822	3.822	(0.954)	647063	50.0000	48.8	
18 1,3-Dichlorobenzene	146	3.957	3.957	(0.987)	680127	50.0000	50.0	
* 19 1,4-Dichlorobenzene-D4	152	4.008	4.008	(1.000)	361138	40.0000		
20 1,4-Dichlorobenzene	146	4.029	4.029	(1.005)	637455	50.0000	50.0	
22 1,2-Dichlorobenzene	146	4.174	4.174	(1.041)	633400	50.0000	50.4	
23 2-Methylphenol	108	4.257	4.257	(1.062)	584003	50.0000	47.9	
25 2,2'-Oxybis(1-chloropropane)	45	4.277	4.277	(1.067)	633092	50.0000	47.8	
28 3&4-Methylphenol	108	4.433	4.433	(1.106)	563906	50.0000	56.1	
30 N-Nitroso-di-n-propylamine	70	4.433	4.433	(1.106)	323868	50.0000	47.5	
32 Hexachloroethane	117	4.515	4.515	(1.127)	287018	50.0000	49.8	
$ 33 Nitrobenzene-D5	82	4.578	4.578	(0.853)	606458	50.0000	49.7	
34 Nitrobenzene	77	4.598	4.598	(0.857)	574792	50.0000	51.4	
36 Isophorone	82	4.857	4.857	(0.905)	1099427	50.0000	47.1	
37 2-Nitrophenol	139	4.940	4.940	(0.921)	340992	50.0000	50.8	
38 2,4-Dimethylphenol	107	5.002	5.002	(0.932)	560286	50.0000	46.5	
40 Bis(2-Chloroethoxy)methane	93	5.095	5.095	(0.950)	840416	50.0000	51.4	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9982.D
Report Date: 09-Apr-2015 10:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.219	5.219	(0.973)	460767	50.0000	51.5	
	43 1,2,4-Trichlorobenzene	180	5.302	5.302	(0.988)	474655	50.0000	50.7	
*	45 Naphthalene-D8	136	5.364	5.364	(1.000)	1363286	40.0000		
	46 Naphthalene	128	5.385	5.385	(1.004)	1490888	50.0000	48.3	
	47 4-Chloroaniline	127	5.457	5.457	(1.017)	645889	50.0000	47.3	
	50 Hexachlorobutadiene	225	5.540	5.540	(1.033)	241541	50.0000	46.7	
	54 4-Chloro-3-Methylphenol	107	6.058	6.058	(1.129)	468966	50.0000	49.1	
	56 2-Methylnaphthalene	142	6.192	6.192	(1.154)	980344	50.0000	48.3	
	59 Hexachlorocyclopentadiene	237	6.399	6.399	(0.860)	273149	50.0000	47.0	
	61 2,4,6-Trichlorophenol	196	6.554	6.554	(0.880)	298540	50.0000	50.4	
	62 2,4,5-Trichlorophenol	196	6.596	6.596	(0.886)	327648	50.0000	52.1	
$	63 2-Fluorobiphenyl	172	6.637	6.637	(0.892)	986194	50.0000	48.6	
	66 2-Chloronaphthalene	162	6.772	6.772	(0.910)	1116515	50.0000	55.3(H)	
	69 2-Nitroaniline	65	6.917	6.917	(0.929)	252917	50.0000	37.7	
	72 Dimethyl Phthalate	163	7.165	7.165	(0.962)	1049711	50.0000	47.4	
	75 Acenaphthylene	152	7.269	7.269	(0.976)	1388895	50.0000	47.4	
	74 2,6-Dinitrotoluene	165	7.217	7.217	(0.969)	221148	50.0000	44.5	
*	78 Acenaphthene-D10	164	7.445	7.445	(1.000)	697597	40.0000		
	77 3-Nitroaniline	138	7.424	7.424	(0.997)	261097	50.0000	44.0	
	79 Acenaphthene	153	7.486	7.486	(1.006)	863588	50.0000	49.6	
	80 2,4-Dinitrophenol	184	7.569	7.569	(1.017)	122186	50.0000	43.5	
	81 4-Nitrophenol	139	7.683	7.683	(1.032)	157747	50.0000	40.3(M)	
	83 Dibenzofuran	168	7.693	7.693	(1.033)	1116695	50.0000	48.0	
	84 2,4-Dinitrotoluene	165	7.714	7.714	(1.036)	294039	50.0000	47.7	
	89 Diethylphthalate	149	8.014	8.014	(1.076)	941908	50.0000	44.5	
	92 4-Chlorophenyl-phenylether	204	8.117	8.117	(1.090)	367142	50.0000	48.0	
	90 Fluorene	166	8.107	8.107	(1.089)	819031	50.0000	44.4	
	94 4-Nitroaniline	138	8.179	8.179	(1.099)	203422	50.0000	42.6	
	95 4,6-Dinitro-2-Methylphenol	198	8.210	8.210	(0.887)	157288	50.0000	51.4	
	96 N-Nitrosodiphenylamine	169	8.273	8.273	(0.894)	762650	50.0000	52.1	
$	100 2,4,6-Tribromophenol	330	8.417	8.417	(1.131)	170742	50.0000	46.5	
	106 4-Bromophenyl-phenylether	248	8.718	8.718	(0.942)	254140	50.0000	51.6	
	107 Hexachlorobenzene	284	8.800	8.800	(0.951)	299195	50.0000	50.2	
	110 Pentachlorophenol	266	9.059	9.059	(0.979)	151550	50.0000	43.8	
*	114 Phenanthrene-D10	188	9.256	9.256	(1.000)	972646	40.0000		
	115 Phenanthrene	178	9.287	9.287	(1.003)	1019526	50.0000	48.1	
	118 Anthracene	178	9.349	9.349	(1.010)	1195770	50.0000	52.1	
	119 Carbazole	167	9.556	9.556	(1.032)	983604	50.0000	47.6	
	121 Di-n-butylphthalate	149	10.011	10.011	(1.082)	1416825	50.0000	46.2	
	126 Fluoranthene	202	10.736	10.736	(1.160)	954373	50.0000	43.8	
	128 Pyrene	202	11.005	11.005	(0.861)	972192	50.0000	48.2	
$	129 Terphenyl-D14	244	11.222	11.222	(0.878)	653854	50.0000	49.1	
	136 Butylbenzylphthalate	149	11.926	11.926	(0.934)	493602	50.0000	47.0	
*	141 Chrysene-D12	240	12.775	12.775	(1.000)	559488	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.754	12.754	(0.998)	202472	50.0000	51.6	
	139 Benzo(a)anthracene	228	12.764	12.764	(0.999)	684943	50.0000	50.1	
	142 Chrysene	228	12.827	12.827	(1.004)	646299	50.0000	48.8	
	143 bis(2-Ethylhexyl)phthalate	149	12.930	12.930	(1.012)	665068	50.0000	47.0	
	144 Di-n-octylphthalate	149	14.265	14.265	(0.908)	991125	50.0000	43.2	
	145 Benzo(b)fluoranthene	252	14.928	14.928	(0.950)	503597	50.0000	46.6	
	147 Benzo(k)fluoranthene	252	14.979	14.979	(0.953)	513705	50.0000	47.4(H)	
	149 Benzo(a)pyrene	252	15.600	15.600	(0.993)	429820	50.0000	48.1	
*	150 Perylene-D12	264	15.714	15.714	(1.000)	353696	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.474	17.474	(1.112)	248803	50.0000	51.8	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9982.D
Report Date: 09-Apr-2015 10:56

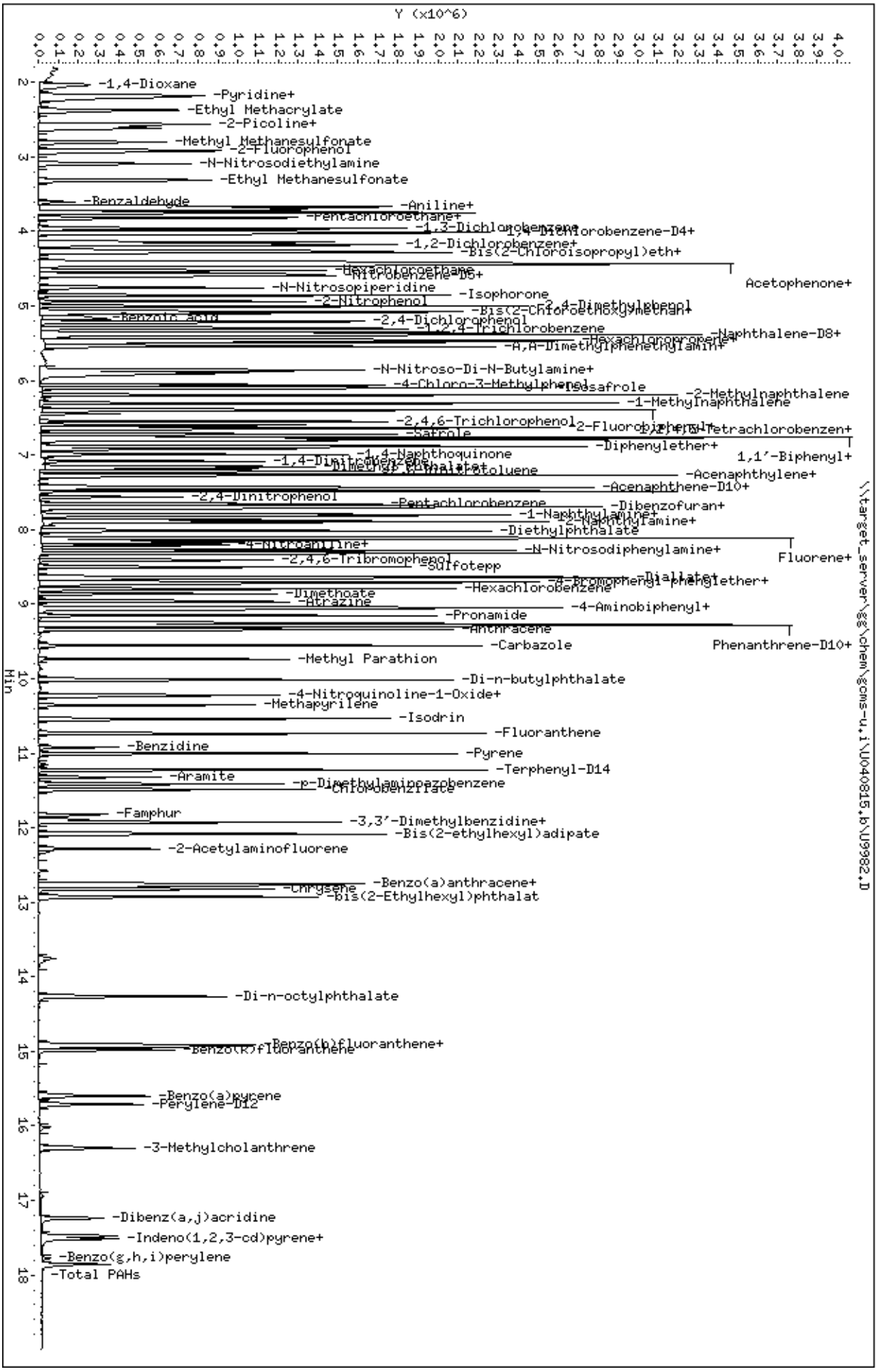
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.515	17.515	(1.115)	246135	50.0000	51.3	
155 Benzo(g,h,i)perylene	276	17.857	17.857	(1.136)	242423	50.0000	45.2	

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9982,D
Date : 08-APR-2015 13:30
Client ID:
Sample Info: WG160877-2,SI2008
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



0000538

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\UD340.D

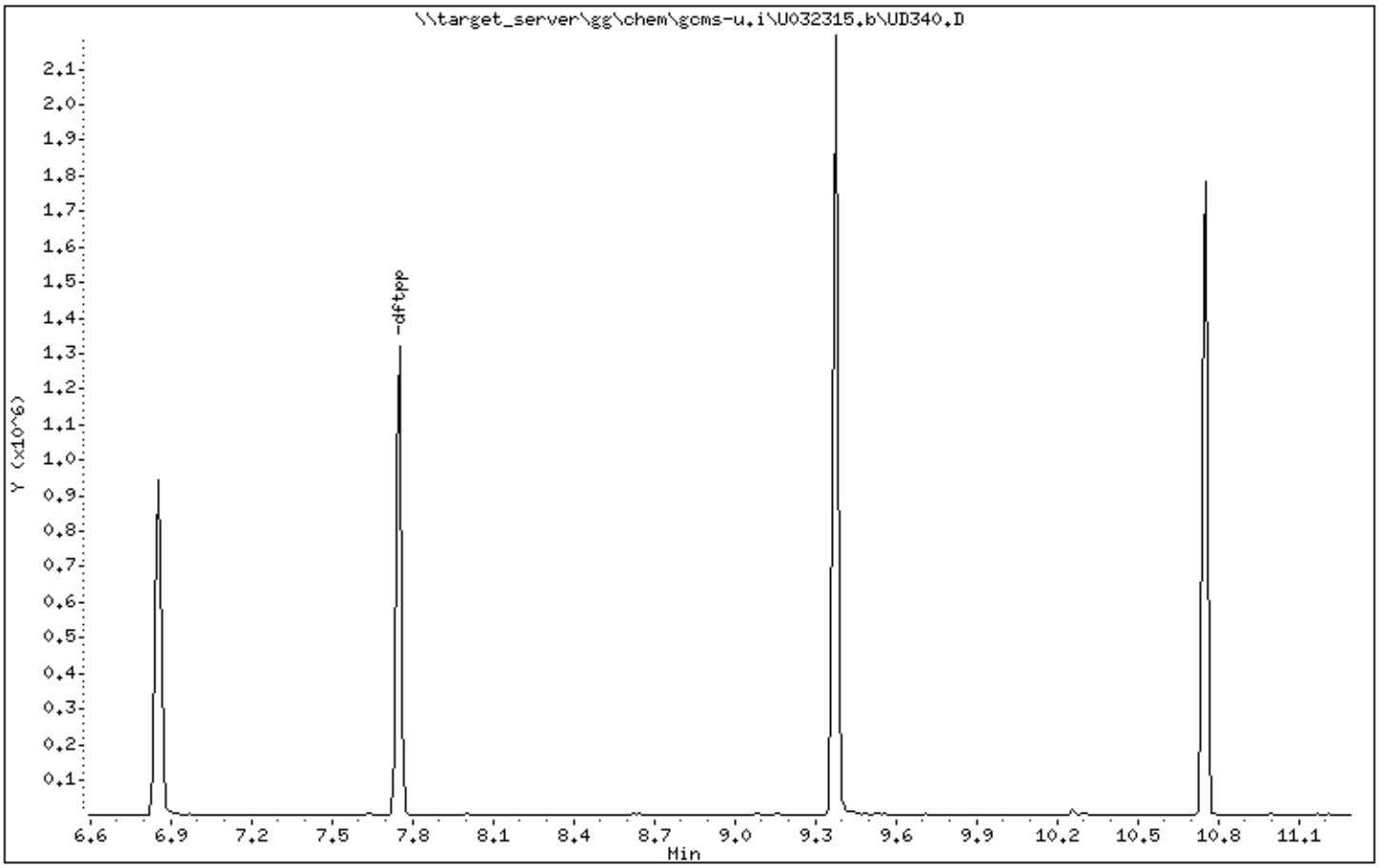
Date : 23-MAR-2015 14:55

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160080-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\UD340.D

Date : 23-MAR-2015 14:55

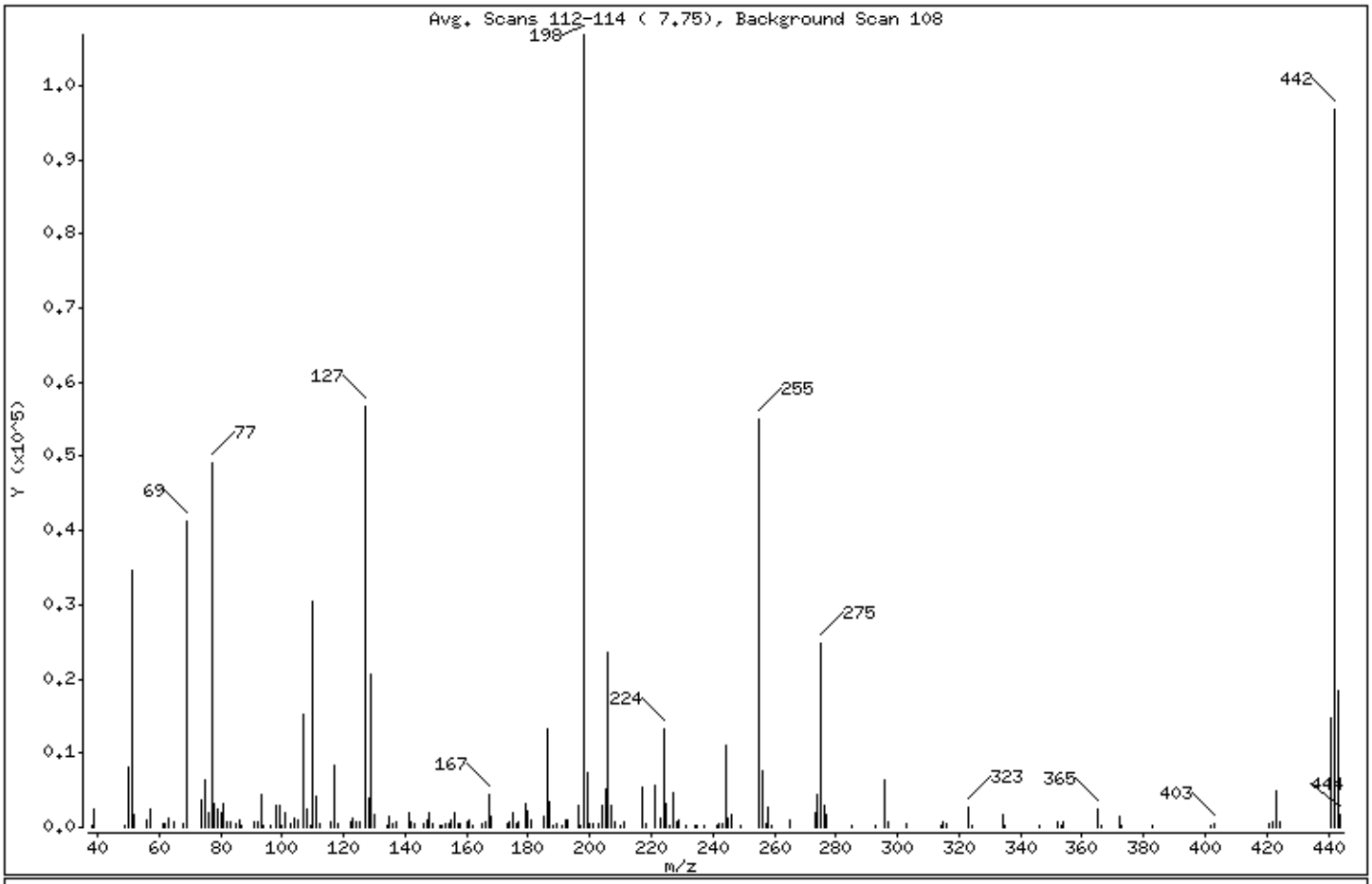
Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160080-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	32.43
68	Less than 2.00% of mass 69	0.52 (1.33)
69	Less than 100.00% of mass 198	38.71
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	53.02
197	Less than 1.00% of mass 198	0.19
199	5.00 - 9.00% of mass 198	6.86
275	10.00 - 30.00% of mass 198	23.26
365	1.00 - 100.00% of mass 198	2.39
441	0.01 - 100.00% of mass 443	13.90 (81.06)
442	40.00 - 100.00% of mass 198	90.57
443	17.00 - 23.00% of mass 442	17.14 (18.93)

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\UD340.D

Date : 23-MAR-2015 14:55

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160080-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: UD340.D
Spectrum: Avg. Scans 112-114 (7.75), Background Scan 108
Location of Maximum: 198.00
Number of points: 175

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	184	112.00	543	180.00	2200	249.00	245
39.00	2443	116.00	652	181.00	901	255.00	55024
49.00	202	117.00	8388	185.00	1411	256.00	7550
50.00	8002	118.00	562	186.00	13285	257.00	534
51.00	34656	122.00	820	187.00	3499	258.00	2780
52.00	1682	123.00	1299	188.00	199	259.00	317
56.00	1050	124.00	682	189.00	576	265.00	1013
57.00	2575	125.00	630	191.00	185	273.00	1909
61.00	508	127.00	56664	192.00	866	274.00	4421
62.00	493	128.00	4036	193.00	892	275.00	24856
63.00	1185	129.00	20552	196.00	3015	276.00	2935
65.00	761	130.00	1647	197.00	206	277.00	1840
68.00	552	134.00	185	198.00	106864	285.00	207
69.00	41368	135.00	1546	199.00	7329	293.00	281
74.00	3577	136.00	538	200.00	432	296.00	6403
75.00	6441	137.00	779	201.00	606	297.00	757
76.00	1885	141.00	1876	203.00	390	303.00	501
77.00	49168	142.00	842	204.00	3070	314.00	200
78.00	3305	143.00	500	205.00	5157	315.00	710
79.00	2474	146.00	413	206.00	23664	316.00	388
80.00	1935	147.00	1015	207.00	3050	323.00	2629
81.00	3139	148.00	2038	208.00	785	324.00	224
82.00	792	149.00	581	210.00	313	334.00	1688
83.00	760	151.00	168	211.00	774	335.00	250
85.00	582	152.00	226	217.00	5497	346.00	291
86.00	1087	153.00	522	218.00	562	352.00	799
87.00	168	154.00	519	221.00	5591	353.00	341
91.00	730	155.00	984	223.00	1262	354.00	696
92.00	660	156.00	1974	224.00	13178	365.00	2550
93.00	4363	157.00	419	225.00	3233	366.00	184
94.00	208	158.00	525	226.00	174	372.00	1421
96.00	203	160.00	755	227.00	4669	373.00	257
98.00	3051	161.00	932	228.00	629	383.00	210
99.00	2834	162.00	184	229.00	1037	402.00	315
100.00	193	165.00	555	231.00	265	403.00	471

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\UD340.D

Date : 23-MAR-2015 14:55

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160080-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

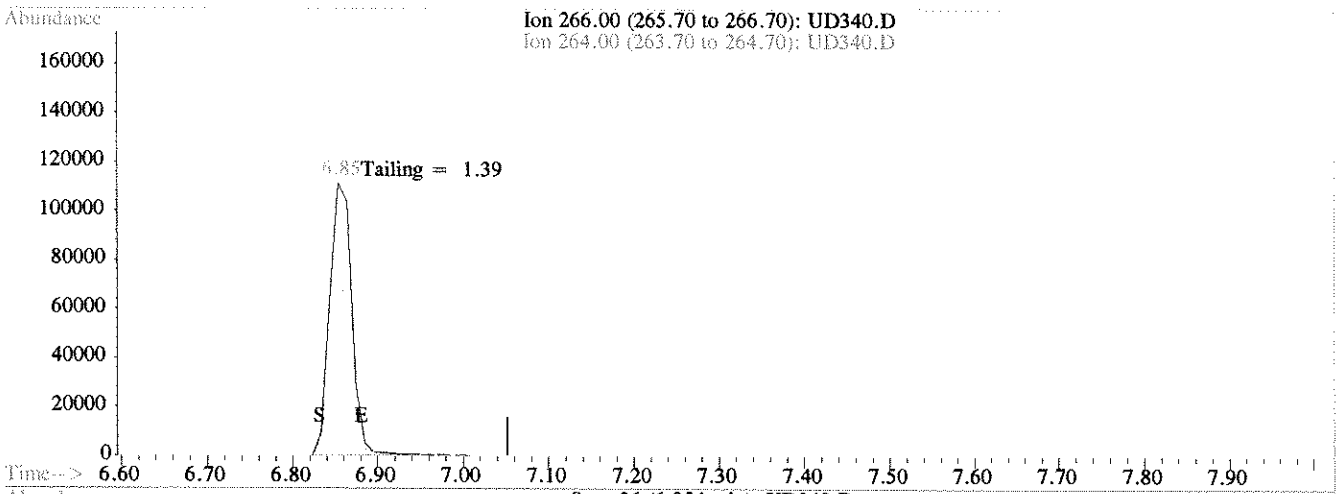
Data File: UD340.D
Spectrum: Avg. Scans 112-114 (7.75), Background Scan 108
Location of Maximum: 198.00
Number of points: 175

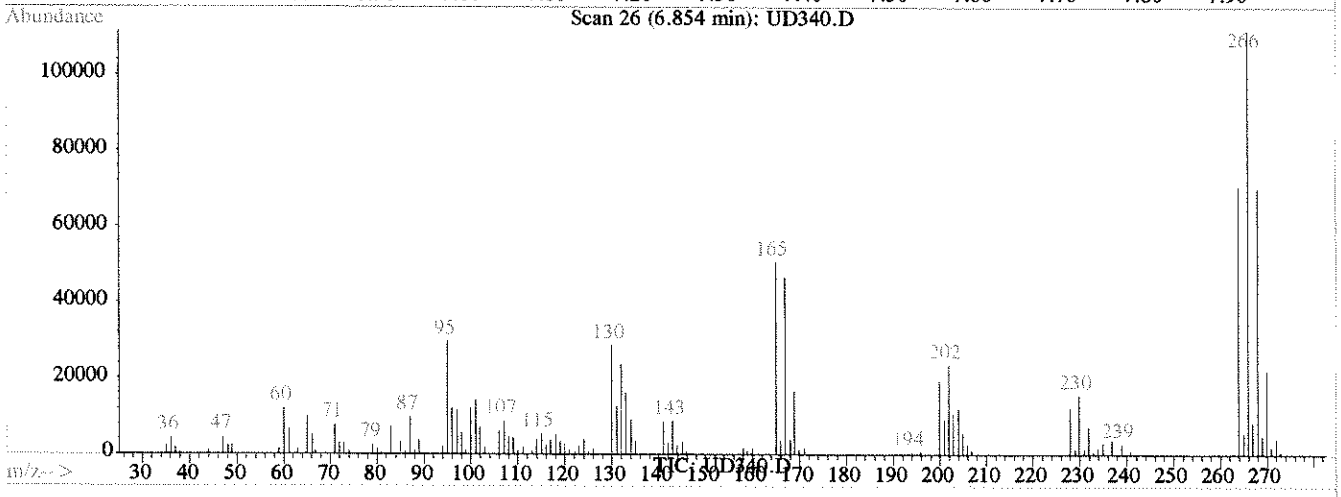
m/z	Y	m/z	Y	m/z	Y	m/z	Y
101.00	1962	166.00	631	234.00	175	421.00	544
103.00	599	167.00	4508	235.00	238	422.00	630
104.00	1113	168.00	1567	237.00	212	423.00	4928
105.00	991	173.00	455	241.00	240	424.00	768
107.00	15282	174.00	832	242.00	537	441.00	14850
108.00	2407	175.00	1874	243.00	378	442.00	96784
109.00	195	176.00	597	244.00	11100	443.00	18320
110.00	30584	177.00	778	245.00	1322	444.00	1816
111.00	4138	179.00	3293	246.00	1703		

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U032315\UD340.D Vial: 1
Acq On : 23 Mar 2015 2:55 pm Operator: JCG
Sample : WG160080-1 Inst : GC/MS Ins
Misc : WG160080,WG160080,WG160080-4 Multiplr: 1.00
MS Integration Params: EPA8270 Quant Results File: temp.res
Quant Time: Mar 24 10:38 2015

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration





(1) Pentachlorophenol (CM)

6.85min 92.52ug/L

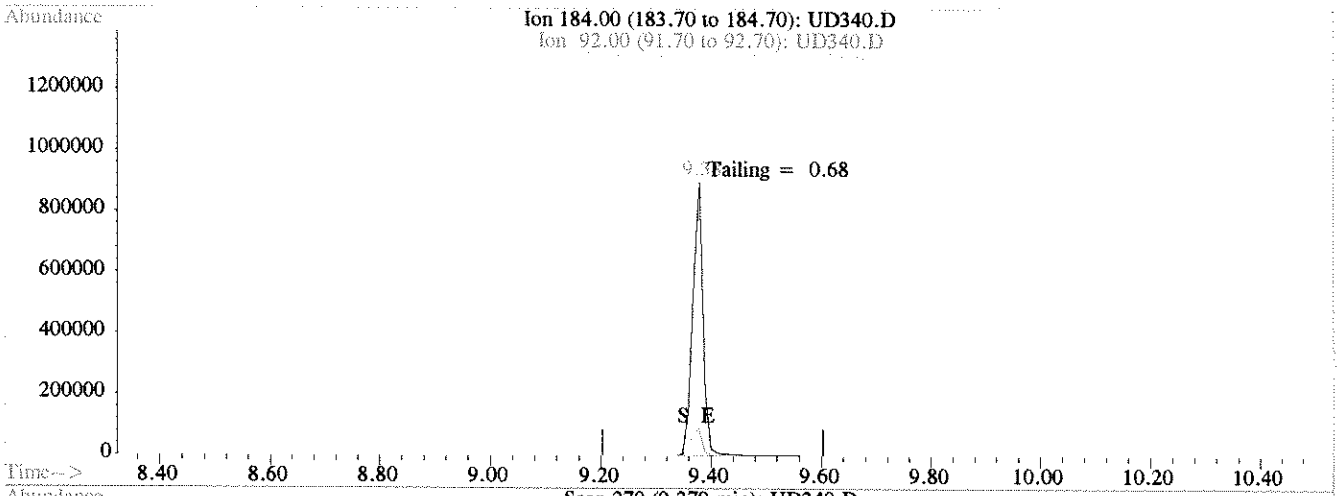
response 204569

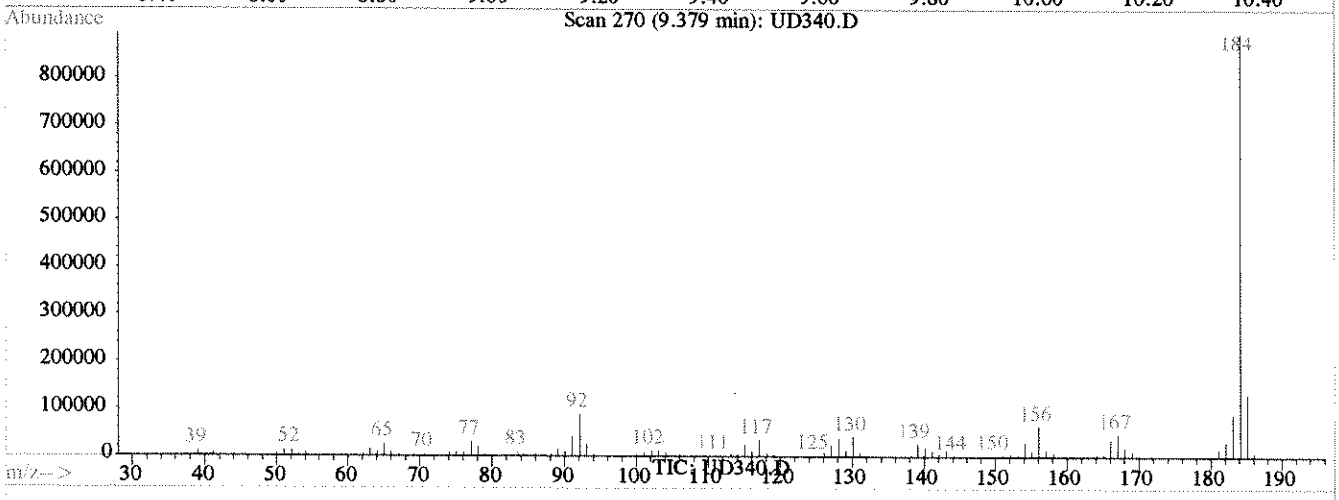
Ion	Exp%	Act%
266.00	100	100
264.00	62.00	61.39
268.00	63.50	61.38
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U032315\UD340.D Vial: 1
Acq On : 23 Mar 2015 2:55 pm Operator: JCG
Sample : WG160080-1 Inst : GC/MS Ins
Misc : WG160080,WG160080,WG160080-4 Multiplr: 1.00
Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator) Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration





(2) Benzidine (T)

9.38min 263.52ug/L

response 1182207

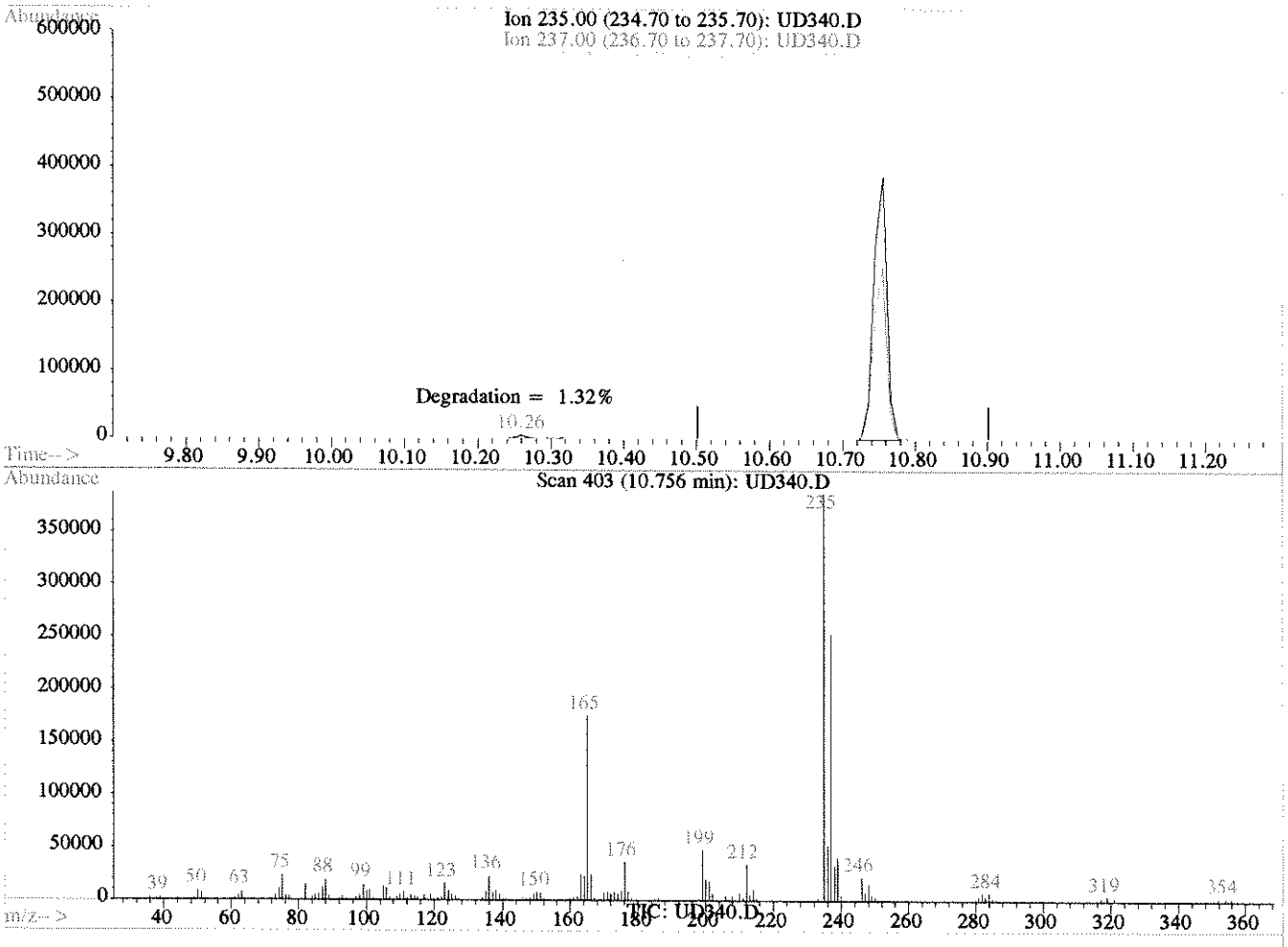
Ion	Exp%	Act%
184.00	100	100
92.00	12.20	10.51
185.00	14.40	14.37
0.00	0.00	0.00

UD340.D TUNETAIL.M Tue Mar 24 10:38:44 2015

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U032315\UD340.D
Acq On : 23 Mar 2015 2:55 pm
Sample : WG160080-1
Misc : WG160080,WG160080,WG160080-4
Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Quant Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res



(3) 4,4'-DDT (T)

10.76min 109.90ug/L

response 493042

Ion	Exp%	Act%
235.00	100	100
237.00	50.00	65.14
165.00	50.00	51.04
0.00	0.00	0.00

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\UD349.D

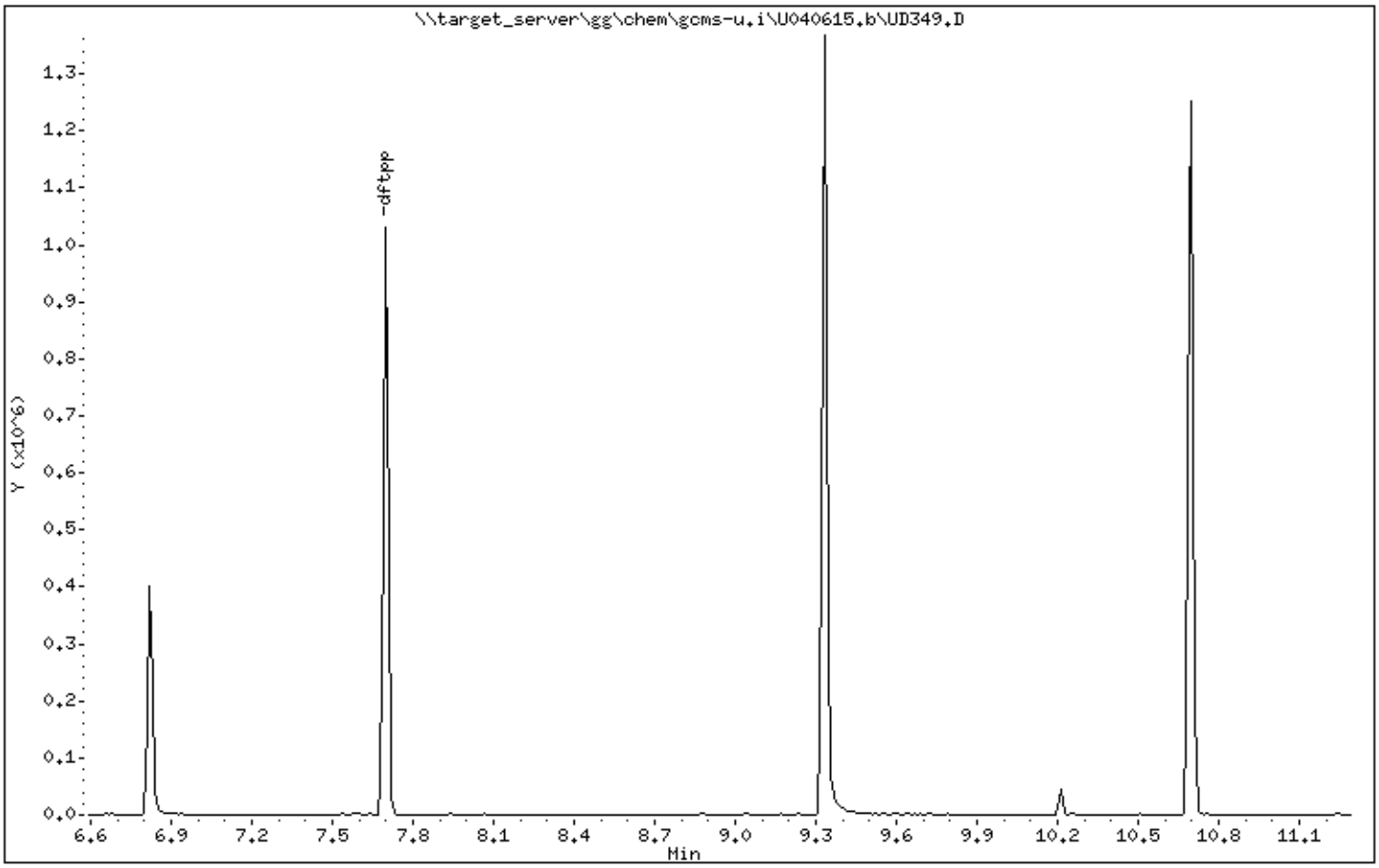
Date : 06-APR-2015 14:49

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160781-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\UD349.D

Date : 06-APR-2015 14:49

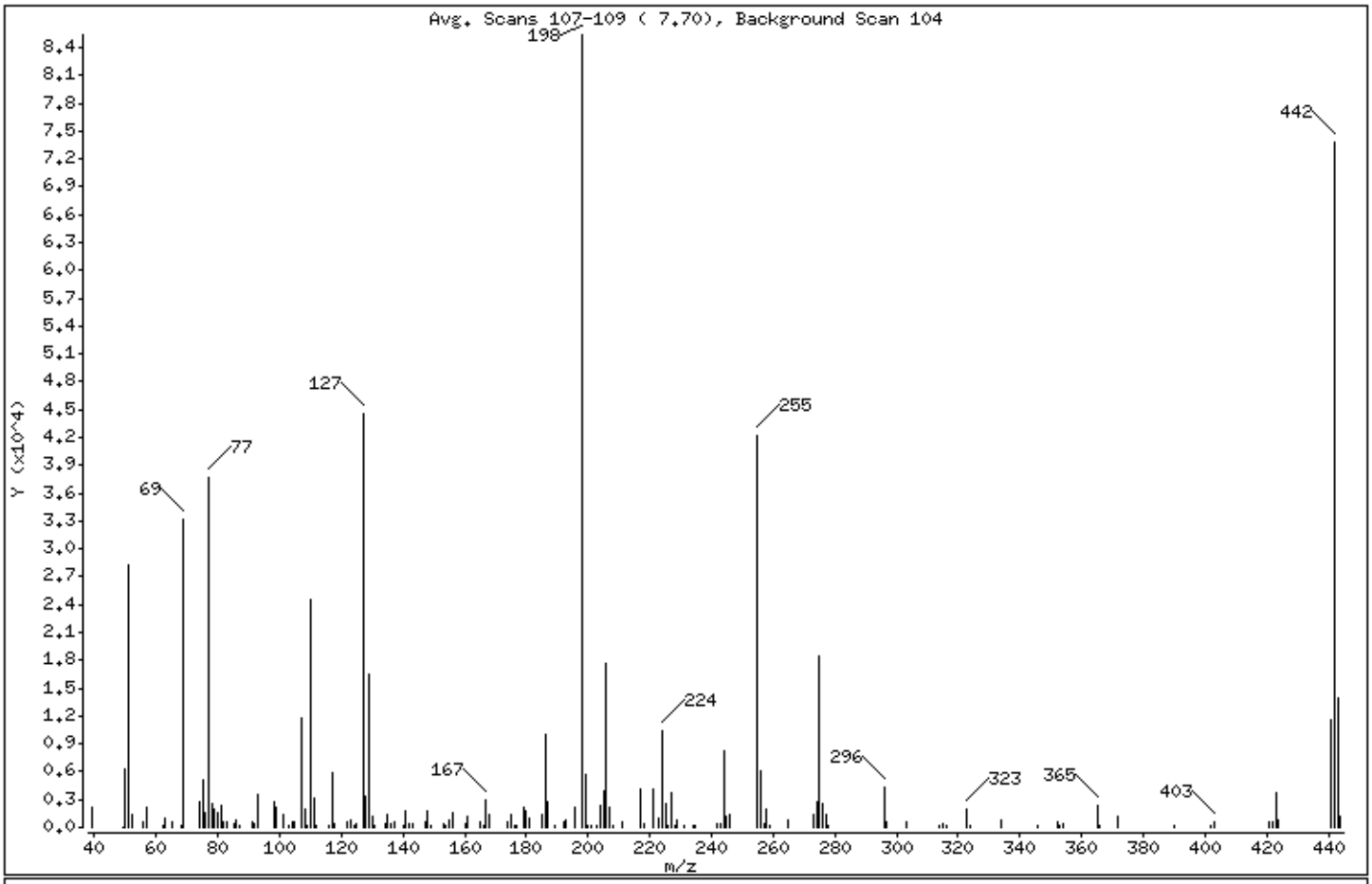
Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160781-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	33.11
68	Less than 2.00% of mass 69	0.24 (0.63)
69	Less than 100.00% of mass 198	38.92
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	52.16
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.73
275	10.00 - 30.00% of mass 198	21.68
365	1.00 - 100.00% of mass 198	2.70
441	0.01 - 100.00% of mass 443	13.62 (82.94)
442	40.00 - 100.00% of mass 198	86.47
443	17.00 - 23.00% of mass 442	16.42 (19.00)

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\UD349.D

Date : 06-APR-2015 14:49

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160781-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: UD349.D
Spectrum: Avg. Scans 107-109 (7.70), Background Scan 104
Location of Maximum: 198.00
Number of points: 155

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	2071	112.00	216	180.00	1745	256.00	6007
49.00	91	116.00	287	181.00	947	257.00	313
50.00	6322	117.00	5849	185.00	1357	258.00	1900
51.00	28272	118.00	435	186.00	9931	259.00	220
52.00	1356	122.00	573	187.00	2759	265.00	859
56.00	634	123.00	864	189.00	217	273.00	1385
57.00	2141	124.00	222	192.00	594	274.00	2843
62.00	192	125.00	443	193.00	882	275.00	18512
63.00	946	127.00	44528	196.00	2240	276.00	2591
65.00	568	128.00	3354	198.00	85376	277.00	1288
68.00	208	129.00	16560	199.00	5745	278.00	171
69.00	33232	130.00	1109	200.00	279	296.00	4342
74.00	2684	131.00	202	201.00	181	297.00	598
75.00	5031	134.00	321	203.00	226	303.00	534
76.00	1554	135.00	1340	204.00	2441	314.00	179
77.00	37624	136.00	341	205.00	3831	315.00	471
78.00	2610	137.00	666	206.00	17624	316.00	186
79.00	1974	140.00	173	207.00	2217	323.00	2004
80.00	1529	141.00	1740	208.00	234	324.00	203
81.00	2285	142.00	314	211.00	639	334.00	879
82.00	616	143.00	406	217.00	4047	346.00	197
83.00	506	147.00	587	218.00	299	352.00	611
85.00	391	148.00	1704	221.00	4026	353.00	189
86.00	862	149.00	223	223.00	1039	354.00	442
87.00	278	153.00	300	224.00	10399	365.00	2306
91.00	500	154.00	171	225.00	2480	366.00	171
92.00	429	155.00	833	226.00	188	372.00	1108
93.00	3595	156.00	1586	227.00	3642	390.00	169
98.00	2676	160.00	463	228.00	225	402.00	168
99.00	2202	161.00	1088	229.00	876	403.00	570
101.00	1308	165.00	539	231.00	224	421.00	499
103.00	210	166.00	207	234.00	212	422.00	611
104.00	607	167.00	2983	235.00	207	423.00	3800
105.00	613	168.00	1411	242.00	355	424.00	860
107.00	11813	174.00	546	243.00	448	441.00	11631

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\UD349.D

Date : 06-APR-2015 14:49

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160781-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: UD349.D
Spectrum: Avg. Scans 107-109 (7.70), Background Scan 104
Location of Maximum: 198.00
Number of points: 155

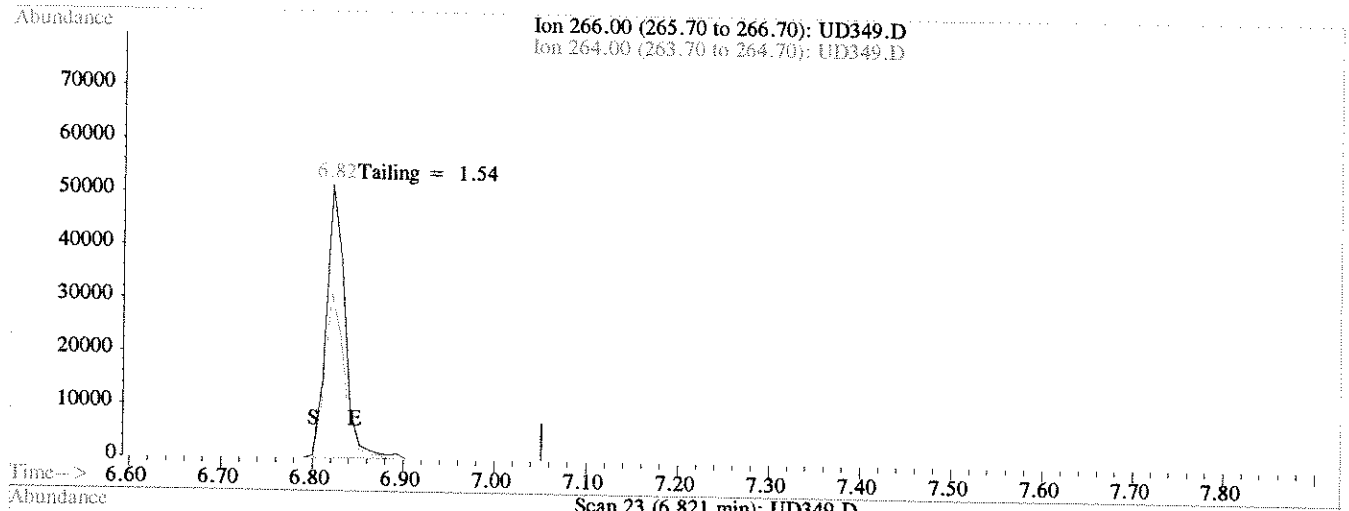
m/z	Y	m/z	Y	m/z	Y	m/z	Y
108.00	1987	175.00	1350	244.00	8231	442.00	73824
109.00	186	176.00	264	245.00	1142	443.00	14023
110.00	24440	177.00	198	246.00	1422	444.00	1207
111.00	3193	179.00	2217	255.00	42160		

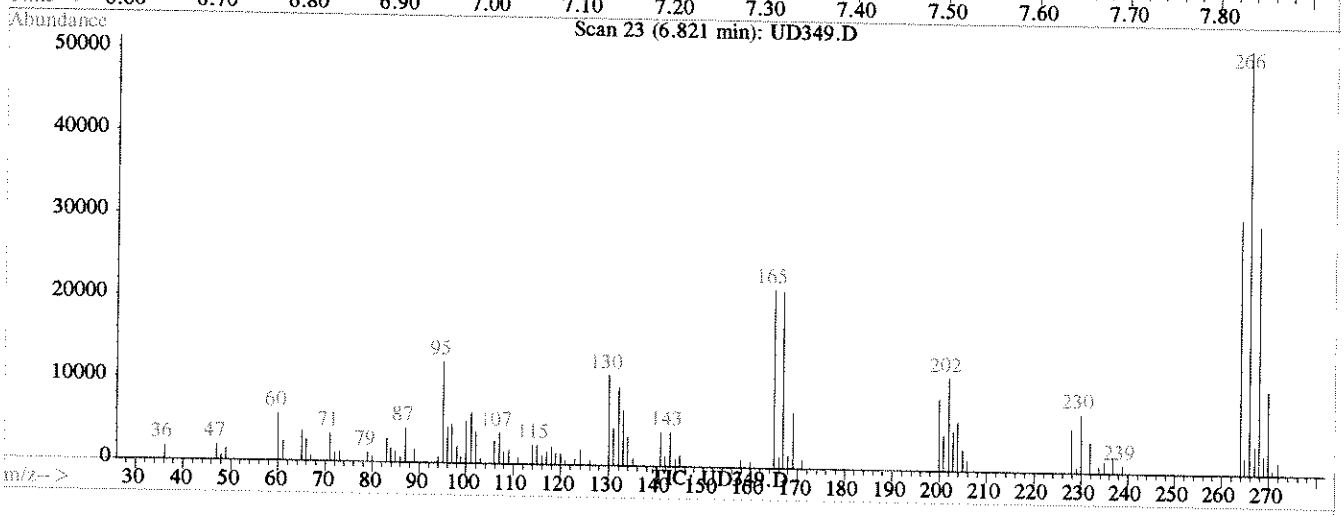
Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040615\UD349.D
Acq On : 6 Apr 2015 2:49 pm
Sample : WG160781-1
Misc : WG160781,WG160781,WG160080-4
MSD Tune : Apr 6 15:06 2015

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res

Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration





(1) Pentachlorophenol (CM)

6.82min 33.52ug/L

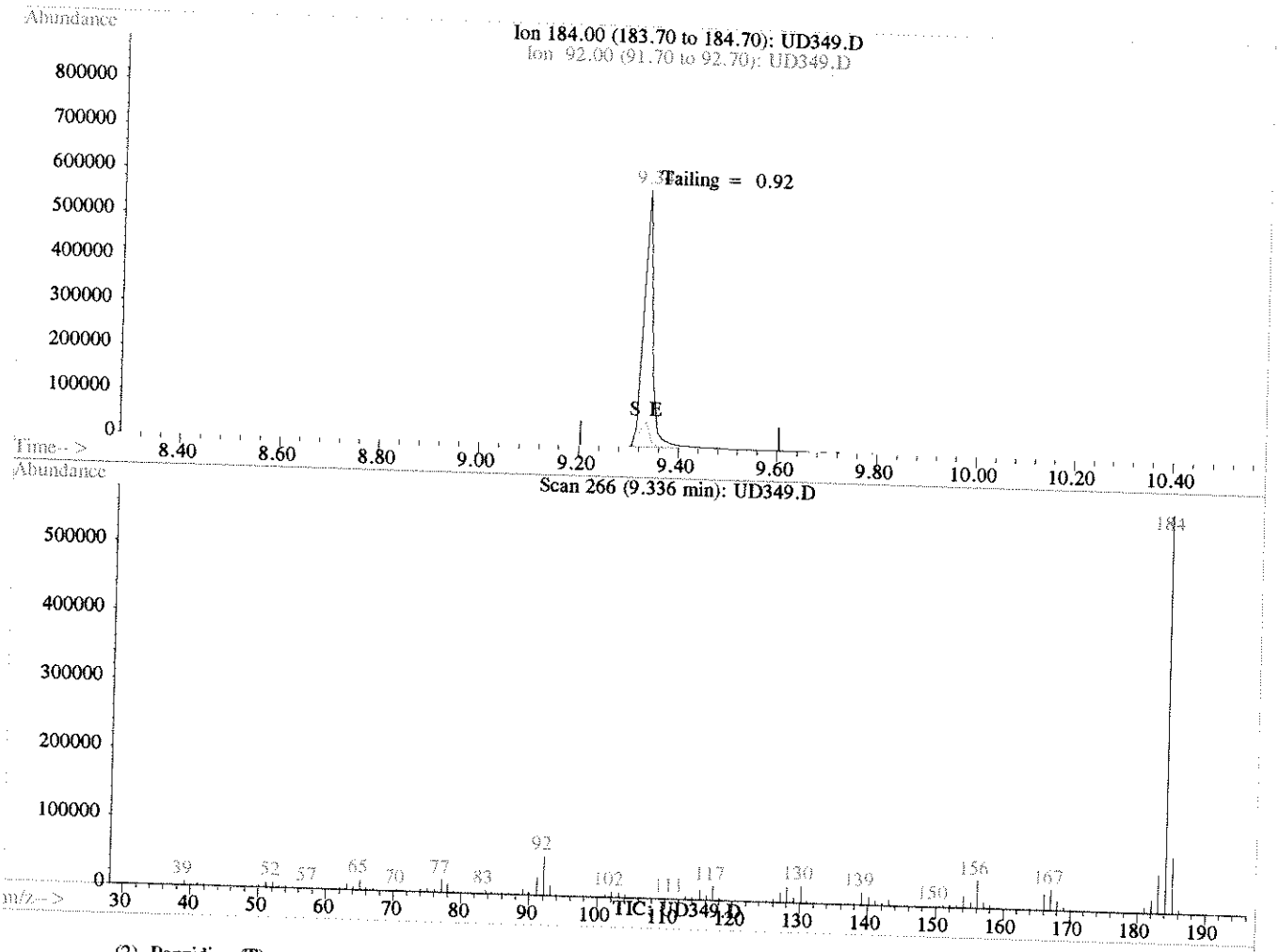
response 74117

Ion	Exp%	Act%
266.00	100	100
264.00	62.00	60.45
268.00	63.50	61.13
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040615\UD349.D
Acq On : 6 Apr 2015 2:49 pm
Sample : WG160781-1
Misc : WG160781,WG160781,WG160080-4
Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res



(2) Benzidine (T)

9.34min 172.35ug/L

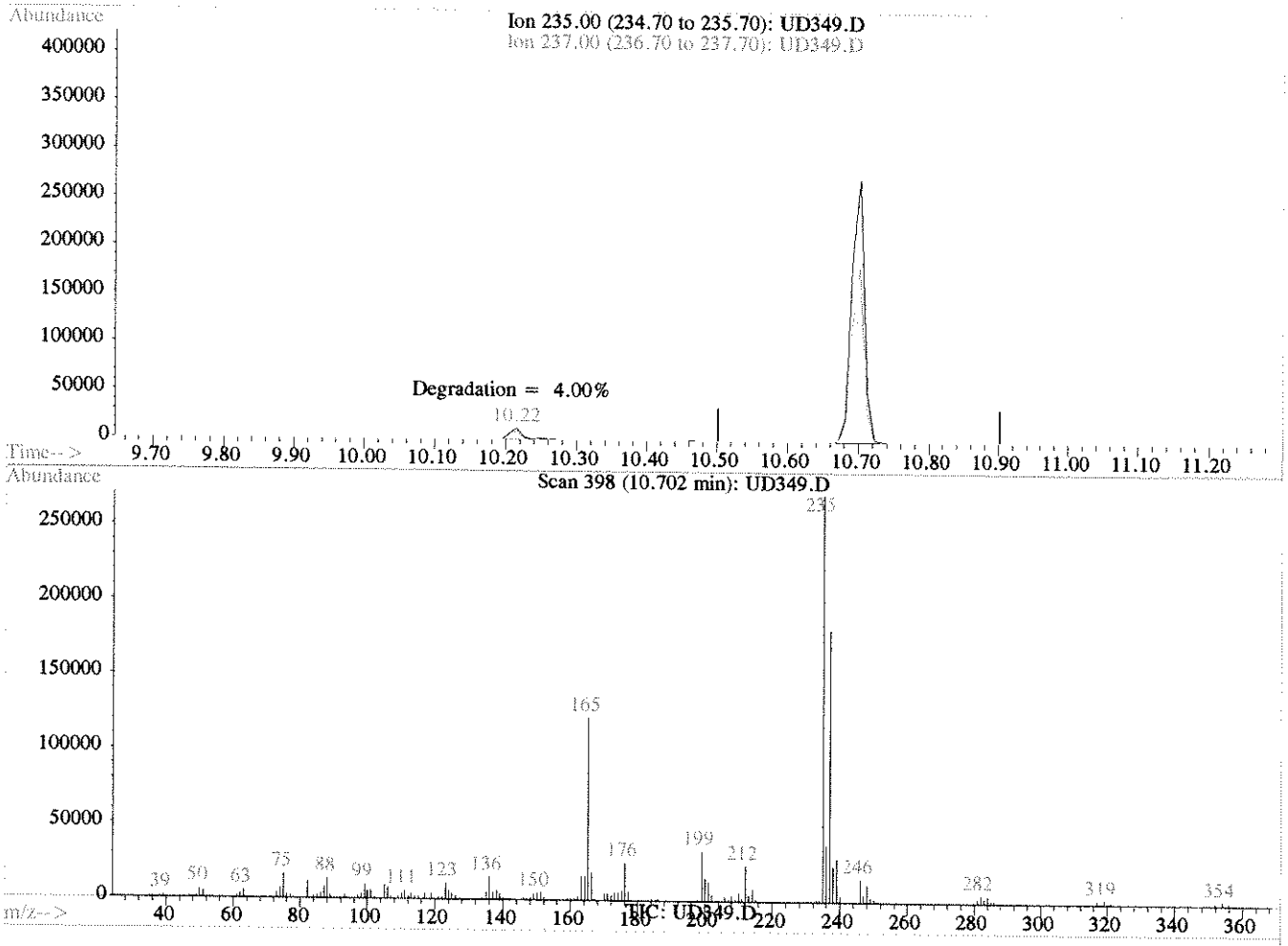
response 773169

Ion	Exp%	Act%
184.00	100	100
92.00	12.20	10.29
185.00	14.40	14.03
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040615\UD349.D
Acq On : 6 Apr 2015 2:49 pm
Sample : WG160781-1
Misc : WG160781,WG160781,WG160080-4
Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Quant Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res



(3) 4,4'-DDT (T)

10.70min 75.13ug/L

response 337059

Ion	Exp%	Act%
235.00	100	100
237.00	50.00	64.50
165.00	50.00	49.88
0.00	0.00	0.00

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\UD351.D

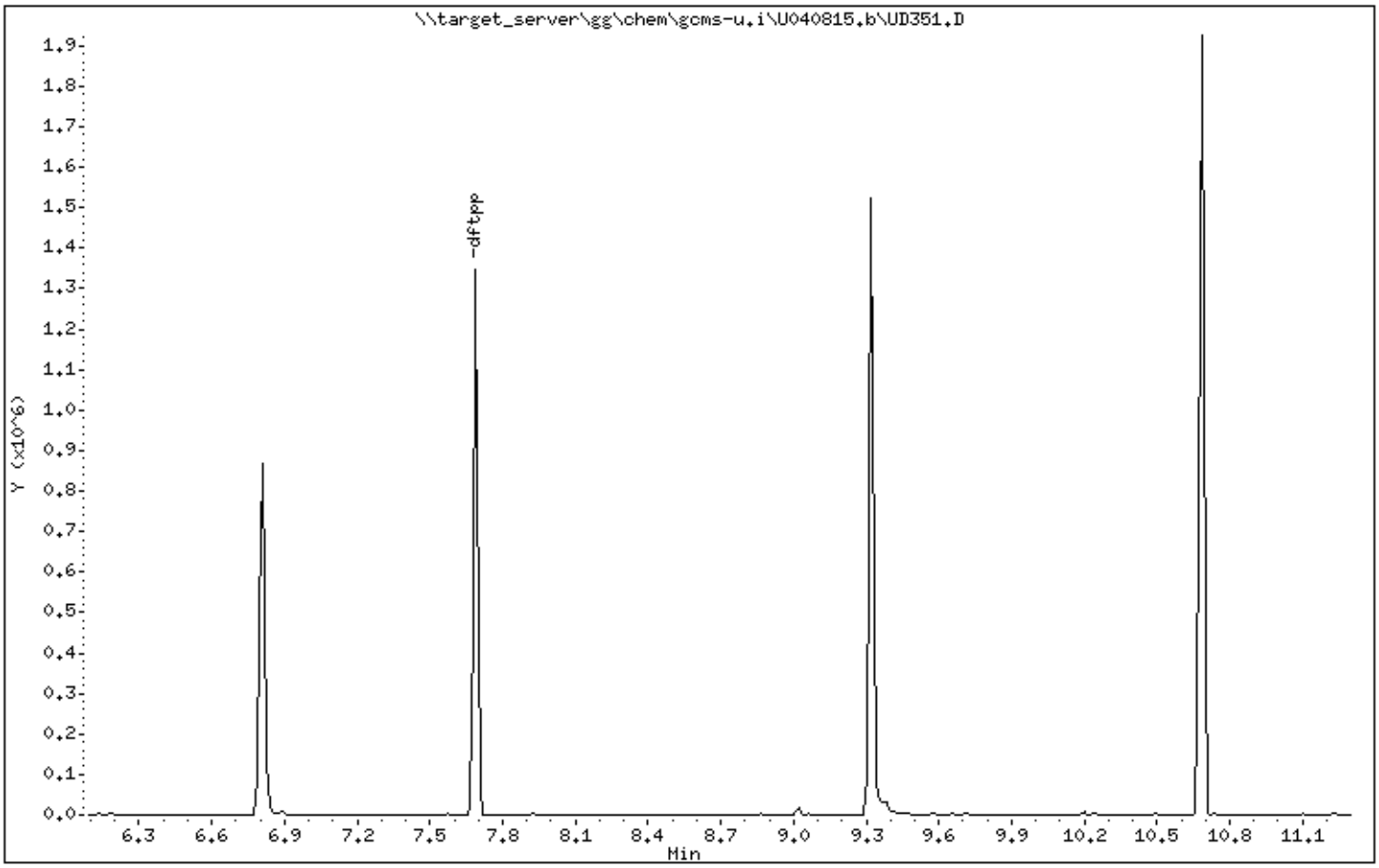
Date : 08-APR-2015 12:54

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160877-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\UD351.D

Date : 08-APR-2015 12:54

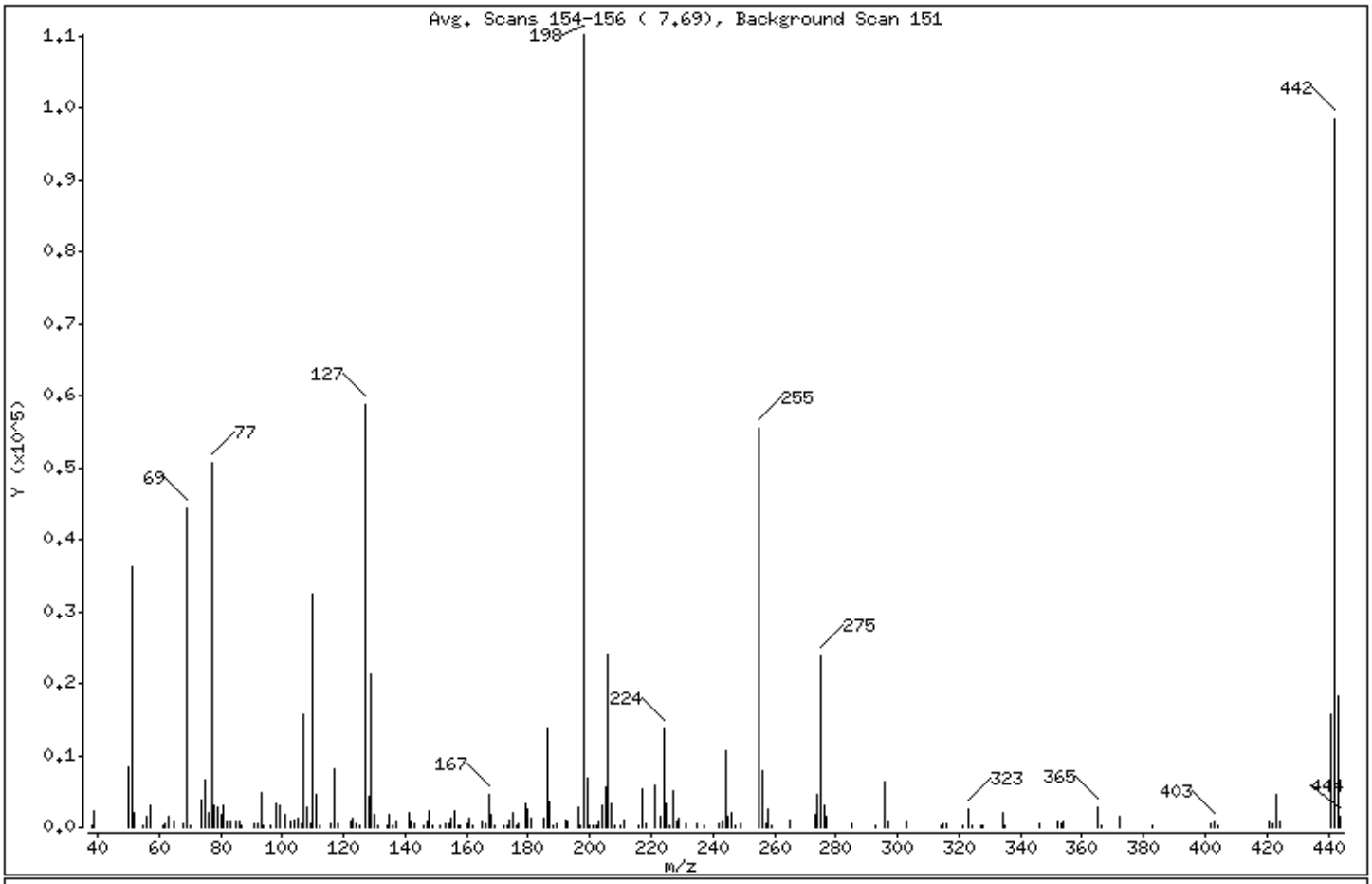
Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160877-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	32.80
68	Less than 2.00% of mass 69	0.49 (1.23)
69	Less than 100.00% of mass 198	40.14
70	Less than 2.00% of mass 69	0.17 (0.41)
127	40.00 - 60.00% of mass 198	53.33
197	Less than 1.00% of mass 198	0.18
199	5.00 - 9.00% of mass 198	6.29
275	10.00 - 30.00% of mass 198	21.68
365	1.00 - 100.00% of mass 198	2.47
441	0.01 - 100.00% of mass 443	14.32 (86.78)
442	40.00 - 100.00% of mass 198	89.50
443	17.00 - 23.00% of mass 442	16.50 (18.44)

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\UD351.D

Date : 08-APR-2015 12:54

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160877-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: UD351.D
Spectrum: Avg. Scans 154-156 (7.69), Background Scan 151
Location of Maximum: 198.00
Number of points: 181

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	205	116.00	381	181.00	1287	257.00	469
39.00	2394	117.00	8206	185.00	1350	258.00	2436
50.00	8265	118.00	633	186.00	13796	259.00	281
51.00	36128	122.00	824	187.00	3537	265.00	966
52.00	1943	123.00	1250	188.00	365	273.00	1660
55.00	201	124.00	568	189.00	535	274.00	4540
56.00	1420	125.00	336	192.00	921	275.00	23880
57.00	2968	127.00	58744	193.00	868	276.00	3096
61.00	296	128.00	4196	196.00	2814	277.00	1639
62.00	475	129.00	21200	197.00	202	285.00	428
63.00	1526	130.00	1821	198.00	110144	293.00	292
65.00	756	131.00	231	199.00	6925	296.00	6213
68.00	542	134.00	246	200.00	294	297.00	780
69.00	44216	135.00	1662	201.00	274	303.00	684
70.00	182	136.00	354	202.00	283	314.00	223
74.00	3830	137.00	733	203.00	744	315.00	584
75.00	6524	141.00	2003	204.00	3098	316.00	425
76.00	2016	142.00	743	205.00	5495	321.00	168
77.00	50744	143.00	523	206.00	24032	323.00	2512
78.00	3095	146.00	365	207.00	3206	324.00	198
79.00	2848	147.00	871	208.00	360	327.00	176
80.00	1846	148.00	2249	210.00	221	328.00	214
81.00	3139	149.00	245	211.00	1037	334.00	2036
82.00	722	151.00	178	216.00	200	335.00	167
83.00	808	153.00	622	217.00	5222	346.00	549
85.00	794	154.00	560	218.00	614	352.00	730
86.00	808	155.00	1342	221.00	5837	353.00	484
87.00	240	156.00	2235	223.00	1483	354.00	785
91.00	419	157.00	254	224.00	13633	365.00	2716
92.00	580	158.00	219	225.00	3350	366.00	222
93.00	4760	160.00	500	226.00	275	372.00	1432
94.00	215	161.00	1163	227.00	5132	383.00	265
96.00	242	162.00	177	228.00	819	402.00	616
98.00	3340	165.00	866	229.00	1353	403.00	746
99.00	2968	166.00	525	231.00	541	404.00	188

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\UD351.D

Date : 08-APR-2015 12:54

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160877-1,SI2008

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: UD351.D
Spectrum: Avg. Scans 154-156 (7.69), Background Scan 151
Location of Maximum: 198.00
Number of points: 181

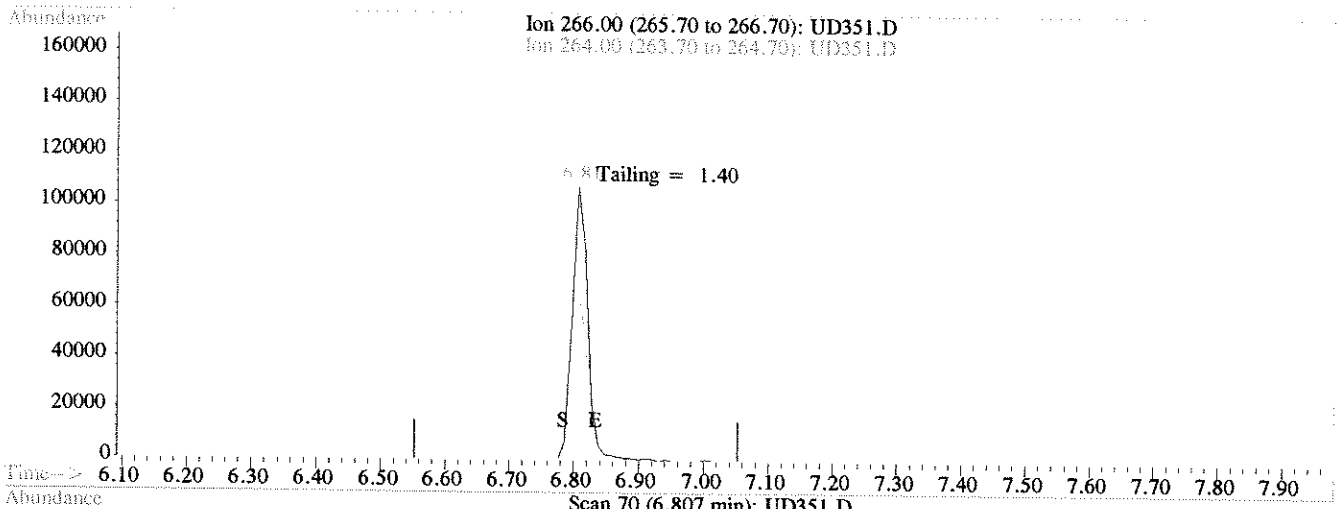
m/z	Y	m/z	Y	m/z	Y	m/z	Y
101.00	1840	167.00	4630	235.00	405	421.00	728
103.00	712	168.00	1878	237.00	191	422.00	521
104.00	1101	169.00	170	242.00	585	423.00	4648
105.00	1256	172.00	260	243.00	730	424.00	853
106.00	518	173.00	315	244.00	10523	441.00	15773
107.00	15794	174.00	1038	245.00	1580	442.00	98576
108.00	2865	175.00	1933	246.00	1915	443.00	18176
109.00	417	176.00	289	247.00	266	444.00	1480
110.00	32368	177.00	609	249.00	417		
111.00	4656	179.00	3336	255.00	55512		
112.00	252	180.00	2498	256.00	7782		

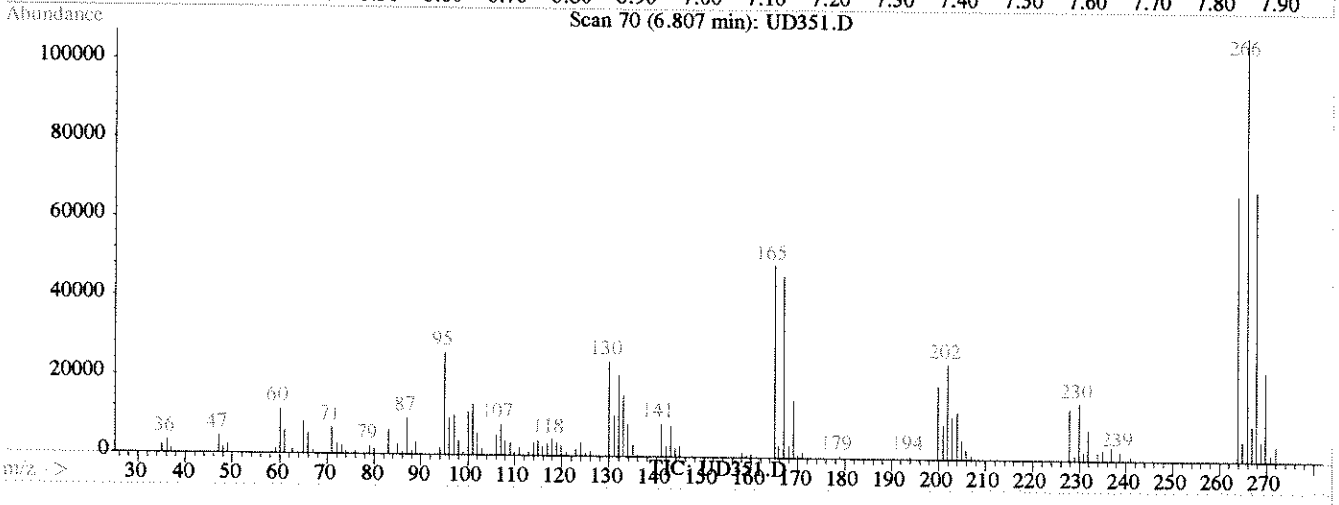
Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040815\UD351.D
Acq On : 8 Apr 2015 12:54 pm
Sample : WG160877-1
Misc : WG160877,WG160877,WG160080-4
Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Quant Title : Katahdin 8270C Water Calibration
Last Quant Time : Mon Mar 23 13:41:55 2015
Quant Results File : temp.res

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration





(1) Pentachlorophenol (CM)

6.81min 81.14ug/L

response 179399

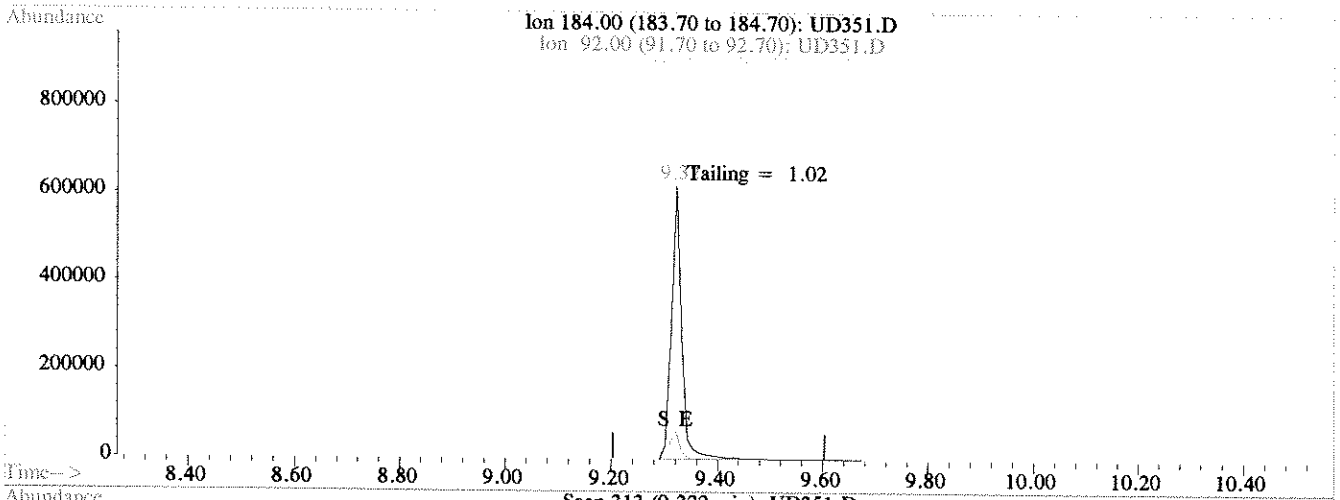
Ion	Exp%	Act%
266.00	100	100
264.00	62.00	61.03
268.00	63.50	63.35
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040815\UD351.D
Acq On : 8 Apr 2015 12:54 pm
Sample : WG160877-1
Misc : WG160877,WG160877,WG160080-4
MSD Method : C:\HPCHEM\1\METHODS\TUNEPAR.M
Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Quant Title : Katahdin 8270C Water Calibration
Quant Time : Apr 8 13:26 2015

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration



(2) Benzidine (T)

9.32min 187.13ug/L

response 839496

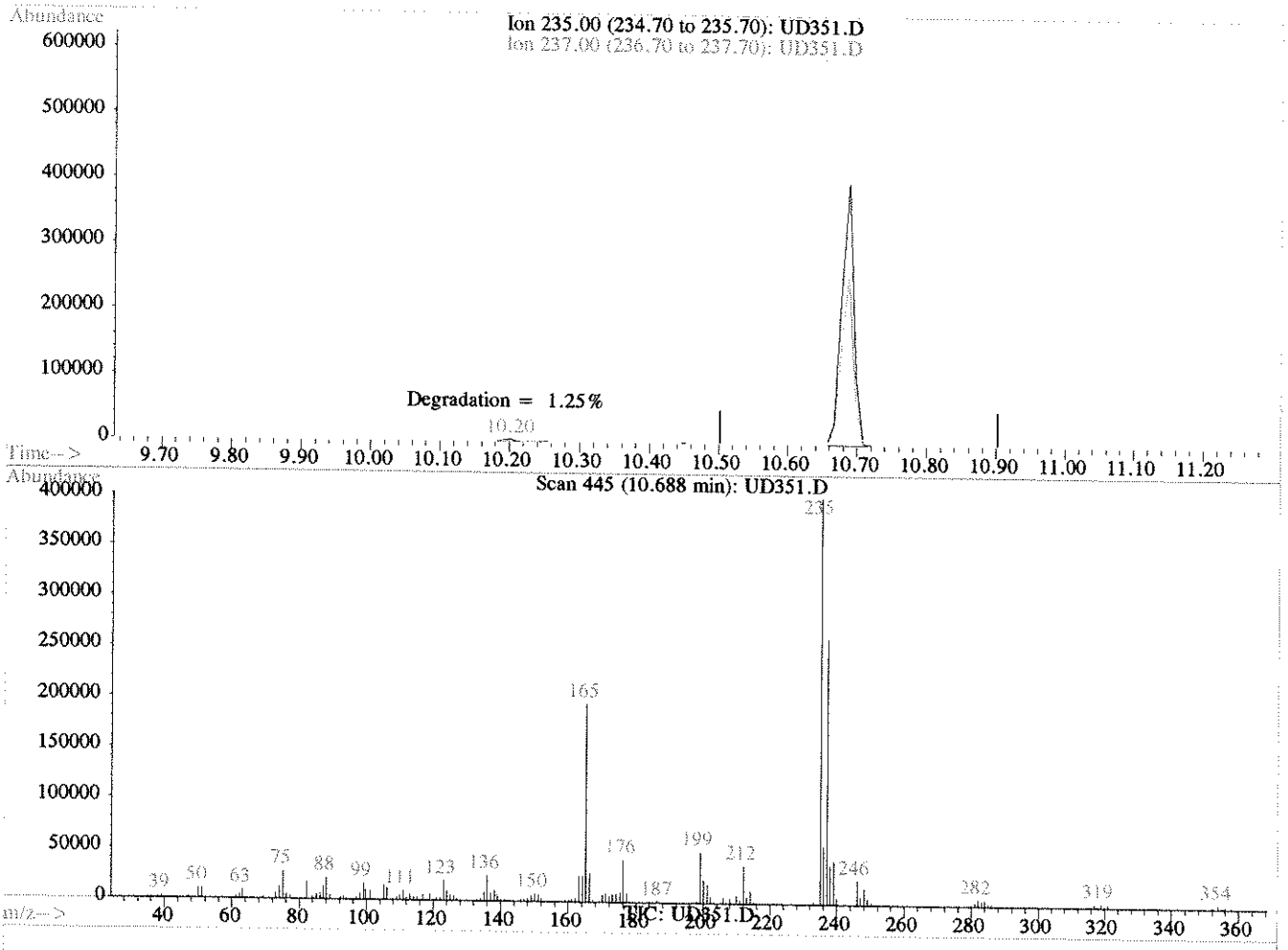
Ion	Exp%	Act%
184.00	100	100
92.00	12.20	10.17
185.00	14.40	14.41
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040815\UD351.D
Acq On : 8 Apr 2015 12:54 pm
Sample : WG160877-1
Misc : WG160877,WG160877,WG160080-4
Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Quant Title : Katahdin 8270C Water Calibration
Quant Time : Apr 8 13:26 2015

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration



(3) 4,4'-DDT (T)

10.69min 108.20ug/L

response 485383

Ion	Exp%	Act%
235.00	100	100
237.00	50.00	64.63
165.00	50.00	50.58
0.00	0.00	0.00

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160777-1
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: U9933.D

Sample Date:
Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
Bis(2-Chloroethyl)Ether	U	7.5	ug/L	1	10	10.	2.0	7.5
2-Chlorophenol	U	7.5	ug/L	1	10	10.	3.2	7.5
1,3-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
1,4-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.2	7.5
1,2-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.4	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
2,2'-Oxybis(1-Chloropropane)	U	7.5	ug/L	1	10	10.	2.1	7.5
3&4-Methylphenol	U	7.5	ug/L	1	10	10.	5.6	7.5
N-Nitroso-Di-N-Propylamine	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachloroethane	U	7.5	ug/L	1	10	10.	2.3	7.5
Nitrobenzene	U	7.5	ug/L	1	10	10.	3.1	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2-Nitrophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Bis(2-Chloroethoxy)Methane	U	7.5	ug/L	1	10	10.	2.1	7.5
2,4-Dichlorophenol	U	7.5	ug/L	1	10	10.	3.0	7.5
1,2,4-Trichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Naphthalene	U	7.5	ug/L	1	10	10.	2.2	7.5
4-Chloroaniline	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobutadiene	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Methylnaphthalene	U	7.5	ug/L	1	10	10.	3.2	7.5
Hexachlorocyclopentadiene	U	7.5	ug/L	1	10	10.	1.2	7.5
2,4,6-Trichlorophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.9	7.5
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
2,6-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.0	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	1.0	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160777-1
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: U9933.D

Sample Date:
Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.
Dibenzofuran	U	7.5	ug/L	1	10	10.	1.6	7.5
2,4-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.2	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
4-Chlorophenyl-Phenylether	U	7.5	ug/L	1	10	10.	2.2	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.
4,6-Dinitro-2-Methylphenol	U	19	ug/L	1	25	25.	2.0	19.
N-Nitrosodiphenylamine	U	7.5	ug/L	1	10	10.	3.7	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Phenanthrene	U	7.5	ug/L	1	10	10.	2.4	7.5
Anthracene	U	7.5	ug/L	1	10	10.	1.7	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
Di-N-Butylphthalate	U	7.5	ug/L	1	10	10.	2.5	7.5
Fluoranthene	U	7.5	ug/L	1	10	10.	2.4	7.5
Pyrene	U	7.5	ug/L	1	10	10.	1.9	7.5
Butylbenzylphthalate	U	7.5	ug/L	1	10	10.	1.9	7.5
3,3’-Dichlorobenzidine	U	7.5	ug/L	1	10	10.	1.1	7.5
Benzo(a)anthracene	U	7.5	ug/L	1	10	10.	1.6	7.5
Chrysene	U	7.5	ug/L	1	10	10.	1.7	7.5
Bis(2-Ethylhexyl)Phthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Di-N-Octylphthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Benzo(b)fluoranthene	U	7.5	ug/L	1	10	10.	1.2	7.5
Benzo(k)fluoranthene	U	7.5	ug/L	1	10	10.	1.6	7.5
Benzo(a)pyrene	U	7.5	ug/L	1	10	10.	1.2	7.5
Indeno(1,2,3-cd)pyrene	U	7.5	ug/L	1	10	10.	1.9	7.5
Dibenzo(a,h)anthracene	U	7.5	ug/L	1	10	10.	1.7	7.5
Benzo(g,h,i)perylene	U	7.5	ug/L	1	10	10.	1.5	7.5
2-Fluorophenol		34.2	%					
Phenol-d6		24.9	%					
Nitrobenzene-d5		87.9	%					
2-Fluorobiphenyl		75.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160777-1
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: U9933.D

Sample Date:
Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
2,4,6-Tribromophenol		54.5	%					
Terphenyl-d14		81.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9933.D
Report Date: 09-Apr-2015 10:49

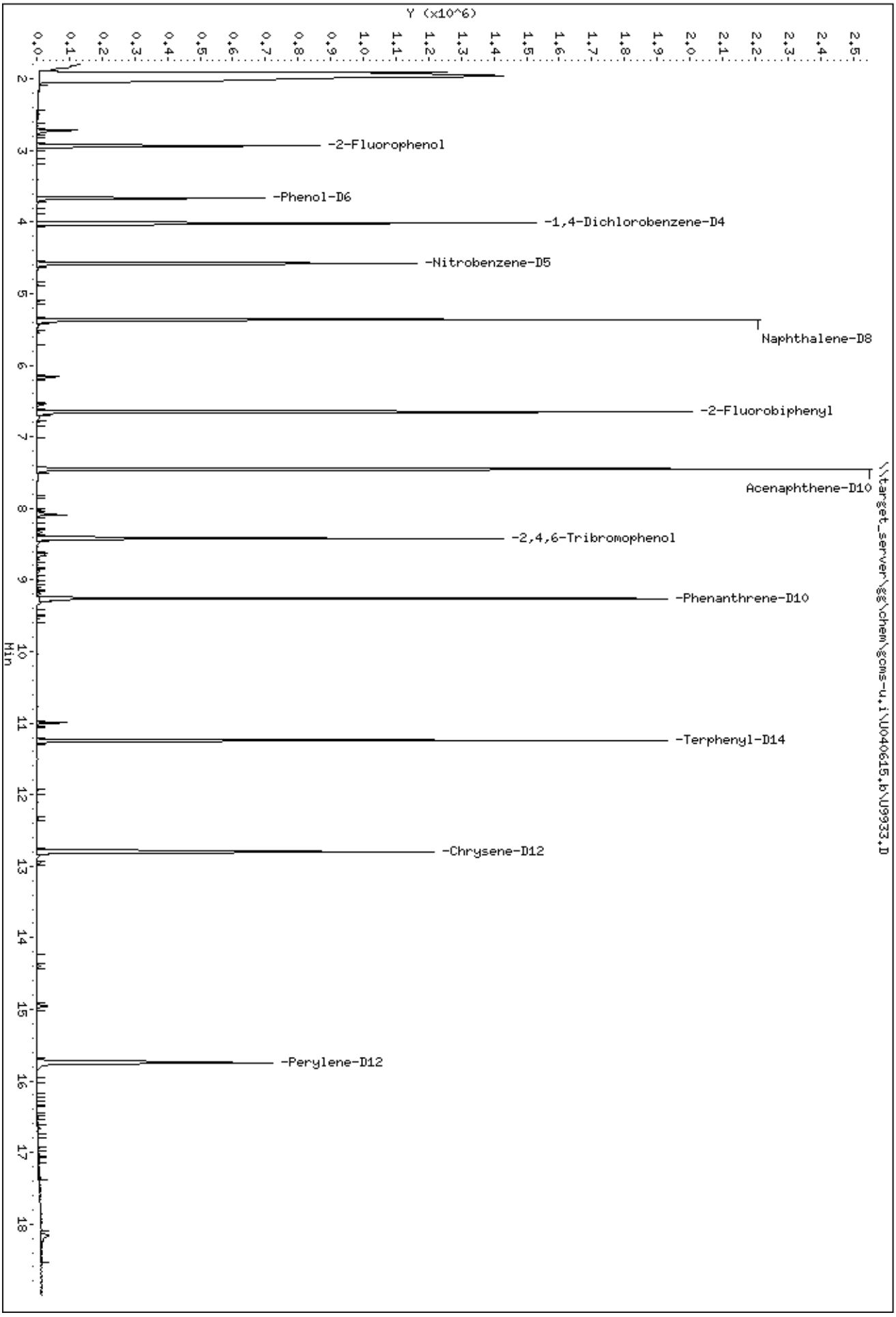
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9933.D
Lab Smp Id: WG160777-1 Client Smp ID: WG160777-Blank
Inj Date : 06-APR-2015 15:39 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160777-1,SI2008
Misc Info : WG160781,WG160777,WG160080-4,SI2008-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.931	2.931	(0.730)	451482	34.1843	34.2	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	382073	24.9441	24.9	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	349246	40.0000		
$ 33 Nitrobenzene-D5	82	4.577	4.587	(0.853)	476905	43.9512	44.0	
* 45 Naphthalene-D8	136	5.363	5.373	(1.000)	1212683	40.0000		
$ 63 2-Fluorobiphenyl	172	6.647	6.657	(0.892)	741206	37.6752	37.7	
* 78 Acenaphthene-D10	164	7.454	7.454	(1.000)	677147	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.416	8.427	(1.129)	194428	54.5197	54.5	
* 114 Phenanthrene-D10	188	9.265	9.265	(1.000)	996678	40.0000		
$ 129 Terphenyl-D14	244	11.242	11.242	(0.879)	751378	40.5760	40.6	
* 141 Chrysene-D12	240	12.795	12.805	(1.000)	778301	40.0000		
* 150 Perylene-D12	264	15.744	15.744	(1.000)	521755	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9933,D
Date : 06-APR-2015 15:39
Client ID: WG160777-Blank
Sample Info: WG160777-1,SI2008
Instrument: gcms-u,i
\\target_server\gg\chem\gcms-u,i\U040615,b\U9933,D
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
-Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160882-1
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: U9983.D

Sample Date:
Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
Bis(2-Chloroethyl)Ether	U	7.5	ug/L	1	10	10.	2.0	7.5
2-Chlorophenol	U	7.5	ug/L	1	10	10.	3.2	7.5
1,3-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
1,4-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.2	7.5
1,2-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.4	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
2,2'-Oxybis(1-Chloropropane)	U	7.5	ug/L	1	10	10.	2.1	7.5
3&4-Methylphenol	U	7.5	ug/L	1	10	10.	5.6	7.5
N-Nitroso-Di-N-Propylamine	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachloroethane	U	7.5	ug/L	1	10	10.	2.3	7.5
Nitrobenzene	U	7.5	ug/L	1	10	10.	3.1	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2-Nitrophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Bis(2-Chloroethoxy)Methane	U	7.5	ug/L	1	10	10.	2.1	7.5
2,4-Dichlorophenol	U	7.5	ug/L	1	10	10.	3.0	7.5
1,2,4-Trichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Naphthalene	U	7.5	ug/L	1	10	10.	2.2	7.5
4-Chloroaniline	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobutadiene	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Methylnaphthalene	U	7.5	ug/L	1	10	10.	3.2	7.5
Hexachlorocyclopentadiene	U	7.5	ug/L	1	10	10.	1.2	7.5
2,4,6-Trichlorophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.9	7.5
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
2,6-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.0	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	1.0	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160882-1
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: U9983.D

Sample Date:
Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.
Dibenzofuran	U	7.5	ug/L	1	10	10.	1.6	7.5
2,4-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.2	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
4-Chlorophenyl-Phenylether	U	7.5	ug/L	1	10	10.	2.2	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.
4,6-Dinitro-2-Methylphenol	U	19	ug/L	1	25	25.	2.0	19.
N-Nitrosodiphenylamine	U	7.5	ug/L	1	10	10.	3.7	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Phenanthrene	U	7.5	ug/L	1	10	10.	2.4	7.5
Anthracene	U	7.5	ug/L	1	10	10.	1.7	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
Di-N-Butylphthalate	U	7.5	ug/L	1	10	10.	2.5	7.5
Fluoranthene	U	7.5	ug/L	1	10	10.	2.4	7.5
Pyrene	U	7.5	ug/L	1	10	10.	1.9	7.5
Butylbenzylphthalate	U	7.5	ug/L	1	10	10.	1.9	7.5
3,3’-Dichlorobenzidine	U	7.5	ug/L	1	10	10.	1.1	7.5
Benzo(a)anthracene	U	7.5	ug/L	1	10	10.	1.6	7.5
Chrysene	U	7.5	ug/L	1	10	10.	1.7	7.5
Bis(2-Ethylhexyl)Phthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Di-N-Octylphthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Benzo(b)fluoranthene	U	7.5	ug/L	1	10	10.	1.2	7.5
Benzo(k)fluoranthene	U	7.5	ug/L	1	10	10.	1.6	7.5
Benzo(a)pyrene	U	7.5	ug/L	1	10	10.	1.2	7.5
Indeno(1,2,3-cd)pyrene	U	7.5	ug/L	1	10	10.	1.9	7.5
Dibenzo(a,h)anthracene	U	7.5	ug/L	1	10	10.	1.7	7.5
Benzo(g,h,i)perylene	U	7.5	ug/L	1	10	10.	1.5	7.5
2-Fluorophenol		28.2	%					
Phenol-d6		16.9	%					
Nitrobenzene-d5		68.9	%					
2-Fluorobiphenyl		63.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160882-1
Client ID: Method Blank Sample
Project:
SDG: SI2008
Lab File ID: U9983.D

Sample Date:
Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
2,4,6-Tribromophenol		62.0	%					
Terphenyl-d14		79.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9983.D
Report Date: 09-Apr-2015 10:51

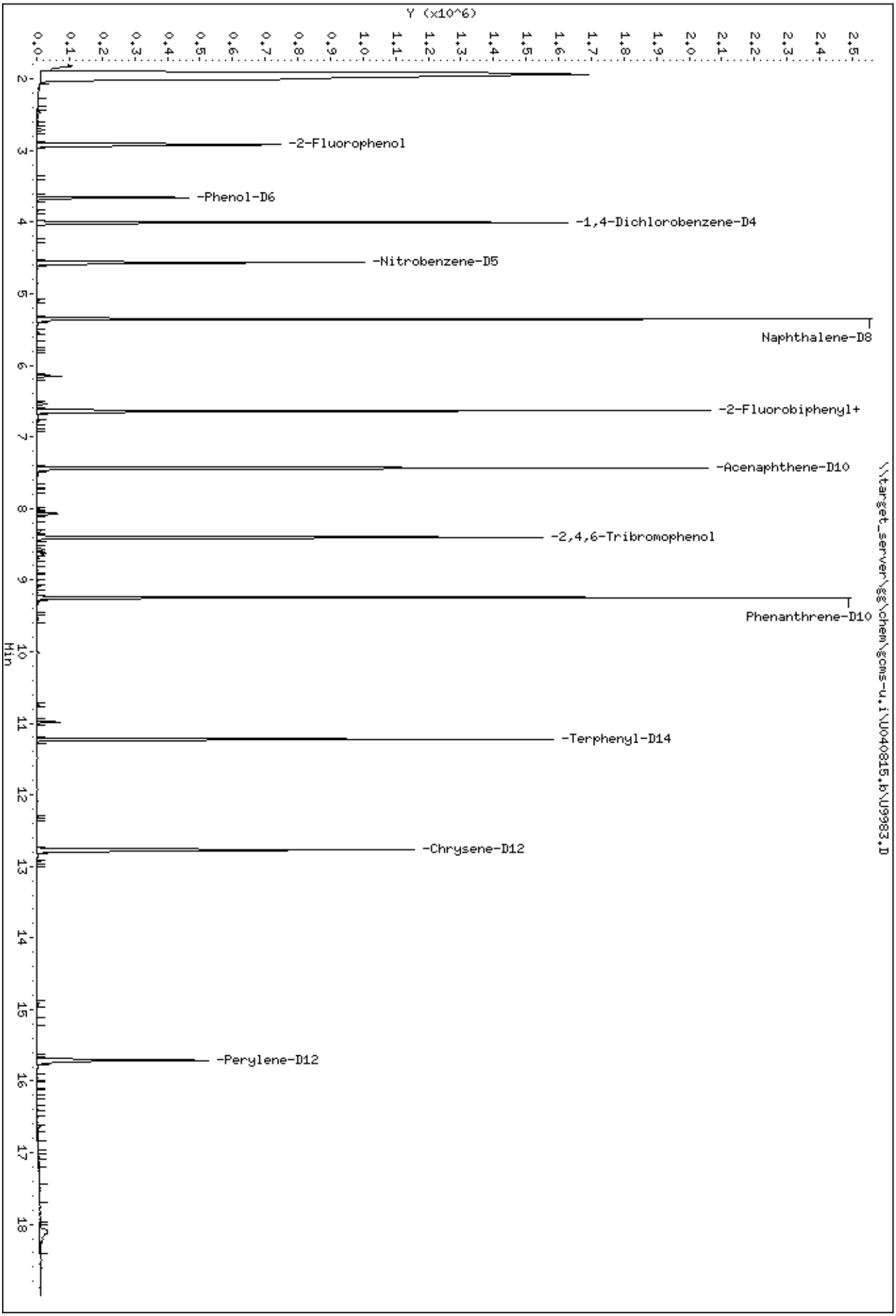
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9983.D
Lab Smp Id: WG160882-1 Client Smp ID: WG160882-Blank
Inj Date : 08-APR-2015 14:03 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160882-1,SI2008
Misc Info : WG160877,WG160882,WG160080-4,SI2008-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.912	2.911	(0.726)	406394	28.1767	28.2	
$ 12 Phenol-D6	99	3.657	3.656	(0.912)	282841	16.9091	16.9	
* 19 1,4-Dichlorobenzene-D4	152	4.009	4.008	(1.000)	381394	40.0000		
$ 33 Nitrobenzene-D5	82	4.568	4.578	(0.853)	419886	34.4588	34.4	
* 45 Naphthalene-D8	136	5.354	5.364	(1.000)	1361815	40.0000		
$ 63 2-Fluorobiphenyl	172	6.638	6.637	(0.892)	646544	31.4848	31.5	
* 78 Acenaphthene-D10	164	7.445	7.445	(1.000)	706801	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.407	8.417	(1.129)	230871	62.0226	62.0	
* 114 Phenanthrene-D10	188	9.246	9.256	(1.000)	984920	40.0000		
$ 129 Terphenyl-D14	244	11.223	11.222	(0.878)	620272	39.5844	39.6	
* 141 Chrysene-D12	240	12.775	12.775	(1.000)	658592	40.0000		
* 150 Perylene-D12	264	15.715	15.714	(1.000)	384362	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9983,D
Date : 08-APR-2015 14:03
Client ID: WG160882-Blank
Sample Info: WG160882-1,SI2008
Instrument: gcms-u,i
\\target_server\gg\chem\gcms-u,i\U040815,b\U9983,D
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl+
-Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160777-2
LCSD ID: WG160777-3
Project:
SDG: SI2008
Report Date: 09-APR-15
LCS File ID: U9934.D

Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777
LCSD File ID: U9935.D

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Phenol	100.	25.8	25.8	20.8	20.8	ug/L	21	30	0-115
Bis(2-Chloroethyl)Ether	50.0	40.4	80.8	36.3	72.6	ug/L	11	30	35-110
2-Chlorophenol	100.	62.7	62.7	51.8	51.8	ug/L	19	30	35-105
1,3-Dichlorobenzene	50.0	33.0	66.0	30.8	61.6	ug/L	7	30	30-100
1,4-Dichlorobenzene	50.0	34.6	69.2	31.8	63.6	ug/L	8	30	30-100
1,2-Dichlorobenzene	50.0	34.7	69.4	32.4	64.8	ug/L	7	30	35-100
2-Methylphenol	100.	53.3	53.3	48.8	48.8	ug/L	9	30	40-110
2,2'-Oxybis(1-Chloropropane)	50.0	33.8	67.6	30.5	61.0	ug/L	10	30	25-130
3&4-Methylphenol	100.	55.6	55.6	52.1	52.1	ug/L	6	30	30-110
N-Nitroso-Di-N-Propylamine	50.0	37.2	74.4	33.2	66.4	ug/L	11	30	35-130
Hexachloroethane	50.0	33.7	67.4	30.3	60.6	ug/L	11	30	30-100
Nitrobenzene	50.0	38.6	77.2	33.4	66.8	ug/L	14	30	45-110
Isophorone	50.0	30.2	60.4	27.4	54.8	ug/L	10	30	50-110
2-Nitrophenol	100.	67.9	67.9	57.4	57.4	ug/L	17	30	40-115
2,4-Dimethylphenol	100.	67.5	67.5	60.1	60.1	ug/L	12	30	30-110
Bis(2-Chloroethoxy)Methane	50.0	33.0	66.0	29.1	58.2	ug/L	12	30	45-105
2,4-Dichlorophenol	100.	67.1	67.1	58.0	58.0	ug/L	14	30	50-105
1,2,4-Trichlorobenzene	50.0	36.6	73.2	32.4	64.8	ug/L	12	30	35-105
Naphthalene	50.0	36.2	72.4	31.7	63.4	ug/L	13	30	40-100
4-Chloroaniline	50.0	32.3	64.6	31.5	63.0	ug/L	2	30	15-110
Hexachlorobutadiene	50.0	33.9	67.8	29.5	59.0	ug/L	14	30	25-105
4-Chloro-3-Methylphenol	100.	71.6	71.6	66.8	66.8	ug/L	7	30	45-110
2-Methylnaphthalene	50.0	38.1	76.2	34.3	68.6	ug/L	10	30	45-105
Hexachlorocyclopentadiene	50.0	21.9	43.8	19.7	39.4	ug/L	10	30	23-70
2,4,6-Trichlorophenol	100.	64.6	64.6	53.2	53.2	ug/L	19	30	50-115
2,4,5-Trichlorophenol	100.	65.2	65.2	56.7	56.7	ug/L	14	30	50-110
2-Chloronaphthalene	50.0	28.7	57.4	29.2	58.4	ug/L	2	30	50-105
2-Nitroaniline	50.0	34.0	68.0	32.4	64.8	ug/L	5	30	50-115
Dimethyl Phthalate	50.0	40.0	80.0	38.6	77.2	ug/L	4	30	25-125
Acenaphthylene	50.0	37.4	74.8	35.3	70.6	ug/L	6	30	50-105
2,6-Dinitrotoluene	50.0	43.5	87.0	41.8	83.6	ug/L	4	30	50-115
3-Nitroaniline	50.0	35.4	70.8	33.2	66.4	ug/L	6	30	20-125
Acenaphthene	50.0	39.2	78.4	36.1	72.2	ug/L	8	30	45-110
2,4-Dinitrophenol	100.	67.8	67.8	51.8	51.8	ug/L	27	30	15-140

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160777-2
LCSD ID: WG160777-3
Project:
SDG: SI2008
Report Date: 09-APR-15
LCS File ID: U9934.D

Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777
LCSD File ID: U9935.D

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
4-Nitrophenol	100.	28.8	28.8	23.6	23.6	ug/L	20	30	0-125
Dibenzofuran	50.0	38.4	76.8	37.5	75.0	ug/L	2	30	55-105
2,4-Dinitrotoluene	50.0	46.2	92.4	42.6	85.2	ug/L	8	30	50-120
Diethylphthalate	50.0	42.0	84.0	42.0	84.0	ug/L	0	30	40-120
4-Chlorophenyl-Phenylether	50.0	40.7	81.4	36.4	72.8	ug/L	11	30	50-110
Fluorene	50.0	40.1	80.2	38.4	76.8	ug/L	4	30	50-110
4-Nitroaniline	50.0	44.4	88.8	41.2	82.4	ug/L	7	30	35-120
4,6-Dinitro-2-Methylphenol	100.	86.5	86.5	65.2	65.2	ug/L	28	30	40-130
N-Nitrosodiphenylamine	50.0	31.9	63.8	30.4	60.8	ug/L	5	30	50-110
4-Bromophenyl-Phenylether	50.0	42.2	84.4	40.0	80.0	ug/L	5	30	50-115
Hexachlorobenzene	50.0	40.2	80.4	40.0	80.0	ug/L	0	30	50-110
Pentachlorophenol	100.	70.4	70.4	60.2	60.2	ug/L	16	30	40-115
Phenanthrene	50.0	48.2	96.4	46.5	93.0	ug/L	4	30	50-115
Anthracene	50.0	45.0	90.0	42.9	85.8	ug/L	5	30	55-110
Carbazole	50.0	43.6	87.2	43.3	86.6	ug/L	1	30	50-115
Di-N-Butylphthalate	50.0	47.8	95.6	47.0	94.0	ug/L	2	30	55-115
Fluoranthene	50.0	44.4	88.8	40.0	80.0	ug/L	10	30	55-115
Pyrene	50.0	43.0	86.0	44.3	88.6	ug/L	3	30	50-130
Butylbenzylphthalate	50.0	43.6	87.2	42.2	84.4	ug/L	3	30	45-115
3,3'-Dichlorobenzidine	100.	79.5	79.5	74.5	74.5	ug/L	6	30	20-110
Benzo(a)anthracene	50.0	42.1	84.2	41.5	83.0	ug/L	1	30	55-110
Chrysene	50.0	41.6	83.2	40.0	80.0	ug/L	4	30	55-110
Bis(2-Ethylhexyl)Phthalate	50.0	44.6	89.2	42.5	85.0	ug/L	5	30	40-125
Di-N-Octylphthalate	50.0	39.5	79.0	38.6	77.2	ug/L	2	30	35-135
Benzo(b)fluoranthene	50.0	40.2	80.4	37.9	75.8	ug/L	6	30	45-120
Benzo(k)fluoranthene	50.0	42.3	84.6	38.2	76.4	ug/L	10	30	45-125
Benzo(a)pyrene	50.0	40.9	81.8	38.4	76.8	ug/L	6	30	55-110
Indeno(1,2,3-cd)pyrene	50.0	63.0	126.*	45.1	90.2	ug/L	33*	30	45-125
Dibenzo(a,h)anthracene	50.0	50.0	100.	44.1	88.2	ug/L	12	30	40-125
Benzo(g,h,i)perylene	50.0	47.2	94.4	44.8	89.6	ug/L	5	30	40-125
2-Fluorophenol			35.7		29.1				20-110
Phenol-d6			23.6		19.9				10-115
Nitrobenzene-d5			74.3		65.3				40-110
2-Fluorobiphenyl			72.3		65.8				50-110

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160777-2
LCSD ID: WG160777-3
Project:
SDG: SI2008
Report Date: 09-APR-15
LCS File ID: U9934.D

Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777
LCSD File ID: U9935.D

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

2,4,6-Tribromophenol	77.2	68.4	40-125
Terphenyl-d14	84.8	86.6	50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9934.D
Report Date: 09-Apr-2015 10:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9934.D
Lab Smp Id: WG160777-2 Client Smp ID: WG160777-LCS
Inj Date : 06-APR-2015 16:05 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160777-2,SI2008
Misc Info : WG160781,WG160777,WG160080-4,SI2008-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.931	2.931	(0.730)	441268	35.7219	35.7	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	337489	23.5574	23.6	
13 Phenol	94	3.676	3.676	(0.915)	385503	25.7566	25.8	
16 Bis(2-Chloroethyl)ether	93	3.759	3.759	(0.936)	417937	40.3535	40.4	
17 2-Chlorophenol	128	3.832	3.831	(0.954)	751470	62.6822	62.7	
18 1,3-Dichlorobenzene	146	3.966	3.966	(0.987)	406711	33.0371	33.0	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	326652	40.0000		
20 1,4-Dichlorobenzene	146	4.039	4.038	(1.005)	399946	34.6504	34.6	
22 1,2-Dichlorobenzene	146	4.184	4.194	(1.041)	394610	34.7303	34.7	
23 2-Methylphenol	108	4.266	4.266	(1.062)	587848	53.2954	53.3	
25 2,2'-Oxybis(1-chloropropane)	45	4.287	4.287	(1.067)	404992	33.8426	33.8	
28 3&4-Methylphenol	108	4.432	4.442	(1.103)	505381	55.5800	55.6(Q)	
30 N-Nitroso-di-n-propylamine	70	4.442	4.442	(1.106)	229298	37.1964	37.2(Q)	
32 Hexachloroethane	117	4.525	4.535	(1.126)	175569	33.6840	33.7	
$ 33 Nitrobenzene-D5	82	4.577	4.587	(0.852)	409297	37.1302	37.1	
34 Nitrobenzene	77	4.598	4.608	(0.856)	390393	38.6305	38.6	
36 Isophorone	82	4.877	4.866	(0.908)	638432	30.2562	30.2	
37 2-Nitrophenol	139	4.949	4.949	(0.921)	412049	67.8747	67.9	
38 2,4-Dimethylphenol	107	5.012	5.011	(0.933)	735061	67.4935	67.5	
40 Bis(2-Chloroethoxy)methane	93	5.105	5.104	(0.950)	487833	33.0018	33.0	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9934.D
Report Date: 09-Apr-2015 10:49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.219	5.229	(0.971)	543265	67.1498	67.1	
	43 1,2,4-Trichlorobenzene	180	5.312	5.311	(0.988)	309831	36.6054	36.6	
*	45 Naphthalene-D8	136	5.374	5.373	(1.000)	1231963	40.0000		
	46 Naphthalene	128	5.394	5.394	(1.004)	1069202	36.2229	36.2	
	47 4-Chloroaniline	127	5.467	5.467	(1.017)	398659	32.3392	32.3	
	50 Hexachlorobutadiene	225	5.550	5.549	(1.033)	168841	33.9025	33.9	
	54 4-Chloro-3-Methylphenol	107	6.057	6.067	(1.127)	618152	71.5718	71.6	
	56 2-Methylnaphthalene	142	6.202	6.201	(1.154)	698314	38.1068	38.1	
	59 Hexachlorocyclopentadiene	237	6.409	6.408	(0.860)	122419	21.8917	21.9	
	61 2,4,6-Trichlorophenol	196	6.554	6.564	(0.879)	367805	64.5533	64.6	
	62 2,4,5-Trichlorophenol	196	6.605	6.605	(0.886)	394468	65.2036	65.2	
$	63 2-Fluorobiphenyl	172	6.647	6.657	(0.892)	704744	36.1495	36.1	
	66 2-Chloronaphthalene	162	6.781	6.781	(0.910)	557409	28.6946	28.7	
	69 2-Nitroaniline	65	6.926	6.926	(0.929)	219027	33.9783	34.0	
	72 Dimethyl Phthalate	163	7.164	7.174	(0.961)	852220	39.9674	40.0	
	75 Acenaphthylene	152	7.278	7.278	(0.976)	1051934	37.3678	37.4	
	74 2,6-Dinitrotoluene	165	7.226	7.226	(0.969)	207736	43.4884	43.5	
*	78 Acenaphthene-D10	164	7.454	7.454	(1.000)	671009	40.0000		
	77 3-Nitroaniline	138	7.433	7.443	(0.997)	201952	35.3647	35.4	
	79 Acenaphthene	153	7.496	7.495	(1.006)	656287	39.2321	39.2	
	80 2,4-Dinitrophenol	184	7.558	7.578	(1.014)	182946	67.7828	67.8	
	81 4-Nitrophenol	139	7.672	7.692	(1.029)	108666	28.8419	28.8(QH)	
	83 Dibenzofuran	168	7.703	7.702	(1.033)	859369	38.4131	38.4	
	84 2,4-Dinitrotoluene	165	7.723	7.733	(1.036)	274151	46.2365	46.2	
	89 Diethylphthalate	149	8.023	8.033	(1.076)	855426	41.9840	42.0	
	92 4-Chlorophenyl-phenylether	204	8.137	8.137	(1.092)	317160	40.7274	40.7	
	90 Fluorene	166	8.117	8.127	(1.089)	730553	40.0827	40.1	
	94 4-Nitroaniline	138	8.189	8.189	(1.099)	204076	44.3872	44.4	
	95 4,6-Dinitro-2-Methylphenol	198	8.230	8.230	(0.888)	284947	86.5394	86.5	
	96 N-Nitrosodiphenylamine	169	8.282	8.292	(0.894)	502816	31.8894	31.9(R)	
$	100 2,4,6-Tribromophenol	330	8.427	8.427	(1.131)	272918	77.2292	77.2	
	106 4-Bromophenyl-phenylether	248	8.727	8.727	(0.942)	231970	42.2514	42.2	
	107 Hexachlorobenzene	284	8.810	8.820	(0.951)	257502	40.1510	40.2	
	110 Pentachlorophenol	266	9.058	9.068	(0.978)	261898	70.3577	70.4	
*	114 Phenanthrene-D10	188	9.265	9.265	(1.000)	1046969	40.0000		
	115 Phenanthrene	178	9.296	9.296	(1.003)	1100161	48.2482	48.2	
	118 Anthracene	178	9.359	9.358	(1.010)	1112124	45.0460	45.0	
	119 Carbazole	167	9.566	9.565	(1.032)	968332	43.5805	43.6	
	121 Di-n-butylphthalate	149	10.031	10.031	(1.083)	1578121	47.7700	47.8	
	126 Fluoranthene	202	10.745	10.755	(1.160)	1037366	44.3912	44.4	
	128 Pyrene	202	11.025	11.025	(0.861)	1048130	43.0525	43.0	
$	129 Terphenyl-D14	244	11.242	11.242	(0.878)	682408	42.4271	42.4	
	136 Butylbenzylphthalate	149	11.946	11.946	(0.933)	553035	43.5824	43.6	
*	141 Chrysene-D12	240	12.805	12.805	(1.000)	676020	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.774	12.774	(0.998)	376915	79.5490	79.5	
	139 Benzo(a)anthracene	228	12.784	12.784	(0.998)	694403	42.0608	42.1	
	142 Chrysene	228	12.847	12.846	(1.003)	665496	41.5590	41.6	
	143 bis(2-Ethylhexyl)phthalate	149	12.950	12.960	(1.011)	762900	44.5829	44.6	
	144 Di-n-octylphthalate	149	14.285	14.295	(0.907)	1081963	39.5409	39.5	
	145 Benzo(b)fluoranthene	252	14.948	14.958	(0.949)	518412	40.2140	40.2	
	147 Benzo(k)fluoranthene	252	15.010	15.009	(0.953)	547075	42.3219	42.3(H)	
	149 Benzo(a)pyrene	252	15.620	15.630	(0.992)	435104	40.8914	40.9	
*	150 Perylene-D12	264	15.745	15.744	(1.000)	421595	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.494	17.504	(1.111)	360682	62.9619	63.0(R)	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9934.D
Report Date: 09-Apr-2015 10:49

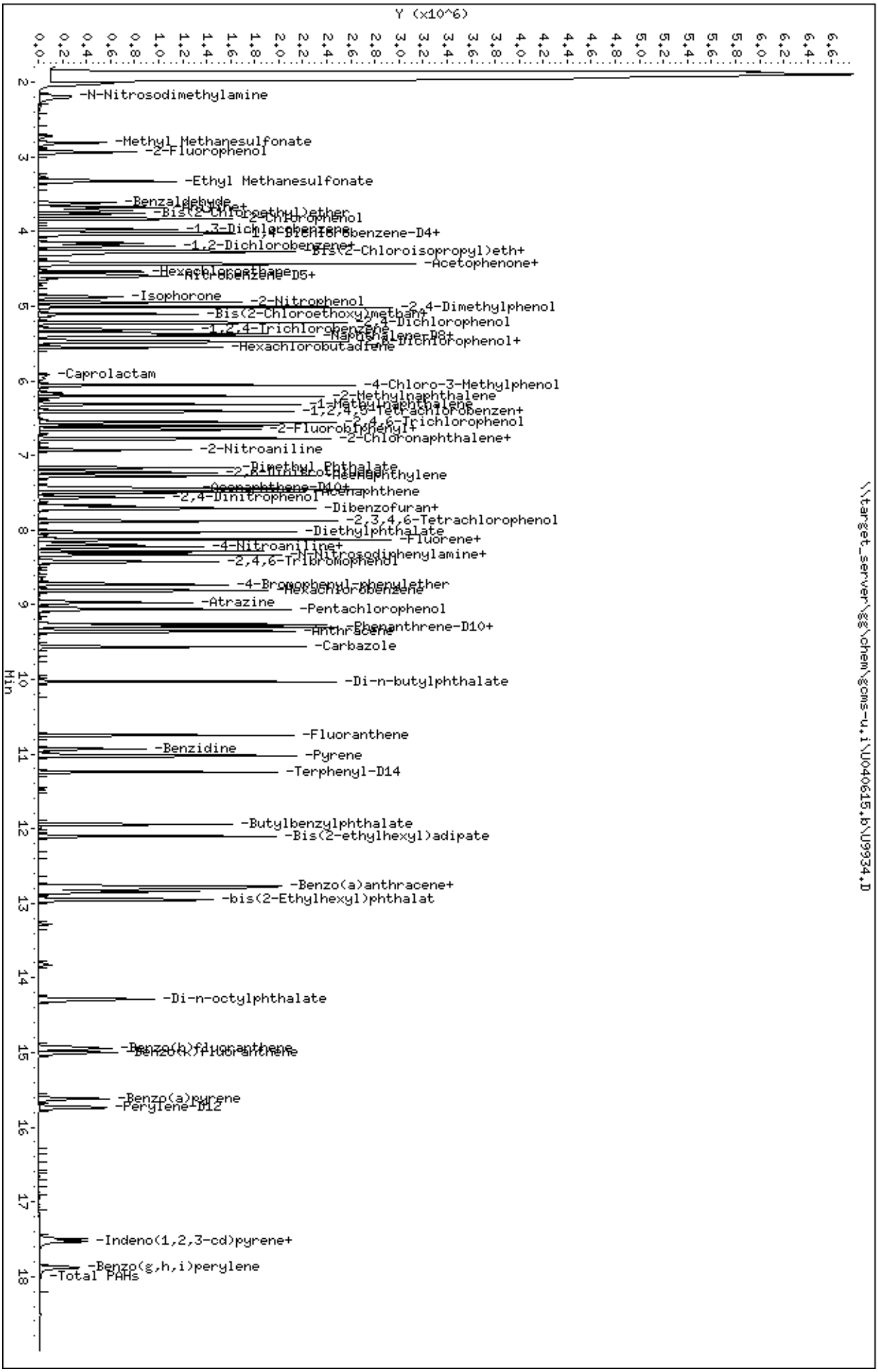
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.535	17.545	(1.114)	285931	49.9636	50.0	
155 Benzo(g,h,i)perylene	276	17.887	17.887	(1.136)	301104	47.1618	47.2	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9934,D
Date : 06-APR-2015 16:05
Client ID: WG160777-LCS
Sample Info: WG160777-2,SI2008
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9935.D
Report Date: 09-Apr-2015 10:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9935.D
Lab Smp Id: WG160777-3 Client Smp ID: WG160777-LCSD
Inj Date : 06-APR-2015 16:31 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160777-3,SI2008
Misc Info : WG160781,WG160777,WG160080-4,SI2008-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 5 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.931	2.931	(0.730)	348143	29.1223	29.1	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	275408	19.8646	19.9	
13 Phenol	94	3.677	3.676	(0.915)	301405	20.8088	20.8	
16 Bis(2-Chloroethyl)ether	93	3.759	3.759	(0.936)	363507	36.2677	36.3	
17 2-Chlorophenol	128	3.821	3.831	(0.951)	601603	51.8536	51.8	
18 1,3-Dichlorobenzene	146	3.966	3.966	(0.987)	366351	30.7503	30.8	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	316118	40.0000		
20 1,4-Dichlorobenzene	146	4.039	4.038	(1.005)	355185	31.7978	31.8	
22 1,2-Dichlorobenzene	146	4.184	4.194	(1.041)	355991	32.3754	32.4	
23 2-Methylphenol	108	4.266	4.266	(1.062)	520476	48.7598	48.8	
25 2,2'-Oxybis(1-chloropropane)	45	4.287	4.287	(1.067)	353466	30.5212	30.5	
28 3&4-Methylphenol	108	4.432	4.442	(1.103)	458373	52.0900	52.1(Q)	
30 N-Nitroso-di-n-propylamine	70	4.432	4.442	(1.103)	198145	33.2139	33.2(Q)	
32 Hexachloroethane	117	4.536	4.535	(1.129)	152800	30.2925	30.3	
$ 33 Nitrobenzene-D5	82	4.577	4.587	(0.852)	356747	32.6609	32.7	
34 Nitrobenzene	77	4.598	4.608	(0.856)	334407	33.3951	33.4	
36 Isophorone	82	4.867	4.866	(0.906)	572717	27.3917	27.4	
37 2-Nitrophenol	139	4.950	4.949	(0.921)	345216	57.3890	57.4	
38 2,4-Dimethylphenol	107	5.012	5.011	(0.933)	648654	60.1078	60.1	
40 Bis(2-Chloroethoxy)methane	93	5.105	5.104	(0.950)	426783	29.1375	29.1	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9935.D
Report Date: 09-Apr-2015 10:49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.219	5.229	(0.971)	465373	58.0515	58.0	
	43 1,2,4-Trichlorobenzene	180	5.312	5.311	(0.988)	271363	32.3556	32.4	
*	45 Naphthalene-D8	136	5.374	5.373	(1.000)	1220728	40.0000		
	46 Naphthalene	128	5.395	5.394	(1.004)	949525	31.7424	31.7	
	47 4-Chloroaniline	127	5.467	5.467	(1.017)	384841	31.5056	31.5	
	50 Hexachlorobutadiene	225	5.550	5.549	(1.033)	149218	29.5158	29.5	
	54 4-Chloro-3-Methylphenol	107	6.057	6.067	(1.127)	571297	66.7555	66.8	
	56 2-Methylnaphthalene	142	6.202	6.201	(1.154)	623261	34.3242	34.3	
	59 Hexachlorocyclopentadiene	237	6.409	6.408	(0.860)	108540	19.7057	19.7	
	61 2,4,6-Trichlorophenol	196	6.554	6.564	(0.879)	298585	53.2035	53.2	
	62 2,4,5-Trichlorophenol	196	6.595	6.605	(0.885)	338101	56.7385	56.7	
$	63 2-Fluorobiphenyl	172	6.647	6.657	(0.892)	632216	32.9237	32.9	
	66 2-Chloronaphthalene	162	6.782	6.781	(0.910)	559828	29.2585	29.2	
	69 2-Nitroaniline	65	6.926	6.926	(0.929)	205410	32.3517	32.4	
	72 Dimethyl Phthalate	163	7.165	7.174	(0.961)	811682	38.6466	38.6	
	75 Acenaphthylene	152	7.278	7.278	(0.976)	978399	35.2855	35.3	
	74 2,6-Dinitrotoluene	165	7.227	7.226	(0.969)	196728	41.8118	41.8	
*	78 Acenaphthene-D10	164	7.454	7.454	(1.000)	660932	40.0000		
	77 3-Nitroaniline	138	7.423	7.443	(0.996)	187002	33.2460	33.2	
	79 Acenaphthene	153	7.496	7.495	(1.006)	594981	36.1095	36.1	
	80 2,4-Dinitrophenol	184	7.558	7.578	(1.014)	137625	51.7685	51.8	
	81 4-Nitrophenol	139	7.672	7.692	(1.029)	87721	23.6377	23.6(aQH)	
	83 Dibenzofuran	168	7.703	7.702	(1.033)	826711	37.5167	37.5	
	84 2,4-Dinitrotoluene	165	7.723	7.733	(1.036)	248943	42.6252	42.6	
	89 Diethylphthalate	149	8.024	8.033	(1.076)	843796	42.0446	42.0	
	92 4-Chlorophenyl-phenylether	204	8.127	8.137	(1.090)	290087	36.4263	36.4	
	90 Fluorene	166	8.117	8.127	(1.089)	696832	38.3975	38.4	
	94 4-Nitroaniline	138	8.179	8.189	(1.097)	186673	41.2210	41.2	
	95 4,6-Dinitro-2-Methylphenol	198	8.220	8.230	(0.887)	208530	65.1548	65.2	
	96 N-Nitrosodiphenylamine	169	8.282	8.292	(0.894)	466392	30.4310	30.4(R)	
$	100 2,4,6-Tribromophenol	330	8.427	8.427	(1.131)	238285	68.4569	68.4	
	106 4-Bromophenyl-phenylether	248	8.727	8.727	(0.942)	215396	40.0008	40.0	
	107 Hexachlorobenzene	284	8.810	8.820	(0.951)	249589	40.0376	40.0	
	110 Pentachlorophenol	266	9.059	9.068	(0.978)	217818	60.2006	60.2	
*	114 Phenanthrene-D10	188	9.266	9.265	(1.000)	1017668	40.0000		
	115 Phenanthrene	178	9.297	9.296	(1.003)	1043440	46.5359	46.5	
	118 Anthracene	178	9.348	9.358	(1.009)	1030077	42.9240	42.9	
	119 Carbazole	167	9.566	9.565	(1.032)	935282	43.3050	43.3	
	121 Di-n-butylphthalate	149	10.031	10.031	(1.083)	1510562	47.0415	47.0	
	126 Fluoranthene	202	10.746	10.755	(1.160)	929196	40.0392	40.0	
	128 Pyrene	202	11.025	11.025	(0.861)	963055	44.3378	44.3	
$	129 Terphenyl-D14	244	11.242	11.242	(0.878)	621749	43.3266	43.3	
	136 Butylbenzylphthalate	149	11.946	11.946	(0.933)	477335	42.1621	42.2	
*	141 Chrysene-D12	240	12.805	12.805	(1.000)	603142	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.774	12.774	(0.998)	314988	74.5119	74.5	
	139 Benzo(a)anthracene	228	12.785	12.784	(0.998)	611075	41.4859	41.5	
	142 Chrysene	228	12.847	12.846	(1.003)	571589	40.0077	40.0	
	143 bis(2-Ethylhexyl)phthalate	149	12.950	12.960	(1.011)	649136	42.5183	42.5	
	144 Di-n-octylphthalate	149	14.285	14.295	(0.908)	899310	38.5832	38.6	
	145 Benzo(b)fluoranthene	252	14.937	14.958	(0.949)	416698	37.9470	37.9	
	147 Benzo(k)fluoranthene	252	15.000	15.009	(0.953)	420470	38.1863	38.2(H)	
	149 Benzo(a)pyrene	252	15.621	15.630	(0.993)	348170	38.4136	38.4	
*	150 Perylene-D12	264	15.734	15.744	(1.000)	359121	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.494	17.504	(1.112)	220122	45.1098	45.1	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9935.D
Report Date: 09-Apr-2015 10:49

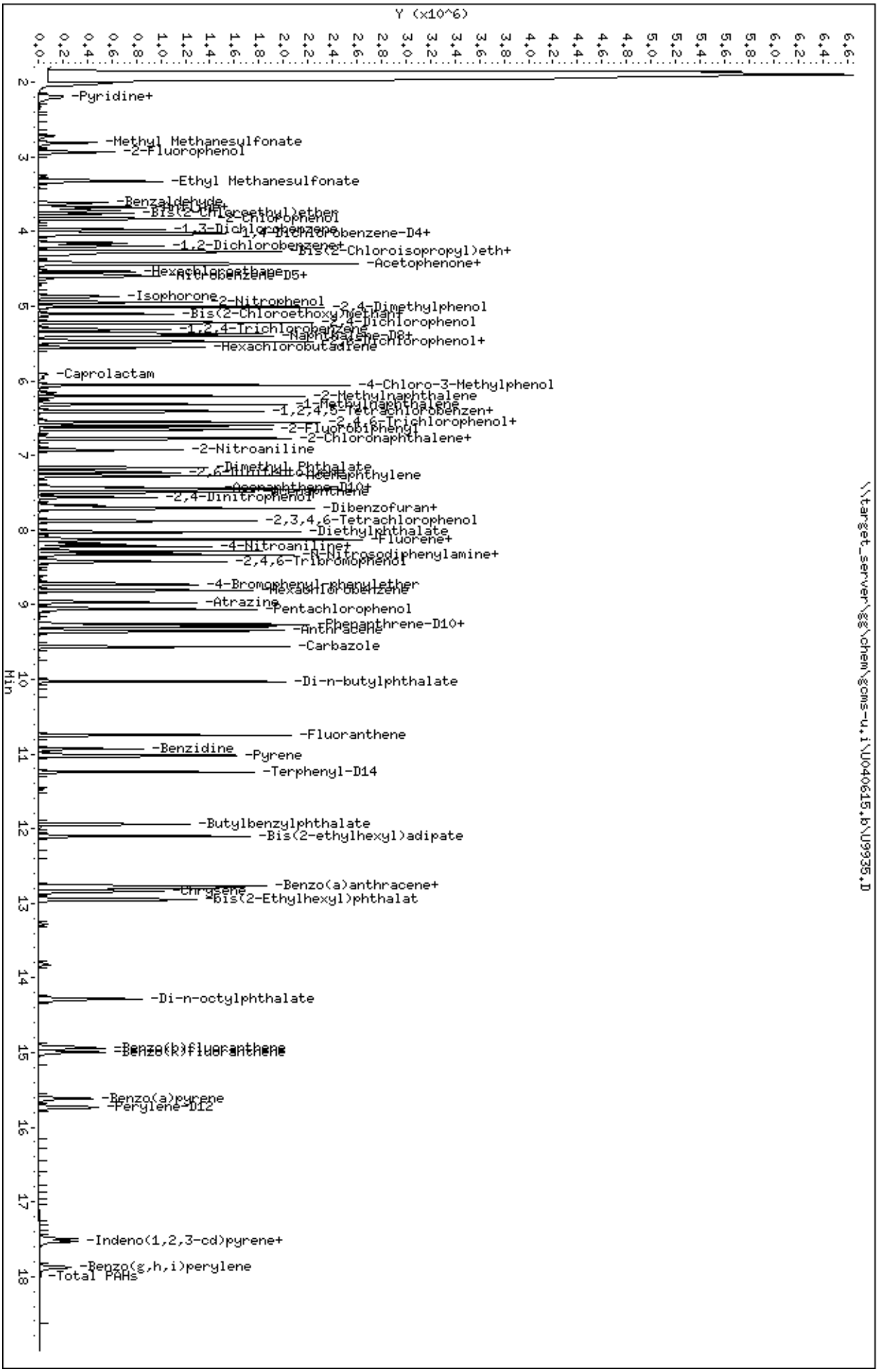
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.535	17.545	(1.114)	215074	44.1199	44.1	
155 Benzo(g,h,i)perylene	276	17.877	17.887	(1.136)	243411	44.7578	44.8	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9935.D
Date : 06-APR-2015 16:31
Client ID: WG160777-LCSD
Sample Info: WG160777-3,SI2008
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160882-2
LCSD ID: WG160882-3
Project:
SDG: SI2008
Report Date: 09-APR-15
LCS File ID: U9984.D

Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882
LCSD File ID: U9985.D

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Phenol	100.	19.2	19.2	25.6	25.6	ug/L	28	30	0-115
Bis(2-Chloroethyl)Ether	50.0	34.9	69.8	38.6	77.2	ug/L	10	30	35-110
2-Chlorophenol	100.	53.2	53.2	62.3	62.3	ug/L	16	30	35-105
1,3-Dichlorobenzene	50.0	29.8	59.6	33.4	66.8	ug/L	11	30	30-100
1,4-Dichlorobenzene	50.0	31.3	62.6	35.3	70.6	ug/L	12	30	30-100
1,2-Dichlorobenzene	50.0	31.9	63.8	36.0	72.0	ug/L	12	30	35-100
2-Methylphenol	100.	44.8	44.8	54.3	54.3	ug/L	19	30	40-110
2,2'-Oxybis(1-Chloropropane)	50.0	29.4	58.8	33.1	66.2	ug/L	12	30	25-130
3&4-Methylphenol	100.	45.2	45.2	58.4	58.4	ug/L	25	30	30-110
N-Nitroso-Di-N-Propylamine	50.0	32.4	64.8	37.0	74.0	ug/L	13	30	35-130
Hexachloroethane	50.0	30.1	60.2	34.1	68.2	ug/L	12	30	30-100
Nitrobenzene	50.0	33.4	66.8	38.7	77.4	ug/L	15	30	45-110
Isophorone	50.0	26.6	53.2	31.1	62.2	ug/L	16	30	50-110
2-Nitrophenol	100.	59.2	59.2	73.6	73.6	ug/L	22	30	40-115
2,4-Dimethylphenol	100.	57.0	57.0	67.9	67.9	ug/L	17	30	30-110
Bis(2-Chloroethoxy)Methane	50.0	28.5	57.0	32.9	65.8	ug/L	14	30	45-105
2,4-Dichlorophenol	100.	58.3	58.3	71.2	71.2	ug/L	20	30	50-105
1,2,4-Trichlorobenzene	50.0	32.1	64.2	37.3	74.6	ug/L	15	30	35-105
Naphthalene	50.0	31.1	62.2	36.1	72.2	ug/L	15	30	40-100
4-Chloroaniline	50.0	28.5	57.0	33.3	66.6	ug/L	16	30	15-110
Hexachlorobutadiene	50.0	30.2	60.4	36.0	72.0	ug/L	18	30	25-105
4-Chloro-3-Methylphenol	100.	62.0	62.0	76.4	76.4	ug/L	21	30	45-110
2-Methylnaphthalene	50.0	33.3	66.6	39.7	79.4	ug/L	18	30	45-105
Hexachlorocyclopentadiene	50.0	20.1	40.2	24.8	49.6	ug/L	21	30	23-70
2,4,6-Trichlorophenol	100.	56.0	56.0	73.3	73.3	ug/L	27	30	50-115
2,4,5-Trichlorophenol	100.	60.5	60.5	72.2	72.2	ug/L	18	30	50-110
2-Chloronaphthalene	50.0	28.5	57.0	35.9	71.8	ug/L	23	30	50-105
2-Nitroaniline	50.0	32.2	64.4	33.8	67.6	ug/L	5	30	50-115
Dimethyl Phthalate	50.0	36.8	73.6	39.9	79.8	ug/L	8	30	25-125
Acenaphthylene	50.0	35.4	70.8	40.6	81.2	ug/L	14	30	50-105
2,6-Dinitrotoluene	50.0	39.5	79.0	41.0	82.0	ug/L	4	30	50-115
3-Nitroaniline	50.0	30.6	61.2	32.9	65.8	ug/L	7	30	20-125
Acenaphthene	50.0	35.6	71.2	40.6	81.2	ug/L	13	30	45-110
2,4-Dinitrophenol	100.	40.2	40.2	75.9	75.9	ug/L	61*	30	15-140

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160882-2
LCSD ID: WG160882-3
Project:
SDG: SI2008
Report Date: 09-APR-15
LCS File ID: U9984.D

Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882
LCSD File ID: U9985.D

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
4-Nitrophenol	100.	17.2	17.2	102.	102.	ug/L	142*	30	0-125
Dibenzofuran	50.0	36.6	73.2	44.2	88.4	ug/L	19	30	55-105
2,4-Dinitrotoluene	50.0	35.8	71.6	40.7	81.4	ug/L	13	30	50-120
Diethylphthalate	50.0	38.7	77.4	43.5	87.0	ug/L	12	30	40-120
4-Chlorophenyl-Phenylether	50.0	32.9	65.8	44.0	88.0	ug/L	29	30	50-110
Fluorene	50.0	34.8	69.6	42.9	85.8	ug/L	21	30	50-110
4-Nitroaniline	50.0	33.3	66.6	38.5	77.0	ug/L	14	30	35-120
4,6-Dinitro-2-Methylphenol	100.	64.3	64.3	92.3	92.3	ug/L	36*	30	40-130
N-Nitrosodiphenylamine	50.0	33.6	67.2	35.4	70.8	ug/L	5	30	50-110
4-Bromophenyl-Phenylether	50.0	42.4	84.8	45.6	91.2	ug/L	7	30	50-115
Hexachlorobenzene	50.0	42.4	84.8	42.9	85.8	ug/L	1	30	50-110
Pentachlorophenol	100.	63.5	63.5	82.8	82.8	ug/L	26	30	40-115
Phenanthrene	50.0	42.4	84.8	52.0	104.	ug/L	20	30	50-115
Anthracene	50.0	42.0	84.0	47.3	94.6	ug/L	12	30	55-110
Carbazole	50.0	42.4	84.8	43.6	87.2	ug/L	3	30	50-115
Di-N-Butylphthalate	50.0	41.4	82.8	46.6	93.2	ug/L	12	30	55-115
Fluoranthene	50.0	40.7	81.4	42.4	84.8	ug/L	4	30	55-115
Pyrene	50.0	37.7	75.4	44.0	88.0	ug/L	15	30	50-130
Butylbenzylphthalate	50.0	37.2	74.4	40.8	81.6	ug/L	9	30	45-115
3,3'-Dichlorobenzidine	100.	75.0	75.0	81.2	81.2	ug/L	8	30	20-110
Benzo(a)anthracene	50.0	39.4	78.8	43.6	87.2	ug/L	10	30	55-110
Chrysene	50.0	42.1	84.2	42.4	84.8	ug/L	1	30	55-110
Bis(2-Ethylhexyl)Phthalate	50.0	38.1	76.2	40.7	81.4	ug/L	6	30	40-125
Di-N-Octylphthalate	50.0	34.5	69.0	40.3	80.6	ug/L	16	30	35-135
Benzo(b)fluoranthene	50.0	38.7	77.4	41.2	82.4	ug/L	6	30	45-120
Benzo(k)fluoranthene	50.0	40.4	80.8	43.8	87.6	ug/L	8	30	45-125
Benzo(a)pyrene	50.0	40.0	80.0	42.6	85.2	ug/L	6	30	55-110
Indeno(1,2,3-cd)pyrene	50.0	41.8	83.6	41.0	82.0	ug/L	2	30	45-125
Dibenzo(a,h)anthracene	50.0	42.4	84.8	41.4	82.8	ug/L	2	30	40-125
Benzo(g,h,i)perylene	50.0	42.8	85.6	39.8	79.6	ug/L	7	30	40-125
2-Fluorophenol			27.3		39.0				20-110
Phenol-d6			16.8		24.9				10-115
Nitrobenzene-d5			64.1		75.1				40-110
2-Fluorobiphenyl			63.1		76.1				50-110

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160882-2
LCSD ID: WG160882-3
Project:
SDG: SI2008
Report Date: 09-APR-15
LCS File ID: U9984.D

Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882
LCSD File ID: U9985.D

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

2,4,6-Tribromophenol	64.9	78.9	40-125
Terphenyl-d14	77.3	87.8	50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9984.D
Report Date: 09-Apr-2015 10:51

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9984.D
Lab Smp Id: WG160882-2 Client Smp ID: WG160882-LCS
Inj Date : 08-APR-2015 14:29 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160882-2,SI2008
Misc Info : WG160877,WG160882,WG160080-4,SI2008-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.920	2.911	(0.729)	368926	27.3282	27.3	
$ 12 Phenol-D6	99	3.655	3.656	(0.912)	262615	16.7736	16.8	
13 Phenol	94	3.666	3.677	(0.915)	313861	19.1884	19.2	
16 Bis(2-Chloroethyl)ether	93	3.748	3.750	(0.935)	394844	34.8848	34.9	
17 2-Chlorophenol	128	3.821	3.822	(0.954)	696883	53.1903	53.2	
18 1,3-Dichlorobenzene	146	3.955	3.957	(0.987)	400718	29.7849	29.8	
* 19 1,4-Dichlorobenzene-D4	152	4.007	4.008	(1.000)	356981	40.0000		
20 1,4-Dichlorobenzene	146	4.028	4.029	(1.005)	394715	31.2918	31.3	
22 1,2-Dichlorobenzene	146	4.173	4.174	(1.041)	396358	31.9204	31.9	
23 2-Methylphenol	108	4.255	4.257	(1.062)	540437	44.8343	44.8	
25 2,2'-Oxybis(1-chloropropane)	45	4.276	4.277	(1.067)	385178	29.4523	29.4	
28 3&4-Methylphenol	108	4.421	4.433	(1.103)	449223	45.2066	45.2	
30 N-Nitroso-di-n-propylamine	70	4.431	4.433	(1.106)	217969	32.3546	32.4(Q)	
32 Hexachloroethane	117	4.514	4.515	(1.127)	171546	30.1160	30.1	
$ 33 Nitrobenzene-D5	82	4.566	4.578	(0.851)	384880	32.0365	32.0	
34 Nitrobenzene	77	4.587	4.598	(0.855)	368439	33.4522	33.4	
36 Isophorone	82	4.866	4.857	(0.907)	612302	26.6254	26.6	
37 2-Nitrophenol	139	4.939	4.940	(0.921)	391406	59.1586	59.2	
38 2,4-Dimethylphenol	107	5.001	5.002	(0.932)	676670	57.0094	57.0	
40 Bis(2-Chloroethoxy)methane	93	5.094	5.095	(0.950)	458785	28.4778	28.5	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9984.D
Report Date: 09-Apr-2015 10:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.208	5.219	(0.971)	513994	58.2938	58.3	
	43 1,2,4-Trichlorobenzene	180	5.301	5.302	(0.988)	296205	32.1102	32.1	
*	45 Naphthalene-D8	136	5.363	5.364	(1.000)	1342662	40.0000		
	46 Naphthalene	128	5.384	5.385	(1.004)	1026639	31.1010	31.1	
	47 4-Chloroaniline	127	5.456	5.457	(1.017)	383193	28.5217	28.5	
	50 Hexachlorobutadiene	225	5.539	5.540	(1.033)	167228	30.1882	30.2	
	54 4-Chloro-3-Methylphenol	107	6.046	6.058	(1.127)	583557	61.9956	62.0	
	56 2-Methylnaphthalene	142	6.191	6.192	(1.154)	664668	33.2803	33.3	
	59 Hexachlorocyclopentadiene	237	6.398	6.399	(0.860)	117603	20.0639	20.1	
	61 2,4,6-Trichlorophenol	196	6.543	6.554	(0.879)	334567	56.0209	56.0	
	62 2,4,5-Trichlorophenol	196	6.595	6.596	(0.886)	383739	60.5149	60.5	
$	63 2-Fluorobiphenyl	172	6.636	6.637	(0.892)	644432	31.5366	31.5	
	66 2-Chloronaphthalene	162	6.771	6.803	(0.910)	581282	28.5483	28.5	
	69 2-Nitroaniline	65	6.915	6.917	(0.929)	217630	32.2099	32.2	
	72 Dimethyl Phthalate	163	7.154	7.165	(0.961)	821930	36.7752	36.8	
	75 Acenaphthylene	152	7.267	7.269	(0.976)	1043607	35.3681	35.4	
	74 2,6-Dinitrotoluene	165	7.216	7.217	(0.969)	197840	39.5132	39.5	
*	78 Acenaphthene-D10	164	7.443	7.445	(1.000)	703335	40.0000		
	77 3-Nitroaniline	138	7.412	7.424	(0.996)	183132	30.5951	30.6	
	79 Acenaphthene	153	7.474	7.486	(1.004)	623728	35.5720	35.6	
	80 2,4-Dinitrophenol	184	7.547	7.569	(1.014)	113687	40.1859	40.2	
	81 4-Nitrophenol	139	7.661	7.693	(1.029)	67935	17.2024	17.2(aQH)	
	83 Dibenzofuran	168	7.692	7.693	(1.033)	858340	36.6037	36.6	
	84 2,4-Dinitrotoluene	165	7.702	7.714	(1.035)	222262	35.7624	35.8	
	89 Diethylphthalate	149	8.013	8.014	(1.076)	826064	38.6795	38.7	
	92 4-Chlorophenyl-phenylether	204	8.116	8.117	(1.090)	288197	32.8986	32.9	
	90 Fluorene	166	8.106	8.107	(1.089)	687917	34.7705	34.8	
	94 4-Nitroaniline	138	8.168	8.179	(1.097)	160457	33.2959	33.3	
	95 4,6-Dinitro-2-Methylphenol	198	8.209	8.210	(0.888)	197043	64.3011	64.3	
	96 N-Nitrosodiphenylamine	169	8.271	8.273	(0.895)	492607	33.5696	33.6(R)	
$	100 2,4,6-Tribromophenol	330	8.406	8.417	(1.129)	240526	64.9348	64.9	
	106 4-Bromophenyl-phenylether	248	8.716	8.718	(0.943)	216688	42.4398	42.4	
	107 Hexachlorobenzene	284	8.799	8.800	(0.952)	253140	42.4115	42.4	
	110 Pentachlorophenol	266	9.048	9.059	(0.979)	220031	63.5141	63.5	
*	114 Phenanthrene-D10	188	9.244	9.256	(1.000)	974376	40.0000		
	115 Phenanthrene	178	9.275	9.287	(1.003)	937186	42.3919	42.4	
	118 Anthracene	178	9.337	9.349	(1.010)	965283	42.0112	42.0	
	119 Carbazole	167	9.555	9.556	(1.034)	876391	42.3811	42.4	
	121 Di-n-butylphthalate	149	10.010	10.011	(1.083)	1272688	41.3946	41.4	
	126 Fluoranthene	202	10.735	10.736	(1.161)	901661	40.7175	40.7	
	128 Pyrene	202	11.004	11.005	(0.861)	876530	37.6912	37.7	
$	129 Terphenyl-D14	244	11.221	11.222	(0.878)	593578	38.6338	38.6	
	136 Butylbenzylphthalate	149	11.925	11.926	(0.934)	451640	37.2599	37.2	
*	141 Chrysene-D12	240	12.774	12.775	(1.000)	645757	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.753	12.754	(0.998)	339290	74.9640	75.0	
	139 Benzo(a)anthracene	228	12.753	12.764	(0.998)	620623	39.3536	39.4	
	142 Chrysene	228	12.825	12.827	(1.004)	643909	42.0954	42.1	
	143 bis(2-Ethylhexyl)phthalate	149	12.929	12.930	(1.012)	622513	38.0837	38.1	
	144 Di-n-octylphthalate	149	14.254	14.265	(0.907)	887890	34.5089	34.5	
	145 Benzo(b)fluoranthene	252	14.906	14.928	(0.949)	469353	38.7203	38.7	
	147 Benzo(k)fluoranthene	252	14.968	15.600	(0.953)	491055	40.4004	40.4(H)	
	149 Benzo(a)pyrene	252	15.589	15.600	(0.992)	399733	39.9527	40.0	
*	150 Perylene-D12	264	15.713	15.714	(1.000)	396422	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.473	17.474	(1.112)	224947	41.7610	41.8	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9984.D
Report Date: 09-Apr-2015 10:51

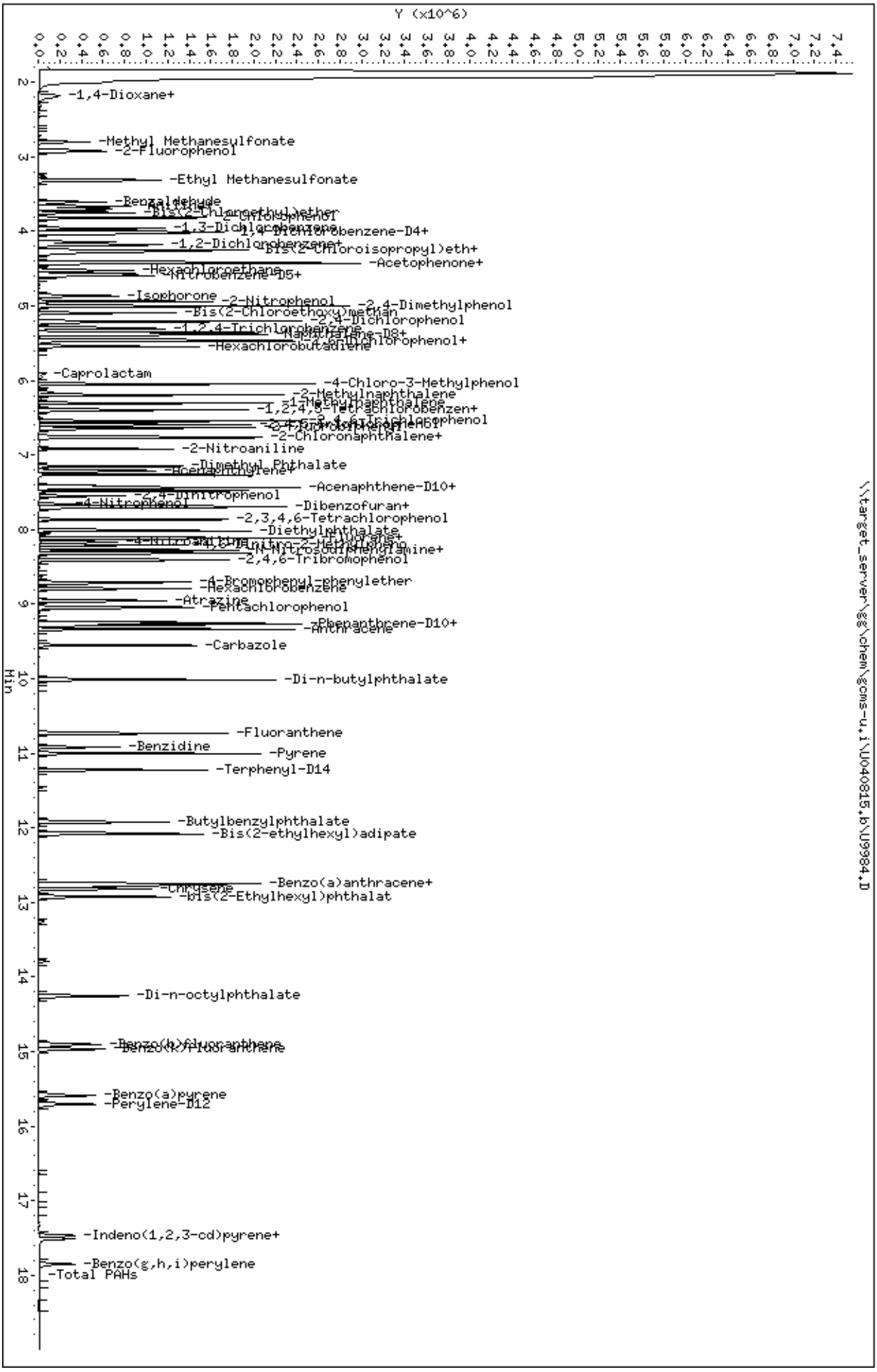
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.514	17.515	(1.115)	227907	42.3533	42.4	
155 Benzo(g,h,i)perylene	276	17.856	17.857	(1.136)	256880	42.7900	42.8	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9984,D
Date : 08-APR-2015 14:29
Client ID: WG160882-LCS
Sample Info: WG160882-2,SI2008
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9985.D
Report Date: 09-Apr-2015 10:52

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9985.D
Lab Smp Id: WG160882-3 Client Smp ID: WG160882-LCSD
Inj Date : 08-APR-2015 14:55 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160882-3,SI2008
Misc Info : WG160877,WG160882,WG160080-4,SI2008-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 5 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.914	2.911	(0.727)	500848	38.9876	39.0	
$ 12 Phenol-D6	99	3.659	3.656	(0.912)	370810	24.8890	24.9	
13 Phenol	94	3.669	3.677	(0.915)	399014	25.6352	25.6	
16 Bis(2-Chloroethyl)ether	93	3.752	3.750	(0.935)	416184	38.6407	38.6	
17 2-Chlorophenol	128	3.814	3.822	(0.951)	777001	62.3222	62.3	
18 1,3-Dichlorobenzene	146	3.959	3.957	(0.987)	427572	33.3975	33.4	
* 19 1,4-Dichlorobenzene-D4	152	4.011	4.008	(1.000)	339701	40.0000		
20 1,4-Dichlorobenzene	146	4.021	4.029	(1.003)	423851	35.3109	35.3	
22 1,2-Dichlorobenzene	146	4.177	4.174	(1.041)	425522	36.0123	36.0	
23 2-Methylphenol	108	4.259	4.257	(1.062)	622796	54.2949	54.3	
25 2,2'-Oxybis(1-chloropropane)	45	4.280	4.277	(1.067)	412529	33.1483	33.1	
28 3&4-Methylphenol	108	4.425	4.433	(1.103)	552712	58.4503	58.4	
30 N-Nitroso-di-n-propylamine	70	4.435	4.433	(1.106)	236968	36.9640	37.0(Q)	
32 Hexachloroethane	117	4.518	4.515	(1.126)	184659	34.0671	34.1	
$ 33 Nitrobenzene-D5	82	4.570	4.578	(0.853)	415670	37.5417	37.5	
34 Nitrobenzene	77	4.591	4.598	(0.857)	393225	38.7388	38.7	
36 Isophorone	82	4.870	4.857	(0.909)	658942	31.0902	31.1	
37 2-Nitrophenol	139	4.943	4.940	(0.923)	449001	73.6348	73.6	
38 2,4-Dimethylphenol	107	4.994	5.002	(0.932)	743072	67.9276	67.9	
40 Bis(2-Chloroethoxy)methane	93	5.087	5.095	(0.950)	488787	32.9202	32.9	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9985.D
Report Date: 09-Apr-2015 10:52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.212	5.219	(0.973)	579030	71.2543	71.2	
	43 1,2,4-Trichlorobenzene	180	5.294	5.302	(0.988)	317283	37.3202	37.3	
*	45 Naphthalene-D8	136	5.357	5.364	(1.000)	1237431	40.0000		
	46 Naphthalene	128	5.377	5.385	(1.004)	1071131	36.1073	36.1	
	47 4-Chloroaniline	127	5.460	5.457	(1.019)	412889	33.3455	33.3	
	50 Hexachlorobutadiene	225	5.543	5.540	(1.035)	178186	36.0249	36.0	
	54 4-Chloro-3-Methylphenol	107	6.050	6.058	(1.129)	662893	76.4129	76.4	
	56 2-Methylnaphthalene	142	6.195	6.192	(1.156)	730331	39.6778	39.7	
	59 Hexachlorocyclopentadiene	237	6.392	6.399	(0.859)	131236	24.8354	24.8	
	61 2,4,6-Trichlorophenol	196	6.547	6.554	(0.880)	394508	73.2730	73.3	
	62 2,4,5-Trichlorophenol	196	6.588	6.596	(0.886)	413018	72.2465	72.2	
$	63 2-Fluorobiphenyl	172	6.640	6.637	(0.893)	700850	38.0438	38.0	
	66 2-Chloronaphthalene	162	6.775	6.803	(0.911)	658806	35.8899	35.9	
	69 2-Nitroaniline	65	6.909	6.917	(0.929)	205949	33.8105	33.8	
	72 Dimethyl Phthalate	163	7.147	7.165	(0.961)	804589	39.9315	39.9	
	75 Acenaphthylene	152	7.261	7.269	(0.976)	1079599	40.5844	40.6	
	74 2,6-Dinitrotoluene	165	7.209	7.217	(0.969)	184895	40.9614	41.0	
*	78 Acenaphthene-D10	164	7.437	7.445	(1.000)	634075	40.0000		
	77 3-Nitroaniline	138	7.416	7.424	(0.997)	177363	32.8680	32.9	
	79 Acenaphthene	153	7.478	7.486	(1.006)	641489	40.5811	40.6	
	80 2,4-Dinitrophenol	184	7.551	7.569	(1.015)	193576	75.8990	75.9	
	81 4-Nitrophenol	139	7.685	7.693	(1.033)	363426	102.078	102	
	83 Dibenzofuran	168	7.696	7.693	(1.035)	934251	44.1928	44.2	
	84 2,4-Dinitrotoluene	165	7.706	7.714	(1.036)	227938	40.6817	40.7	
	89 Diethylphthalate	149	8.006	8.014	(1.077)	837142	43.4799	43.5	
	92 4-Chlorophenyl-phenylether	204	8.120	8.117	(1.092)	315402	44.0292	44.0	
	90 Fluorene	166	8.110	8.107	(1.090)	726004	42.9000	42.9	
	94 4-Nitroaniline	138	8.172	8.179	(1.099)	167155	38.4745	38.5	
	95 4,6-Dinitro-2-Methylphenol	198	8.213	8.210	(0.888)	265387	92.3431	92.3	
	96 N-Nitrosodiphenylamine	169	8.275	8.273	(0.895)	487226	35.4032	35.4(R)	
$	100 2,4,6-Tribromophenol	330	8.410	8.417	(1.131)	263354	78.8636	78.9	
	106 4-Bromophenyl-phenylether	248	8.710	8.718	(0.942)	215589	45.5722	45.6	
	107 Hexachlorobenzene	284	8.793	8.800	(0.951)	240007	42.8760	42.9	
	110 Pentachlorophenol	266	9.041	9.059	(0.978)	269138	82.8379	82.8	
*	114 Phenanthrene-D10	188	9.248	9.256	(1.000)	913817	40.0000		
	115 Phenanthrene	178	9.279	9.287	(1.003)	1010720	52.0567	52.0	
	118 Anthracene	178	9.341	9.349	(1.010)	1019194	47.2971	47.3	
	119 Carbazole	167	9.548	9.556	(1.032)	845479	43.5958	43.6	
	121 Di-n-butylphthalate	149	10.014	10.011	(1.083)	1343488	46.5932	46.6	
	126 Fluoranthene	202	10.728	10.736	(1.160)	874032	42.4485	42.4	
	128 Pyrene	202	11.008	11.005	(0.861)	908093	44.0181	44.0	
$	129 Terphenyl-D14	244	11.225	11.222	(0.879)	598637	43.9219	43.9	
	136 Butylbenzylphthalate	149	11.919	11.926	(0.933)	438438	40.7741	40.8	
*	141 Chrysene-D12	240	12.778	12.775	(1.000)	572851	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.747	12.754	(0.998)	326171	81.2371	81.2	
	139 Benzo(a)anthracene	228	12.757	12.764	(0.998)	609275	43.5509	43.6	
	142 Chrysene	228	12.819	12.827	(1.003)	575973	42.4463	42.4	
	143 bis(2-Ethylhexyl)phthalate	149	12.922	12.930	(1.011)	590434	40.7183	40.7	
	144 Di-n-octylphthalate	149	14.258	14.265	(0.908)	860904	40.2747	40.3	
	145 Benzo(b)fluoranthene	252	14.899	14.928	(0.949)	415181	41.2270	41.2	
	147 Benzo(k)fluoranthene	252	14.961	15.600	(0.953)	442364	43.8067	43.8(H)	
	149 Benzo(a)pyrene	252	15.582	15.600	(0.992)	354366	42.6318	42.6	
*	150 Perylene-D12	264	15.707	15.714	(1.000)	329346	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.466	17.474	(1.112)	183552	41.0162	41.0	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9985.D
Report Date: 09-Apr-2015 10:52

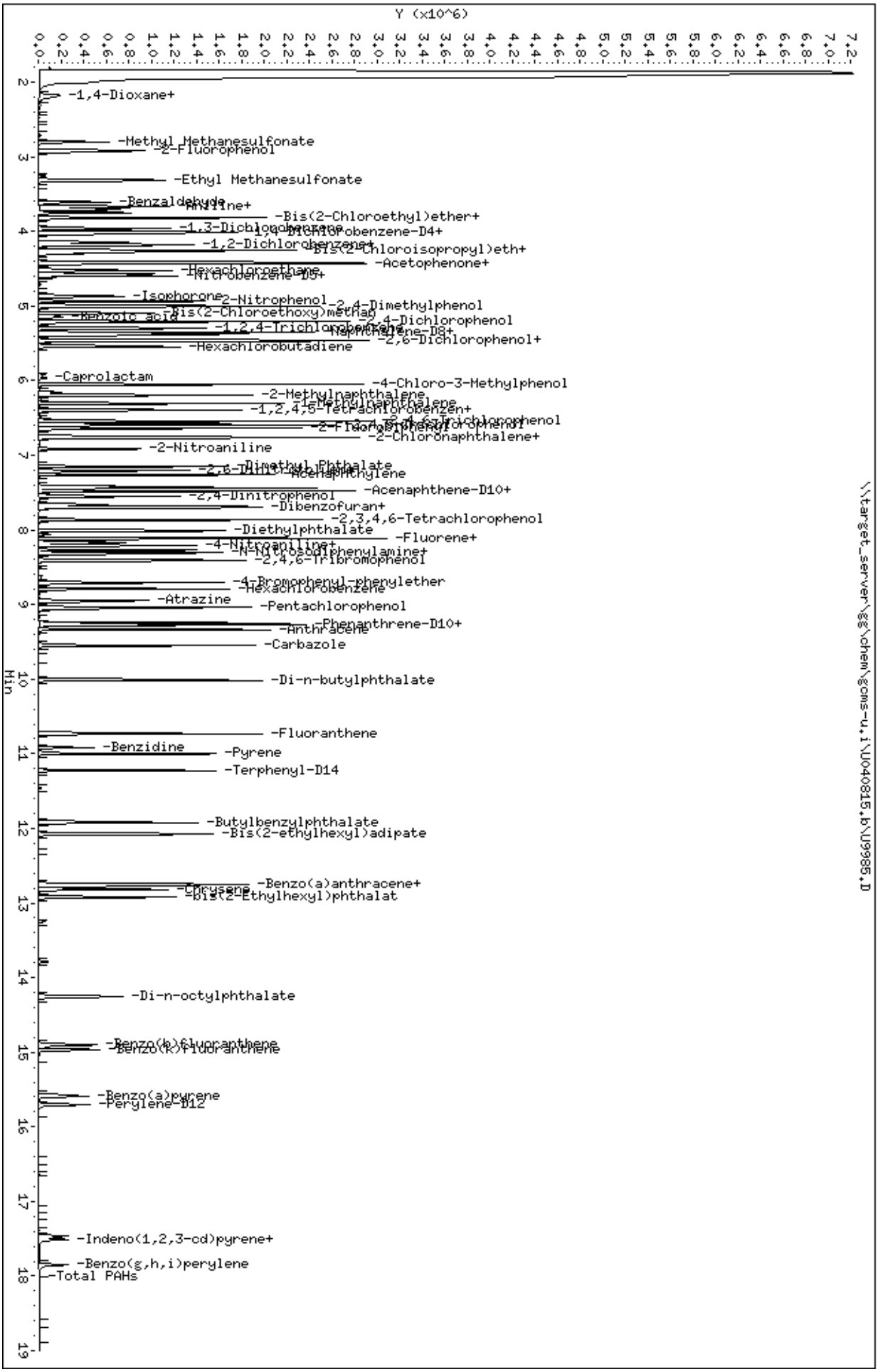
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.508	17.515	(1.115)	184861	41.3505	41.4	
155 Benzo(g,h,i)perylene	276	17.849	17.857	(1.136)	198613	39.8221	39.8	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9985,D
Date : 08-APR-2015 14:55
Client ID: WG160882-LCSD
Sample Info: WG160882-3,SI2008
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG160777-4
MSD ID: WG160777-5
Sample ID: SI2008-1
Client ID: MW-09-GW-033115
Project:
SDG: SI2008
MS File ID: U9942.D

Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777
Report Date: 09-APR-15
MSD File ID: U9943.D

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Phenol	94.3	94.3	ug/L	U7.1	13.	21.	13.6	22.3	48*	30	0-115
Bis(2-Chloroethyl)Ether	47.2	47.2	ug/L	U7.1	28.	32.	60.0	68.3	13	30	35-110
2-Chlorophenol	94.3	94.3	ug/L	U7.1	34.	48.	35.5	51.1	36*	30	35-105
1,3-Dichlorobenzene	47.2	47.2	ug/L	U7.1	24.	29.	51.5	61.9	18	30	30-100
1,4-Dichlorobenzene	47.2	47.2	ug/L	U7.1	26.	30.	54.9	64.4	16	30	30-100
1,2-Dichlorobenzene	47.2	47.2	ug/L	U7.1	26.	30.	55.5	64.0	14	30	35-100
2-Methylphenol	94.3	94.3	ug/L	UM7.1	36.	47.	38.2*	50.0	27	30	40-110
2,2'-Oxybis(1-Chloropropane)	47.2	47.2	ug/L	U7.1	24.	28.	51.3	60.2	16	30	25-130
3&4-Methylphenol	94.3	94.3	ug/L	U7.1	38.	52.	39.8	54.7	31*	30	30-110
N-Nitroso-Di-N-Propylamine	47.2	47.2	ug/L	U7.1	30.	34.	63.2	72.1	13	30	35-130
Hexachloroethane	47.2	47.2	ug/L	U7.1	25.	29.	52.2	62.3	18	30	30-100
Nitrobenzene	47.2	47.2	ug/L	U7.1	28.	32.	58.7	68.9	16	30	45-110
Isophorone	47.2	47.2	ug/L	U7.1	24.	27.	50.0	58.1	15	30	50-110
2-Nitrophenol	94.3	94.3	ug/L	UM7.1	35.	54.	37.2*	56.9	42*	30	40-115
2,4-Dimethylphenol	94.3	94.3	ug/L	U7.1	50.	56.	53.5	59.8	11	30	30-110
Bis(2-Chloroethoxy)Methane	47.2	47.2	ug/L	U7.1	25.	28.	52.8	59.4	12	30	45-105
2,4-Dichlorophenol	94.3	94.3	ug/L	UM7.1	39.	59.	41.4*	62.2	40*	30	50-105
1,2,4-Trichlorobenzene	47.2	47.2	ug/L	U7.1	27.	32.	56.4	67.2	17	30	35-105
Naphthalene	47.2	47.2	ug/L	U7.1	26.	31.	55.5	66.1	17	30	40-100
4-Chloroaniline	47.2	47.2	ug/L	U7.1	28.	30.	58.3	64.7	10	30	15-110
Hexachlorobutadiene	47.2	47.2	ug/L	U7.1	24.	30.	51.3	63.6	21	30	25-105
4-Chloro-3-Methylphenol	94.3	94.3	ug/L	U7.1	56.	71.	59.2	75.0	24	30	45-110
2-Methylnaphthalene	47.2	47.2	ug/L	U7.1	30.	35.	63.8	73.8	14	30	45-105
Hexachlorocyclopentadiene	47.2	47.2	ug/L	U7.1	16.	19.	33.1	39.4	18	30	23-70
2,4,6-Trichlorophenol	94.3	94.3	ug/L	UM7.1	38.	54.	40.4*	57.3	35*	30	50-115
2,4,5-Trichlorophenol	94.3	94.3	ug/L	UM18	41.	56.	43.0*	59.2	32*	30	50-110
2-Chloronaphthalene	47.2	47.2	ug/L	U7.1	26.	29.	54.3	61.5	12	30	50-105
2-Nitroaniline	47.2	47.2	ug/L	U18	30.	32.	63.0	68.7	9	30	50-115
Dimethyl Phthalate	47.2	47.2	ug/L	U7.1	36.	39.	76.1	82.2	8	30	25-125
Acenaphthylene	47.2	47.2	ug/L	U7.1	32.	36.	68.9	77.0	11	30	50-105
2,6-Dinitrotoluene	47.2	47.2	ug/L	U7.1	40.	43.	84.0	90.3	7	30	50-115
3-Nitroaniline	47.2	47.2	ug/L	U18	31.	29.	65.3	61.5	6	30	20-125
Acenaphthene	47.2	47.2	ug/L	U7.1	34.	36.	72.3	77.2	6	30	45-110

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG160777-4
MSD ID: WG160777-5
Sample ID: SI2008-1
Client ID: MW-09-GW-033115
Project:
SDG: SI2008
MS File ID: U9942.D

Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777
Report Date: 09-APR-15
MSD File ID: U9943.D

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
2,4-Dinitrophenol	94.3	94.3	ug/L	U18	32.	50.	33.5	52.5	44*	30	15-140
4-Nitrophenol	94.3	94.3	ug/L	U18	84.	93.	89.0	98.4	10	30	0-125
Dibenzofuran	47.2	47.2	ug/L	U7.1	35.	39.	74.8	82.5	10	30	55-105
2,4-Dinitrotoluene	47.2	47.2	ug/L	U7.1	39.	42.	82.9	90.1	8	30	50-120
Diethylphthalate	47.2	47.2	ug/L	U7.1	40.	42.	84.4	89.5	6	30	40-120
4-Chlorophenyl-Phenylether	47.2	47.2	ug/L	U7.1	36.	38.	75.3	80.8	7	30	50-110
Fluorene	47.2	47.2	ug/L	U7.1	35.	38.	74.4	79.7	7	30	50-110
4-Nitroaniline	47.2	47.2	ug/L	U18	37.	41.	79.3	86.7	9	30	35-120
4,6-Dinitro-2-Methylphenol	94.3	94.3	ug/L	U18	44.	62.	47.2	66.0	33*	30	40-130
N-Nitrosodiphenylamine	47.2	47.2	ug/L	U7.1	29.	31.	61.5	65.9	7	30	50-110
4-Bromophenyl-Phenylether	47.2	47.2	ug/L	U7.1	38.	41.	80.3	86.9	8	30	50-115
Hexachlorobenzene	47.2	47.2	ug/L	U7.1	36.	39.	77.0	83.5	8	30	50-110
Pentachlorophenol	94.3	94.3	ug/L	U18	41.	61.	43.6	64.8	39*	30	40-115
Phenanthrene	47.2	47.2	ug/L	U7.1	43.	47.	90.7	99.8	10	30	50-115
Anthracene	47.2	47.2	ug/L	U7.1	40.	41.	85.6	86.5	1	30	55-110
Carbazole	47.2	47.2	ug/L	U7.1	40.	43.	85.9	90.7	6	30	50-115
Di-N-Butylphthalate	47.2	47.2	ug/L	U7.1	44.	47.	93.7	98.8	5	30	55-115
Fluoranthene	47.2	47.2	ug/L	U7.1	38.	40.	79.5	85.0	7	30	55-115
Pyrene	47.2	47.2	ug/L	U7.1	43.	42.	90.3	90.1	0	30	50-130
Butylbenzylphthalate	47.2	47.2	ug/L	U7.1	40.	42.	84.2	90.1	7	30	45-115
3,3'-Dichlorobenzidine	94.3	94.3	ug/L	U7.1	61.	65.	64.4	69.0	7	30	20-110
Benzo(a)anthracene	47.2	47.2	ug/L	U7.1	38.	41.	81.4	87.8	8	30	55-110
Chrysene	47.2	47.2	ug/L	U7.1	38.	40.	79.7	85.9	7	30	55-110
Bis(2-Ethylhexyl)Phthalate	47.2	47.2	ug/L	U7.1	40.	43.	84.6	91.2	7	30	40-125
Di-N-Octylphthalate	47.2	47.2	ug/L	U7.1	39.	40.	83.1	85.9	3	30	35-135
Benzo(b)fluoranthene	47.2	47.2	ug/L	U7.1	38.	40.	80.1	84.8	6	30	45-120
Benzo(k)fluoranthene	47.2	47.2	ug/L	U7.1	38.	41.	81.0	86.7	7	30	45-125
Benzo(a)pyrene	47.2	47.2	ug/L	U7.1	37.	40.	78.2	84.0	7	30	55-110
Indeno(1,2,3-cd)pyrene	47.2	47.2	ug/L	U7.1	39.	44.	81.8	92.8	13	30	45-125
Dibenzo(a,h)anthracene	47.2	47.2	ug/L	U7.1	37.	44.	78.2	92.2	16	30	40-125
Benzo(g,h,i)perylene	47.2	47.2	ug/L	U7.1	39.	43.	83.5	91.6	9	30	40-125
2-Fluorophenol							16.8*	30.1			20-110
Phenol-d6							12.6	21.6			10-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG160777-4
MSD ID: WG160777-5
Sample ID: SI2008-1
Client ID: MW-09-GW-033115
Project:
SDG: SI2008
MS File ID: U9942.D

Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777
Report Date: 09-APR-15
MSD File ID: U9943.D

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Nitrobenzene-d5	56.0	65.6	40-110
2-Fluorobiphenyl	62.2	67.2	50-110
2,4,6-Tribromophenol	53.2	69.8	40-125
Terphenyl-d14	89.2	88.1	50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9942.D
Report Date: 09-Apr-2015 10:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9942.D
Lab Smp Id: WG160777-4 Client Smp ID: MW-09-GW-033115MS
Inj Date : 06-APR-2015 19:31 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160777-4,SI2008
Misc Info : WG160781,WG160777,WG160080-4,SI2008-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 12 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.930	2.931	(0.730)	203912	16.8286	15.9(R)	
$ 12 Phenol-D6	99	3.665	3.666	(0.912)	176918	12.5896	11.9	
13 Phenol	94	3.676	3.676	(0.915)	199887	13.6150	12.8	
16 Bis(2-Chloroethyl)ether	93	3.758	3.759	(0.936)	305091	30.0313	28.3	
17 2-Chlorophenol	128	3.821	3.831	(0.951)	417137	35.4720	33.5	
18 1,3-Dichlorobenzene	146	3.965	3.966	(0.987)	311246	25.7747	24.3	
* 19 1,4-Dichlorobenzene-D4	152	4.017	4.018	(1.000)	320414	40.0000		
20 1,4-Dichlorobenzene	146	4.038	4.038	(1.005)	310497	27.4245	25.9	
22 1,2-Dichlorobenzene	146	4.183	4.194	(1.041)	309394	27.7604	26.2	
23 2-Methylphenol	108	4.266	4.266	(1.062)	412348	38.1121	36.0(R)	
25 2,2'-Oxybis(1-chloropropane)	45	4.286	4.287	(1.067)	301160	25.6560	24.2	
28 3&4-Methylphenol	108	4.431	4.442	(1.103)	355929	39.9059	37.6(Q)	
30 N-Nitroso-di-n-propylamine	70	4.421	4.442	(1.100)	190703	31.5378	29.8(Q)	
32 Hexachloroethane	117	4.535	4.535	(1.129)	133523	26.1159	24.6	
$ 33 Nitrobenzene-D5	82	4.576	4.587	(0.852)	306976	27.9897	26.4	
34 Nitrobenzene	77	4.597	4.608	(0.856)	294896	29.3293	27.7	
36 Isophorone	82	4.866	4.866	(0.906)	525348	25.0237	23.6	
37 2-Nitrophenol	139	4.949	4.949	(0.921)	224923	37.2390	35.1(R)	
38 2,4-Dimethylphenol	107	5.011	5.011	(0.933)	579983	53.5253	50.5	
40 Bis(2-Chloroethoxy)methane	93	5.104	5.104	(0.950)	388149	26.3918	24.9	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9942.D
Report Date: 09-Apr-2015 10:49

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.218	5.229	(0.971)	333568	41.4402	39.1(R)	
	43 1,2,4-Trichlorobenzene	180	5.311	5.311	(0.988)	237732	28.2301	26.6	
*	45 Naphthalene-D8	136	5.373	5.373	(1.000)	1225725	40.0000		
	46 Naphthalene	128	5.394	5.394	(1.004)	850827	27.7450	26.2	
	47 4-Chloroaniline	127	5.466	5.467	(1.017)	357532	29.1506	27.5	
	50 Hexachlorobutadiene	225	5.549	5.549	(1.033)	133182	25.6607	24.2	
	54 4-Chloro-3-Methylphenol	107	6.056	6.067	(1.127)	509600	59.3035	55.9	
	56 2-Methylnaphthalene	142	6.201	6.201	(1.154)	582365	31.9412	30.1	
	59 Hexachlorocyclopentadiene	237	6.408	6.408	(0.860)	91900	16.4924	15.6	
	61 2,4,6-Trichlorophenol	196	6.553	6.564	(0.879)	229174	40.3648	38.1(R)	
	62 2,4,5-Trichlorophenol	196	6.594	6.605	(0.885)	259318	43.0160	40.6(R)	
$	63 2-Fluorobiphenyl	172	6.646	6.657	(0.892)	603906	31.0870	29.3	
	66 2-Chloronaphthalene	162	6.781	6.781	(0.910)	525925	27.1699	25.6	
	69 2-Nitroaniline	65	6.926	6.926	(0.929)	202195	31.4783	29.7	
	72 Dimethyl Phthalate	163	7.164	7.174	(0.961)	808304	38.0422	35.9	
	75 Acenaphthylene	152	7.278	7.278	(0.976)	966783	34.4647	32.5	
	74 2,6-Dinitrotoluene	165	7.226	7.226	(0.969)	199616	41.9367	39.6	
*	78 Acenaphthene-D10	164	7.453	7.454	(1.000)	668638	40.0000		
	77 3-Nitroaniline	138	7.422	7.443	(0.996)	185562	32.6098	30.8	
	79 Acenaphthene	153	7.495	7.495	(1.006)	603232	36.1884	34.1	
	80 2,4-Dinitrophenol	184	7.557	7.578	(1.014)	89947	33.4442	31.6	
	81 4-Nitrophenol	139	7.702	7.692	(1.033)	334217	89.0218	84.0	
	83 Dibenzofuran	168	7.702	7.702	(1.033)	834772	37.4460	35.3	
	84 2,4-Dinitrotoluene	165	7.723	7.733	(1.036)	244949	41.4580	39.1	
	89 Diethylphthalate	149	8.023	8.033	(1.076)	855849	42.1537	39.8	
	92 4-Chlorophenyl-phenylether	204	8.126	8.137	(1.090)	299715	37.5934	35.5	
	90 Fluorene	166	8.116	8.127	(1.089)	688318	37.1977	35.1	
	94 4-Nitroaniline	138	8.178	8.189	(1.097)	181767	39.6751	37.4	
	95 4,6-Dinitro-2-Methylphenol	198	8.219	8.230	(0.887)	154678	47.1775	44.5	
	96 N-Nitrosodiphenylamine	169	8.281	8.292	(0.894)	481919	30.6950	29.0(R)	
$	100 2,4,6-Tribromophenol	330	8.416	8.427	(1.129)	187411	53.2208	50.2	
	106 4-Bromophenyl-phenylether	248	8.727	8.727	(0.942)	221263	40.1328	37.9	
	107 Hexachlorobenzene	284	8.809	8.820	(0.951)	245586	38.4570	36.3	
	110 Pentachlorophenol	266	9.058	9.068	(0.978)	161562	43.5888	41.1	
*	114 Phenanthrene-D10	188	9.265	9.265	(1.000)	1042504	40.0000		
	115 Phenanthrene	178	9.296	9.296	(1.003)	1050610	45.3730	42.8	
	118 Anthracene	178	9.348	9.358	(1.009)	1054197	42.8825	40.4	
	119 Carbazole	167	9.565	9.565	(1.032)	949659	42.9231	40.5	
	121 Di-n-butylphthalate	149	10.031	10.031	(1.083)	1541283	46.8547	44.2	
	126 Fluoranthene	202	10.745	10.755	(1.160)	946444	39.7534	37.5	
	128 Pyrene	202	11.024	11.025	(0.861)	986098	45.1979	42.6	
$	129 Terphenyl-D14	244	11.242	11.242	(0.878)	643291	44.6295	42.1	
	136 Butylbenzylphthalate	149	11.945	11.946	(0.933)	478152	42.0475	39.7	
*	141 Chrysene-D12	240	12.805	12.805	(1.000)	605821	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.773	12.774	(0.998)	273697	64.4580	60.8	
	139 Benzo(a)anthracene	228	12.773	12.784	(0.998)	602217	40.7037	38.4	
	142 Chrysene	228	12.846	12.846	(1.003)	571338	39.8133	37.6	
	143 bis(2-Ethylhexyl)phthalate	149	12.949	12.960	(1.011)	649024	42.3230	39.9	
	144 Di-n-octylphthalate	149	14.285	14.295	(0.908)	898711	41.5673	39.2	
	145 Benzo(b)fluoranthene	252	14.937	14.958	(0.949)	408054	40.0605	37.8	
	147 Benzo(k)fluoranthene	252	14.999	15.009	(0.953)	413840	40.5180	38.2(H)	
	149 Benzo(a)pyrene	252	15.620	15.630	(0.993)	328574	39.0813	36.9	
*	150 Perylene-D12	264	15.734	15.744	(1.000)	333118	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.493	17.504	(1.112)	185358	40.9508	38.6	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9942.D
Report Date: 09-Apr-2015 10:49

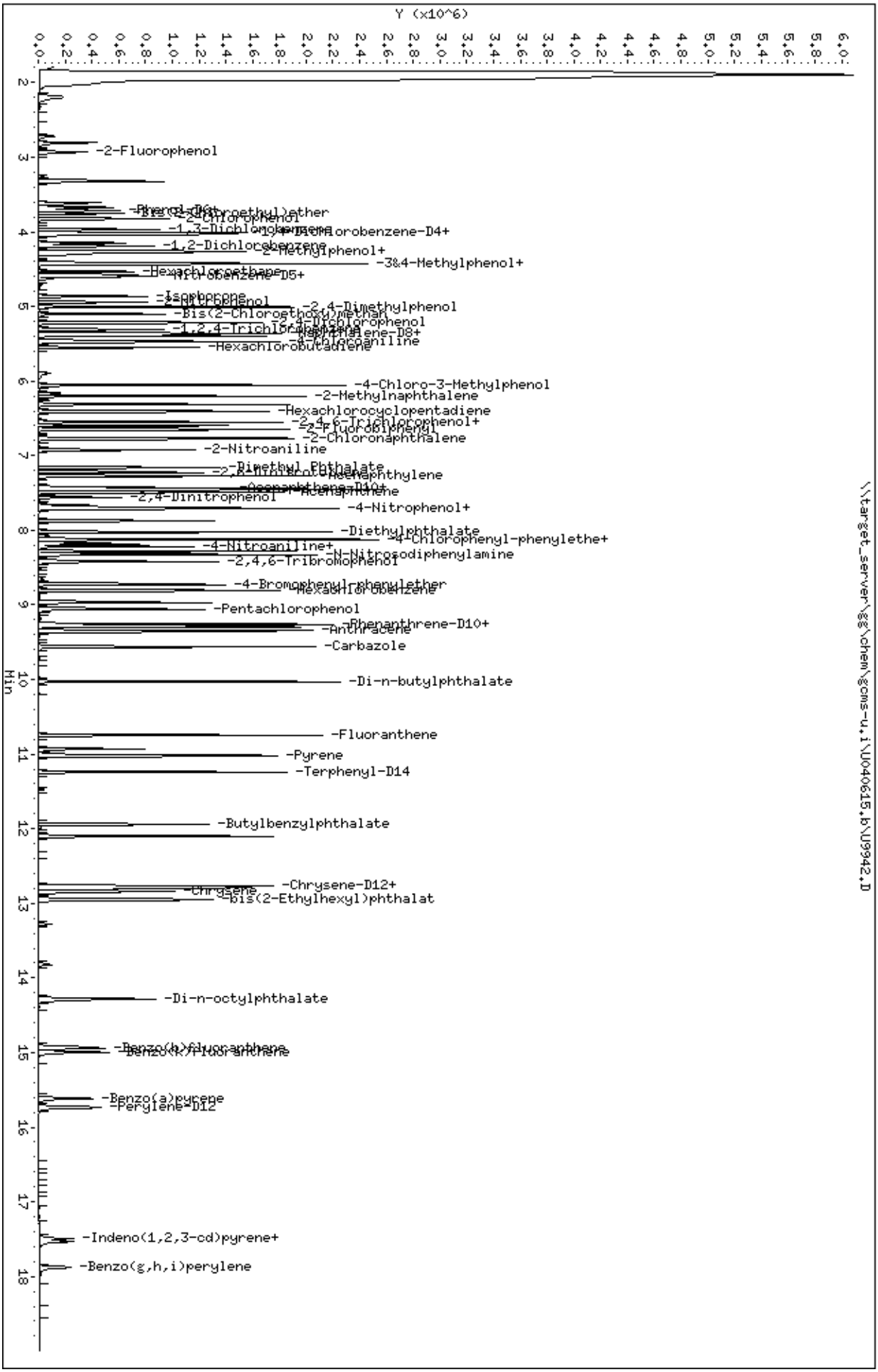
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.535	17.545	(1.114)	176942	39.1310	36.9	
155 Benzo(g,h,i)perylene	276	17.876	17.887	(1.136)	210552	41.7379	39.4	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9942.D
Date : 06-APR-2015 19:31
Client ID: MW-09-GW-033115MS
Sample Info: WG160777-4,SI2008
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9943.D
Report Date: 09-Apr-2015 11:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9943.D
Lab Smp Id: WG160777-5 Client Smp ID: MW-09-GW-033115MSD
Inj Date : 06-APR-2015 19:57 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160777-5,SI2008
Misc Info : WG160781,WG160777,WG160080-4,SI2008-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 13 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.933	2.931	(0.730)	347403	30.1373	28.4	
$ 12 Phenol-D6	99	3.668	3.666	(0.912)	288276	21.5633	20.3	
13 Phenol	94	3.678	3.676	(0.915)	310405	22.2243	21.0	
16 Bis(2-Chloroethyl)ether	93	3.761	3.759	(0.936)	329726	34.1164	32.2	
17 2-Chlorophenol	128	3.823	3.831	(0.951)	571356	51.0715	48.2	
18 1,3-Dichlorobenzene	146	3.968	3.966	(0.987)	355082	30.9089	29.2	
* 19 1,4-Dichlorobenzene-D4	152	4.020	4.018	(1.000)	304822	40.0000		
20 1,4-Dichlorobenzene	146	4.030	4.038	(1.003)	347568	32.2690	30.4	
22 1,2-Dichlorobenzene	146	4.185	4.194	(1.041)	339233	31.9947	30.2	
23 2-Methylphenol	108	4.268	4.266	(1.062)	514735	50.0089	47.2	
25 2,2'-Oxybis(1-chloropropane)	45	4.289	4.287	(1.067)	335655	30.0573	28.4	
28 3&4-Methylphenol	108	4.434	4.442	(1.103)	464045	54.6888	51.6(Q)	
30 N-Nitroso-di-n-propylamine	70	4.423	4.442	(1.100)	207046	35.9920	34.0(Q)	
32 Hexachloroethane	117	4.527	4.535	(1.126)	151466	31.1408	29.4	
$ 33 Nitrobenzene-D5	82	4.579	4.587	(0.853)	341224	32.7822	30.9	
34 Nitrobenzene	77	4.599	4.608	(0.857)	329157	34.4938	32.5	
36 Isophorone	82	4.868	4.866	(0.907)	578971	29.0580	27.4	
37 2-Nitrophenol	139	4.951	4.949	(0.923)	326159	56.8981	53.7	
38 2,4-Dimethylphenol	107	5.003	5.011	(0.932)	614397	59.7444	56.4	
40 Bis(2-Chloroethoxy)methane	93	5.096	5.104	(0.950)	413880	29.6517	28.0	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9943.D
Report Date: 09-Apr-2015 11:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.220	5.229	(0.973)	475237	62.2089	58.7	
	43 1,2,4-Trichlorobenzene	180	5.303	5.311	(0.988)	268326	33.5732	31.7	
*	45 Naphthalene-D8	136	5.365	5.373	(1.000)	1163291	40.0000		
	46 Naphthalene	128	5.396	5.394	(1.006)	936686	33.0845	31.2	
	47 4-Chloroaniline	127	5.469	5.467	(1.019)	376827	32.3727	30.5	
	50 Hexachlorobutadiene	225	5.552	5.549	(1.035)	151140	31.7686	30.0	
	54 4-Chloro-3-Methylphenol	107	6.059	6.067	(1.129)	611976	75.0396	70.8	
	56 2-Methylnaphthalene	142	6.204	6.201	(1.156)	638880	36.9216	34.8	
	59 Hexachlorocyclopentadiene	237	6.400	6.408	(0.858)	107432	19.7615	18.6	
	61 2,4,6-Trichlorophenol	196	6.556	6.564	(0.879)	317783	57.3705	54.1	
	62 2,4,5-Trichlorophenol	196	6.597	6.605	(0.885)	348298	59.2199	55.9	
$	63 2-Fluorobiphenyl	172	6.649	6.657	(0.892)	636357	33.5760	31.7	
	66 2-Chloronaphthalene	162	6.783	6.781	(0.910)	579542	30.6880	29.0	
	69 2-Nitroaniline	65	6.928	6.926	(0.929)	215008	34.3096	32.4	
	72 Dimethyl Phthalate	163	7.156	7.174	(0.960)	851741	41.0883	38.8	
	75 Acenaphthylene	152	7.280	7.278	(0.976)	1053451	38.4929	36.3	
	74 2,6-Dinitrotoluene	165	7.228	7.226	(0.969)	209500	45.1131	42.6	
*	78 Acenaphthene-D10	164	7.456	7.454	(1.000)	652336	40.0000		
	77 3-Nitroaniline	138	7.425	7.443	(0.996)	170578	30.7257	29.0	
	79 Acenaphthene	153	7.487	7.495	(1.004)	628406	38.6407	36.4	
	80 2,4-Dinitrophenol	184	7.560	7.578	(1.014)	137640	52.4564	49.5	
	81 4-Nitrophenol	139	7.704	7.692	(1.033)	360420	98.4003	92.8	
	83 Dibenzofuran	168	7.704	7.702	(1.033)	897222	41.2531	38.9	
	84 2,4-Dinitrotoluene	165	7.715	7.733	(1.035)	259675	45.0487	42.5	
	89 Diethylphthalate	149	8.025	8.033	(1.076)	885810	44.7197	42.2	
	92 4-Chlorophenyl-phenylether	204	8.129	8.137	(1.090)	306835	40.4272	38.1	
	90 Fluorene	166	8.118	8.127	(1.089)	707558	39.8812	37.6	
	94 4-Nitroaniline	138	8.181	8.189	(1.097)	193713	43.3393	40.9	
	95 4,6-Dinitro-2-Methylphenol	198	8.222	8.230	(0.887)	211438	66.0009	62.3	
	96 N-Nitrosodiphenylamine	169	8.284	8.292	(0.894)	506346	33.0067	31.1(R)	
$	100 2,4,6-Tribromophenol	330	8.429	8.427	(1.130)	239729	69.7793	65.8	
	106 4-Bromophenyl-phenylether	248	8.729	8.727	(0.942)	231275	43.5109	41.0	
	107 Hexachlorobenzene	284	8.812	8.820	(0.951)	260681	41.7774	39.4	
	110 Pentachlorophenol	266	9.060	9.068	(0.978)	234708	64.8073	61.1	
*	114 Phenanthrene-D10	188	9.267	9.265	(1.000)	1018632	40.0000		
	115 Phenanthrene	178	9.298	9.296	(1.003)	1095229	49.9136	47.1	
	118 Anthracene	178	9.350	9.358	(1.009)	1040295	43.3088	40.8	
	119 Carbazole	167	9.567	9.565	(1.032)	979625	45.3152	42.8	
	121 Di-n-butylphthalate	149	10.033	10.031	(1.083)	1589312	49.4470	46.6	
	126 Fluoranthene	202	10.747	10.755	(1.160)	975685	42.5257	40.1	
	128 Pyrene	202	11.027	11.025	(0.861)	1016169	45.0570	42.5	
$	129 Terphenyl-D14	244	11.244	11.242	(0.878)	656178	44.0387	41.5	
	136 Butylbenzylphthalate	149	11.948	11.946	(0.933)	529829	45.0721	42.5	
*	141 Chrysene-D12	240	12.807	12.805	(1.000)	626247	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.776	12.774	(0.998)	302931	69.0159	65.1	
	139 Benzo(a)anthracene	228	12.776	12.784	(0.998)	672008	43.9394	41.4	
	142 Chrysene	228	12.848	12.846	(1.003)	636889	42.9336	40.5	
	143 bis(2-Ethylhexyl)phthalate	149	12.952	12.960	(1.011)	721699	45.5271	43.0	
	144 Di-n-octylphthalate	149	14.287	14.295	(0.908)	1034253	42.9410	40.5	
	145 Benzo(b)fluoranthene	252	14.939	14.958	(0.949)	480613	42.3554	40.0	
	147 Benzo(k)fluoranthene	252	15.001	15.009	(0.953)	493249	43.3507	40.9(H)	
	149 Benzo(a)pyrene	252	15.622	15.630	(0.993)	393502	42.0143	39.6	
*	150 Perylene-D12	264	15.736	15.744	(1.000)	371094	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.496	17.504	(1.112)	233933	46.3934	43.8	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9943.D
Report Date: 09-Apr-2015 11:03

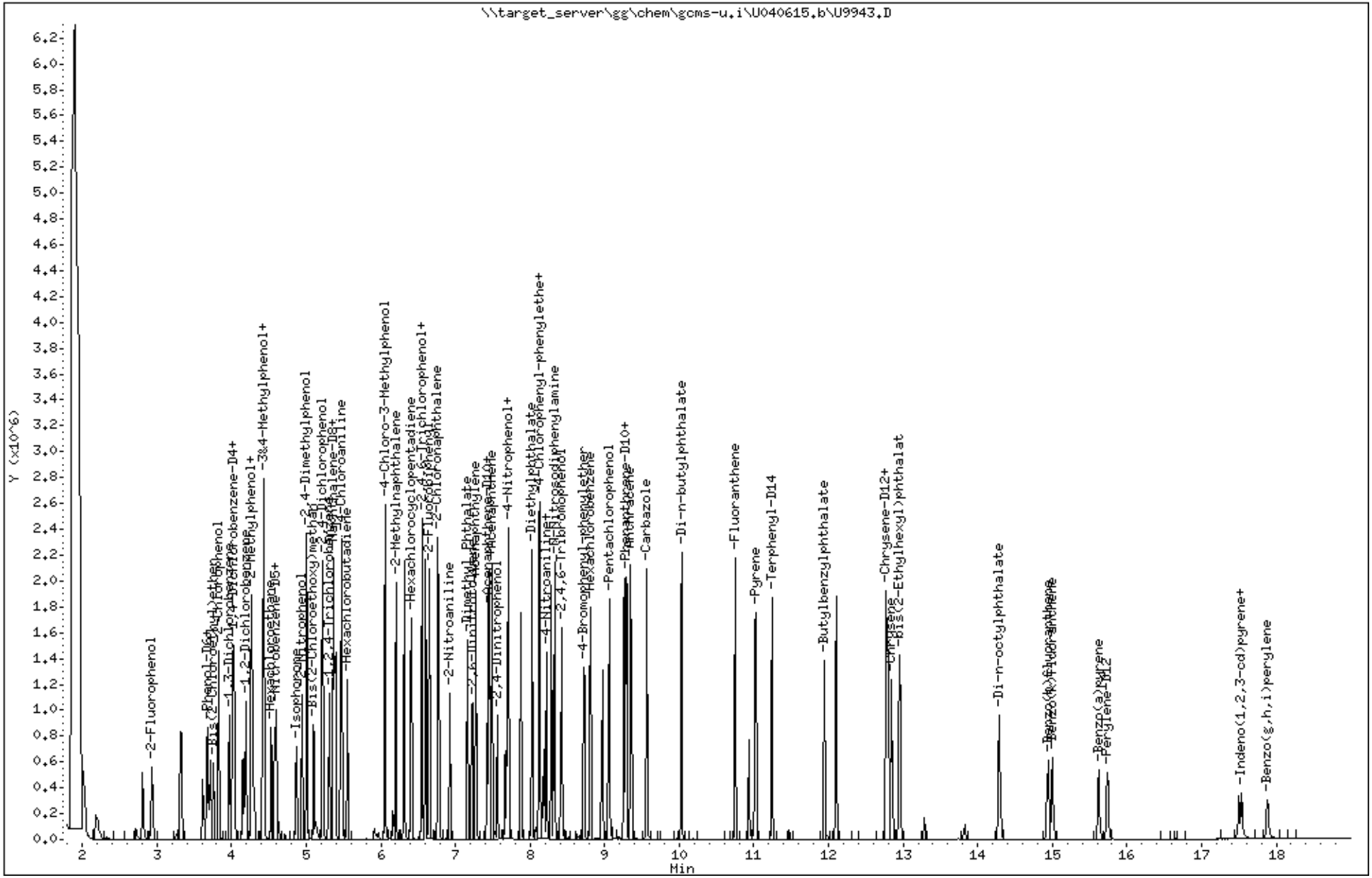
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.537	17.545	(1.114)	232394	46.1348	43.5	
155 Benzo(g,h,i)perylene	276	17.879	17.887	(1.136)	257084	45.7468	43.2	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9943.D
Date : 06-APR-2015 19:57
Client ID: MW-09-GW-033115MSD
Sample Info: WG160777-5,SI2008
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



0000603

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 032315

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG160080-1	50 ng DFTPP	UD340	1	1	DFTPP8340	2.0	JLM	OK
SSTD050U0323	WG160080-4	U9721		2	U8270C72	1.0		✓
-2	SSTD010U0323	22		3				✓
-3	025	23		4				✓
-5	075	24		5				✓
-6	100	25		6				✓
-7	125	26		7				✓
-8	150	27		8				OK
								JLM 032415

STANDARD	CODE
DFTPP	52558 7 JLM
CAL. STD.	SLS83 STK4913
IS MIX	STK4941

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 040615

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG160789-1	50ng DFTPP	U0349	1	1	DFTPP390	2.0	JCM	OK
-2	SSTD050U0406	U9932		2	U8270C72	1.0		OK
3510	WG160777-1	33		3				OK
	-2	34		4				OK
	-3	35		5				OK
	SI1969-1RE	36		6				OK
	-2RE	37		7				SS5↓
	-3RE	38		8				OK
	SI1995-4REDL	39	2	9				OK 100/200
	-4DL	40	1	10				OK
	SI2008-1	41		11				SS1.5↓
	WG160777-4	42		12				SS1↓
	-5	43		13				OK
	SI2008-2	44		14				SS1↓
	-3	45		15				OK
	-4	46		16				OK
	-7	47		17				OK
	SI2069-2	48		18				SS1↓
	-3	49		19				OK
	-4	50		20				SS1.5↓
	-5	51		21				OK
	-1	52		22				SS1↓
3550	SI1976-1DL	53	4	23				1561↓ 100/400
	hellv	54-59	1	24				

STANDARD	CODE
DFTPP	52585
CAL. STD.	52583 STK4913
IS MIX	STK4941

REVIEWED AND APPROVED BY: _____
DATE: _____

DATE OF DFTPP INJECTION: 040815

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG160877-1	50ng DFTPP	U7351	1	1	DFTPP8390	2.0	JLM	OK
-2	SSTD050U0408	U9982		2	U8270C22	1.0		OK
3540	WG160882-1	83		3				OK
	-2	84		4				OK
	-3	85		5				OK
	SI2008-1RE	86		6				OK
	-2RE	87		7				OK
	SI2014-2RE	88		8				OK
	-4RE	89		9				OK
	-1RE	90		10				1560V
	MeCl2	91-94		11				
								JLM 040815

STANDARD	CODE
DFTPP	52585
CAL. STD.	52583 57K4913
IS MIX	57K4941

REVIEWED AND APPROVED BY: _____
DATE: _____

SV
sep

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP)		SW846 3520 (CLLE)		SW846 3535 (SPE)	
Analytical Method: (check one)	SW846 8270	EPA 625	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2	
Standards	Surrogate ID (1): SU2709		Spike ID (1): SU2710			
	Surrogate ID (2):		Spike ID (2):			
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM056		H_2SO_4 Lot # 71333		NaOH Lot # 84109	
Consumables	Filter Paper Lot # 96161511		$NaSO_4$ Lot # 3796500			
Nitrogen Water Bath Temperature 38°C			pH (1st Extraction) ≤2		pH (2nd Extraction) ≥11	
Prep Start Time: ~~10:09~~ 11:30	Prep End Time: 14:00		CLLE Start Time: —		CLLE End Time: —	

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV016	Initials	Comments
4-6-15	JMS	WG160777-1	1000	1mL	NA	✓		1mL	4-6-15	E2	KF	(WG160799) 625-R312823
		-2			1mL					E3		SV-R312822
		-3								E4		~~SV-MS~~
		-4	1060							E5		MS SI2008-1L
		-5	1060							E6		MSD -1M
										KF	4-6-15	

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
4-6-15	JMS	SI1961-1L	1010	1mL	NA	✓		1mL	4-6-15	E7	KF	re emulsion, SS-[illegible]
		-2h	1020							8		
		-3h	1030							9		
		SI1995-4 A	1000							E10		~~PT~~ UP 0315 [illegible] 10mL-0 [illegible]
		SI2008-1L	1060		NA					SV017 A1		MS/D
		-2e	1010							A2		
		-3d	1060							A3		
		-4e	1000							A4		
		-7e	1020							A5		
		SI2069-1f	1040							A6		
		-2f	1010							A7		
		-3f	1010							A8		
		-4e	1030							A9		
		-5f	1060							A10		
		~~SI1946-8MS~~					~~MS~~					
										KF	4-6-15	

Reviewed By_____ Date_____

SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV2709		Spike ID (1): SV2710		
	Surrogate ID (2): —		Spike ID (2): —		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM-62		H_2SO_4 Lot # 71333		NaOH Lot # 8d101
Consumables	Filter Paper Lot # 961815711		$NaSO_4$ Lot # 879605001		
Nitrogen Water Bath Temperature 38°C			pH (1st Extraction) ≤2		pH (2nd Extraction) ≥11
Prep Start Time: 10:10	Prep End Time: 12:00		CLLE Start Time:		CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV017-018	Initials	Comments
4-8-15	KF	Y6160882-1	1000	1.0	NR	✓		1.0	4-8-15	E10	KF	R313145
↓	↓	↓ -2	1000	↓	1.0	↓		↓	↓	A1	↓	
		-3	1000		↓					A2		

KF 4-8-15

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000014

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV019	Initials	Comments
4-8-15	KF	SI2008-1N	1060	1.0	NR	✓		1.0	4-8-15	KF 4-8-15 A3	KF	
↓	↓	↓ -2D	1030	↓	↓	↓		↓	↓	A4	↓	
		SI2069-1E	1060							A5		
		-2E	1030							A6		
		-4F	1020							A7		

KF 4-8-15

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000015

0000609

METALS DATA

Sample Data Section

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SI2008 **SOW No.** SW846

Client Field ID	Lab Sample ID
DUPLICATE-GW-033115	SI2008-007
MW-06-GW-033115	SI2008-003
MW-07-GW-033115	SI2008-004
MW-08-GW-033115	SI2008-002
MW-09-GW-033115	SI2008-001
MW-09-GW-033115	SI2008-001P
MW-09-GW-033115	SI2008-001S

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Edward A. Morgan Name: Edward A. Morgan

Date: April 21, 2015 Title: Senior Analyst

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-09-GW-033115

Matrix: WATER **SDG Name:** SI2008

Percent Solids: 0.00 **Lab Sample ID:** SI2008-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	58	J		P	1	300	15.	100
7440-36-0	ANTIMONY, TOTAL	5.0	U		P	1	8.0	1.3	5.0
7440-38-2	ARSENIC, TOTAL	5.0	U		P	1	8.0	1.4	5.0
7440-39-3	BARIUM, TOTAL	33.2			P	1	5.0	0.23	3.0
7440-41-7	BERYLLIUM, TOTAL	0.10	J		P	1	5.0	0.10	0.50
7440-43-9	CADMIUM, TOTAL	22.7			P	1	5.0	0.049	3.0
7440-70-2	CALCIUM, TOTAL	12600			P	1	100	11.	80
7440-47-3	CHROMIUM, TOTAL	9.35	J		P	1	10	0.36	4.0
7440-48-4	COBALT, TOTAL	4.0	U		P	1	10	0.24	4.0
7440-50-8	COPPER, TOTAL	0.76	J		P	1	25	0.63	10
7439-89-6	IRON, TOTAL	48	J		P	1	100	5.4	80
7439-92-1	LEAD, TOTAL	4.0	U		P	1	5.0	1.1	4.0
7439-95-4	MAGNESIUM, TOTAL	2310			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	4.0	U		P	1	5.0	1.1	4.0
7439-97-6	MERCURY, TOTAL	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	0.85	J		P	1	10	0.28	4.0
7440-09-7	POTASSIUM, TOTAL	1840			P	1	1000	41.	500
7782-49-2	SELENIUM, TOTAL	7.0	U	A	P	1	10	2.4	7.0
7440-22-4	SILVER, TOTAL	4.0	U		P	1	10	0.27	4.0
7440-23-5	SODIUM, TOTAL	25000			P	1	1000	24.	500
7440-28-0	THALLIUM, TOTAL	1.2	J		P	1	15	1.1	5.0
7440-62-2	VANADIUM, TOTAL	0.60	J		P	1	10	0.23	4.0
7440-66-6	ZINC, TOTAL	25.8			P	1	20	0.72	10

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-08-GW-033115

Matrix: WATER **SDG Name:** SI2008

Percent Solids: 0.00 **Lab Sample ID:** SI2008-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	228	J		P	1	300	15.	100
7440-36-0	ANTIMONY, TOTAL	5.0	U		P	1	8.0	1.3	5.0
7440-38-2	ARSENIC, TOTAL	2.2	J		P	1	8.0	1.4	5.0
7440-39-3	BARIUM, TOTAL	27.9			P	1	5.0	0.23	3.0
7440-41-7	BERYLLIUM, TOTAL	0.18	J		P	1	5.0	0.10	0.50
7440-43-9	CADMIUM, TOTAL	0.061	J		P	1	5.0	0.049	3.0
7440-70-2	CALCIUM, TOTAL	63200			P	1	100	11.	80
7440-47-3	CHROMIUM, TOTAL	1.8	J		P	1	10	0.36	4.0
7440-48-4	COBALT, TOTAL	0.54	J		P	1	10	0.24	4.0
7440-50-8	COPPER, TOTAL	1.9	J		P	1	25	0.63	10
7439-89-6	IRON, TOTAL	164			P	1	100	5.4	80
7439-92-1	LEAD, TOTAL	4.0	U		P	1	5.0	1.1	4.0
7439-95-4	MAGNESIUM, TOTAL	19400			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	26.5			P	1	5.0	1.1	4.0
7439-97-6	MERCURY, TOTAL	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	2.5	J		P	1	10	0.28	4.0
7440-09-7	POTASSIUM, TOTAL	3210			P	1	1000	41.	500
7782-49-2	SELENIUM, TOTAL	7.0	U		P	1	10	2.4	7.0
7440-22-4	SILVER, TOTAL	4.0	U		P	1	10	0.27	4.0
7440-23-5	SODIUM, TOTAL	136000			P	1	1000	24.	500
7440-28-0	THALLIUM, TOTAL	1.5	J		P	1	15	1.1	5.0
7440-62-2	VANADIUM, TOTAL	0.68	J		P	1	10	0.23	4.0
7440-66-6	ZINC, TOTAL	46.4			P	1	20	0.72	10

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-06-GW-033115

Matrix: WATER **SDG Name:** SI2008

Percent Solids: 0.00 **Lab Sample ID:** SI2008-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	3290			P	1	300	15.	100
7440-36-0	ANTIMONY, TOTAL	5.0	U		P	1	8.0	1.3	5.0
7440-38-2	ARSENIC, TOTAL	23.6			P	1	8.0	1.4	5.0
7440-39-3	BARIUM, TOTAL	62.2			P	1	5.0	0.23	3.0
7440-41-7	BERYLLIUM, TOTAL	0.42	J		P	1	5.0	0.10	0.50
7440-43-9	CADMIUM, TOTAL	0.093	J		P	1	5.0	0.049	3.0
7440-70-2	CALCIUM, TOTAL	15600			P	1	100	11.	80
7440-47-3	CHROMIUM, TOTAL	5.00	J		P	1	10	0.36	4.0
7440-48-4	COBALT, TOTAL	16.9			P	1	10	0.24	4.0
7440-50-8	COPPER, TOTAL	14.8	J		P	1	25	0.63	10
7439-89-6	IRON, TOTAL	29800			P	1	100	5.4	80
7439-92-1	LEAD, TOTAL	2.8	J		P	1	5.0	1.1	4.0
7439-95-4	MAGNESIUM, TOTAL	2540			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	1880			P	1	5.0	1.1	4.0
7439-97-6	MERCURY, TOTAL	0.312			CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	3.38	J		P	1	10	0.28	4.0
7440-09-7	POTASSIUM, TOTAL	2310			P	1	1000	41.	500
7782-49-2	SELENIUM, TOTAL	7.0	U		P	1	10	2.4	7.0
7440-22-4	SILVER, TOTAL	4.0	U		P	1	10	0.27	4.0
7440-23-5	SODIUM, TOTAL	14100			P	1	1000	24.	500
7440-28-0	THALLIUM, TOTAL	1.9	J		P	1	15	1.1	5.0
7440-62-2	VANADIUM, TOTAL	7.13	J		P	1	10	0.23	4.0
7440-66-6	ZINC, TOTAL	31.1			P	1	20	0.72	10

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-07-GW-033115

Matrix: WATER **SDG Name:** SI2008

Percent Solids: 0.00 **Lab Sample ID:** SI2008-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	674			P	1	300	15.	100
7440-36-0	ANTIMONY, TOTAL	5.0	U		P	1	8.0	1.3	5.0
7440-38-2	ARSENIC, TOTAL	5.0	U		P	1	8.0	1.4	5.0
7440-39-3	BARIUM, TOTAL	46.3			P	1	5.0	0.23	3.0
7440-41-7	BERYLLIUM, TOTAL	0.39	J		P	1	5.0	0.10	0.50
7440-43-9	CADMIUM, TOTAL	0.23	J		P	1	5.0	0.049	3.0
7440-70-2	CALCIUM, TOTAL	17000			P	1	100	11.	80
7440-47-3	CHROMIUM, TOTAL	0.75	J		P	1	10	0.36	4.0
7440-48-4	COBALT, TOTAL	1.4	J		P	1	10	0.24	4.0
7440-50-8	COPPER, TOTAL	3.0	J		P	1	25	0.63	10
7439-89-6	IRON, TOTAL	280			P	1	100	5.4	80
7439-92-1	LEAD, TOTAL	2.1	J		P	1	5.0	1.1	4.0
7439-95-4	MAGNESIUM, TOTAL	4540			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	99.1			P	1	5.0	1.1	4.0
7439-97-6	MERCURY, TOTAL	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	7.51	J		P	1	10	0.28	4.0
7440-09-7	POTASSIUM, TOTAL	1720			P	1	1000	41.	500
7782-49-2	SELENIUM, TOTAL	7.0	U		P	1	10	2.4	7.0
7440-22-4	SILVER, TOTAL	4.0	U		P	1	10	0.27	4.0
7440-23-5	SODIUM, TOTAL	10800			P	1	1000	24.	500
7440-28-0	THALLIUM, TOTAL	1.8	J		P	1	15	1.1	5.0
7440-62-2	VANADIUM, TOTAL	1.3	J		P	1	10	0.23	4.0
7440-66-6	ZINC, TOTAL	142			P	1	20	0.72	10

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** DUPLICATE-GW-033115

Matrix: WATER **SDG Name:** SI2008

Percent Solids: 0.00 **Lab Sample ID:** SI2008-007

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	100	U		P	1	300	15.	100
7440-36-0	ANTIMONY, TOTAL	5.0	U		P	1	8.0	1.3	5.0
7440-38-2	ARSENIC, TOTAL	5.0	U		P	1	8.0	1.4	5.0
7440-39-3	BARIUM, TOTAL	30.5			P	1	5.0	0.23	3.0
7440-41-7	BERYLLIUM, TOTAL	0.10	J		P	1	5.0	0.10	0.50
7440-43-9	CADMIUM, TOTAL	11.9			P	1	5.0	0.049	3.0
7440-70-2	CALCIUM, TOTAL	13700			P	1	100	11.	80
7440-47-3	CHROMIUM, TOTAL	10.2			P	1	10	0.36	4.0
7440-48-4	COBALT, TOTAL	4.0	U		P	1	10	0.24	4.0
7440-50-8	COPPER, TOTAL	0.98	J		P	1	25	0.63	10
7439-89-6	IRON, TOTAL	80	U		P	1	100	5.4	80
7439-92-1	LEAD, TOTAL	4.0	U		P	1	5.0	1.1	4.0
7439-95-4	MAGNESIUM, TOTAL	2430			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	4.0	U		P	1	5.0	1.1	4.0
7439-97-6	MERCURY, TOTAL	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	0.48	J		P	1	10	0.28	4.0
7440-09-7	POTASSIUM, TOTAL	1720			P	1	1000	41.	500
7782-49-2	SELENIUM, TOTAL	7.0	U		P	1	10	2.4	7.0
7440-22-4	SILVER, TOTAL	4.0	U		P	1	10	0.27	4.0
7440-23-5	SODIUM, TOTAL	22600			P	1	1000	24.	500
7440-28-0	THALLIUM, TOTAL	5.0	U		P	1	15	1.1	5.0
7440-62-2	VANADIUM, TOTAL	0.42	J		P	1	10	0.23	4.0
7440-66-6	ZINC, TOTAL	31.8			P	1	20	0.72	10

Comments:

QC Summary Section

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICV

File: HID03A Apr 03, 2015 11:09

Analyte	True	Found	%R (1)
MERCURY	6.0	5.86	97.7

SAMPLE: CCV

File: HID03A Apr 03, 2015 11:16

Analyte	True	Found	%R (1)
MERCURY	5.0	5.00	100.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCV

File: HID03A Apr 03, 2015 11:39

Analyte	True	Found	%R (1)
MERCURY	5.0	5.03	100.6

SAMPLE: CCV

File: HID03A Apr 03, 2015 12:05

Analyte	True	Found	%R (1)
MERCURY	5.0	5.00	100.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICV

File: IID02A Apr 02, 2015 13:36

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10180.00	101.8
ANTIMONY	400.0	403.70	100.9
ARSENIC	400.0	392.50	98.1
BARIUM	400.0	402.70	100.7
BERYLLIUM	400.0	404.80	101.2
CADMIUM	400.0	408.10	102.0
CALCIUM	10000.0	10260.00	102.6
CHROMIUM	400.0	407.10	101.8
COBALT	400.0	411.40	102.8
COPPER	400.0	397.60	99.4
IRON	10000.0	10150.00	101.5
MAGNESIUM	10000.0	10370.00	103.7
MANGANESE	400.0	405.10	101.3
NICKEL	400.0	412.70	103.2
POTASSIUM	13600.0	13680.00	100.6
SELENIUM	400.0	402.40	100.6
SODIUM	10000.0	10310.00	103.1
THALLIUM	400.0	420.50	105.1
VANADIUM	400.0	406.80	101.7
ZINC	400.0	408.00	102.0

SAMPLE: CCV

File: IID02A Apr 02, 2015 14:14

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11830.00	94.6
ANTIMONY	500.0	493.10	98.6
ARSENIC	500.0	488.50	97.7
BARIUM	500.0	476.80	95.4
BERYLLIUM	500.0	475.00	95.0
CADMIUM	500.0	502.00	100.4
CALCIUM	12500.0	12050.00	96.4
CHROMIUM	500.0	500.50	100.1
COBALT	500.0	498.40	99.7
COPPER	500.0	491.00	98.2
IRON	12500.0	11790.00	94.3
MAGNESIUM	12500.0	12530.00	100.2
MANGANESE	500.0	477.00	95.4
NICKEL	500.0	502.80	100.6
POTASSIUM	12500.0	11870.00	95.0
SELENIUM	500.0	486.60	97.3
SODIUM	12500.0	11950.00	95.6
THALLIUM	500.0	499.80	100.0
VANADIUM	500.0	493.30	98.7
ZINC	500.0	492.00	98.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCV

File: IID02A Apr 02, 2015 15:10

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12080.00	96.6
ANTIMONY	500.0	492.20	98.4
ARSENIC	500.0	486.70	97.3
BARIUM	500.0	484.30	96.9
BERYLLIUM	500.0	482.80	96.6
CADMIUM	500.0	502.30	100.5
CALCIUM	12500.0	12170.00	97.4
CHROMIUM	500.0	509.40	101.9
COBALT	500.0	497.20	99.4
COPPER	500.0	491.40	98.3
IRON	12500.0	11920.00	95.4
MAGNESIUM	12500.0	12540.00	100.3
MANGANESE	500.0	490.50	98.1
NICKEL	500.0	502.90	100.6
POTASSIUM	12500.0	12040.00	96.3
SELENIUM	500.0	483.50	96.7
SODIUM	12500.0	12200.00	97.6
THALLIUM	500.0	493.10	98.6
VANADIUM	500.0	498.00	99.6
ZINC	500.0	488.60	97.7

SAMPLE: CCV

File: IID02A Apr 02, 2015 16:08

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12310.00	98.5
ANTIMONY	500.0	494.70	98.9
ARSENIC	500.0	488.20	97.6
BARIUM	500.0	491.40	98.3
BERYLLIUM	500.0	492.70	98.5
CADMIUM	500.0	503.90	100.8
CALCIUM	12500.0	12340.00	98.7
CHROMIUM	500.0	514.90	103.0
COBALT	500.0	497.00	99.4
COPPER	500.0	491.50	98.3
IRON	12500.0	12110.00	96.9
MAGNESIUM	12500.0	12570.00	100.6
MANGANESE	500.0	498.50	99.7
NICKEL	500.0	503.90	100.8
POTASSIUM	12500.0	12200.00	97.6
SELENIUM	500.0	483.60	96.7
SODIUM	12500.0	12370.00	99.0
THALLIUM	500.0	493.30	98.7
VANADIUM	500.0	506.40	101.3
ZINC	500.0	488.60	97.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCV

File: IID02A Apr 02, 2015 17:04

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12220.00	97.8
ANTIMONY	500.0	497.20	99.4
ARSENIC	500.0	487.90	97.6
BARIUM	500.0	491.30	98.3
BERYLLIUM	500.0	489.40	97.9
CADMIUM	500.0	506.80	101.4
CALCIUM	12500.0	12140.00	97.1
CHROMIUM	500.0	513.00	102.6
COBALT	500.0	497.80	99.6
COPPER	500.0	496.50	99.3
IRON	12500.0	11890.00	95.1
MAGNESIUM	12500.0	12730.00	101.8
MANGANESE	500.0	495.30	99.1
NICKEL	500.0	505.30	101.1
POTASSIUM	12500.0	12150.00	97.2
SELENIUM	500.0	483.20	96.6
SODIUM	12500.0	12310.00	98.5
THALLIUM	500.0	491.50	98.3
VANADIUM	500.0	504.60	100.9
ZINC	500.0	482.70	96.5

SAMPLE: CCV

File: IID02A Apr 02, 2015 18:01

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13290.00	106.3
ANTIMONY	500.0	499.60	99.9
ARSENIC	500.0	489.60	97.9
BARIUM	500.0	535.80	107.2
BERYLLIUM	500.0	531.00	106.2
CADMIUM	500.0	505.00	101.0
CALCIUM	12500.0	13260.00	106.1
CHROMIUM	500.0	510.10	102.0
COBALT	500.0	496.30	99.3
COPPER	500.0	492.20	98.4
IRON	12500.0	12920.00	103.4
MAGNESIUM	12500.0	12710.00	101.7
MANGANESE	500.0	537.60	107.5
NICKEL	500.0	505.40	101.1
POTASSIUM	12500.0	13140.00	105.1
SELENIUM	500.0	485.80	97.2
SODIUM	12500.0	13410.00	107.3
THALLIUM	500.0	490.60	98.1
VANADIUM	500.0	497.70	99.5
ZINC	500.0	481.30	96.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCV

File: IID02A Apr 02, 2015 18:58

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12290.00	98.3
ANTIMONY	500.0	495.90	99.2
ARSENIC	500.0	487.90	97.6
BARIUM	500.0	501.00	100.2
BERYLLIUM	500.0	491.70	98.3
CADMIUM	500.0	514.20	102.8
CALCIUM	12500.0	12570.00	100.6
CHROMIUM	500.0	525.20	105.0
COBALT	500.0	492.10	98.4
COPPER	500.0	488.10	97.6
IRON	12500.0	11900.00	95.2
MAGNESIUM	12500.0	12790.00	102.3
MANGANESE	500.0	508.40	101.7
NICKEL	500.0	509.10	101.8
POTASSIUM	12500.0	12280.00	98.2
SELENIUM	500.0	475.70	95.1
SODIUM	12500.0	12660.00	101.3
THALLIUM	500.0	483.90	96.8
VANADIUM	500.0	500.10	100.0
ZINC	500.0	479.80	96.0

SAMPLE: CCV

File: IID02A Apr 02, 2015 19:55

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12250.00	98.0
ANTIMONY	500.0	499.10	99.8
ARSENIC	500.0	488.00	97.6
BARIUM	500.0	491.30	98.3
BERYLLIUM	500.0	486.60	97.3
CADMIUM	500.0	509.80	102.0
CALCIUM	12500.0	12270.00	98.2
CHROMIUM	500.0	513.20	102.6
COBALT	500.0	494.00	98.8
COPPER	500.0	483.00	96.6
IRON	12500.0	11790.00	94.3
MAGNESIUM	12500.0	12760.00	102.1
MANGANESE	500.0	498.80	99.8
NICKEL	500.0	507.70	101.5
POTASSIUM	12500.0	12130.00	97.0
SELENIUM	500.0	477.40	95.5
SODIUM	12500.0	12380.00	99.0
THALLIUM	500.0	484.00	96.8
VANADIUM	500.0	497.80	99.6
ZINC	500.0	479.30	95.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCV

File: IID02A Apr 02, 2015 20:43

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11920.00	95.4
ANTIMONY	500.0	495.50	99.1
ARSENIC	500.0	482.90	96.6
BARIUM	500.0	491.70	98.3
BERYLLIUM	500.0	480.40	96.1
CADMIUM	500.0	524.80	105.0
CALCIUM	12500.0	12490.00	99.9
CHROMIUM	500.0	536.10	107.2
COBALT	500.0	488.00	97.6
COPPER	500.0	482.50	96.5
IRON	12500.0	11580.00	92.6
MAGNESIUM	12500.0	13020.00	104.2
MANGANESE	500.0	507.30	101.5
NICKEL	500.0	515.10	103.0
POTASSIUM	12500.0	11870.00	95.0
SELENIUM	500.0	465.00	93.0
SODIUM	12500.0	12540.00	100.3
THALLIUM	500.0	476.10	95.2
VANADIUM	500.0	498.00	99.6
ZINC	500.0	476.50	95.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICV

File: IID03A Apr 03, 2015 12:59

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9995.00	100.0
ANTIMONY	400.0	401.80	100.4
ARSENIC	400.0	396.70	99.2
BARIUM	400.0	392.80	98.2
BERYLLIUM	400.0	395.20	98.8
CADMIUM	400.0	408.10	102.0
CALCIUM	10000.0	10030.00	100.3
CHROMIUM	400.0	413.10	103.3
COBALT	400.0	413.70	103.4
COPPER	400.0	407.40	101.8
IRON	10000.0	10060.00	100.6
LEAD	400.0	413.70	103.4
MAGNESIUM	10000.0	10440.00	104.4
MANGANESE	400.0	396.30	99.1
NICKEL	400.0	413.30	103.3
POTASSIUM	13600.0	13610.00	100.1
SILVER	400.0	405.80	101.4
SODIUM	10000.0	10100.00	101.0
THALLIUM	400.0	420.80	105.2
VANADIUM	400.0	414.20	103.5
ZINC	400.0	411.50	102.9

SAMPLE: CCV

File: IID03A Apr 03, 2015 13:37

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12130.00	97.0
ANTIMONY	500.0	495.00	99.0
ARSENIC	500.0	493.90	98.8
BARIUM	500.0	484.30	96.9
BERYLLIUM	500.0	486.20	97.2
CADMIUM	500.0	497.90	99.6
CALCIUM	12500.0	12270.00	98.2
CHROMIUM	500.0	508.40	101.7
COBALT	500.0	501.40	100.3
COPPER	500.0	503.80	100.8
IRON	12500.0	12190.00	97.5
LEAD	500.0	503.70	100.7
MAGNESIUM	12500.0	12490.00	99.9
MANGANESE	500.0	482.80	96.6
NICKEL	500.0	503.70	100.7
POTASSIUM	12500.0	12170.00	97.4
SILVER	500.0	502.70	100.5
SODIUM	12500.0	12140.00	97.1
THALLIUM	500.0	502.00	100.4
VANADIUM	500.0	504.20	100.8
ZINC	500.0	499.40	99.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCV

File: IID03A Apr 03, 2015 14:35

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12280.00	98.2
ANTIMONY	500.0	492.20	98.4
ARSENIC	500.0	491.10	98.2
BARIUM	500.0	482.90	96.6
BERYLLIUM	500.0	491.50	98.3
CADMIUM	500.0	499.50	99.9
CALCIUM	12500.0	12170.00	97.4
CHROMIUM	500.0	511.60	102.3
COBALT	500.0	501.70	100.3
COPPER	500.0	505.40	101.1
IRON	12500.0	12470.00	99.8
LEAD	500.0	505.60	101.1
MAGNESIUM	12500.0	12530.00	100.2
MANGANESE	500.0	489.70	97.9
NICKEL	500.0	502.80	100.6
POTASSIUM	12500.0	12320.00	98.6
SILVER	500.0	507.10	101.4
SODIUM	12500.0	12150.00	97.2
THALLIUM	500.0	504.10	100.8
VANADIUM	500.0	511.20	102.2
ZINC	500.0	497.30	99.5

SAMPLE: CCV

File: IID03A Apr 03, 2015 15:31

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12310.00	98.5
ANTIMONY	500.0	491.70	98.3
ARSENIC	500.0	491.60	98.3
BARIUM	500.0	484.90	97.0
BERYLLIUM	500.0	491.40	98.3
CADMIUM	500.0	496.40	99.3
CALCIUM	12500.0	12130.00	97.0
CHROMIUM	500.0	509.30	101.9
COBALT	500.0	498.40	99.7
COPPER	500.0	502.60	100.5
IRON	12500.0	12520.00	100.2
LEAD	500.0	504.70	100.9
MAGNESIUM	12500.0	12520.00	100.2
MANGANESE	500.0	492.70	98.5
NICKEL	500.0	500.80	100.2
POTASSIUM	12500.0	12530.00	100.2
SILVER	500.0	505.60	101.1
SODIUM	12500.0	12140.00	97.1
THALLIUM	500.0	505.00	101.0
VANADIUM	500.0	507.30	101.5
ZINC	500.0	493.40	98.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCV

File: IID03A Apr 03, 2015 16:28

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12200.00	97.6
ANTIMONY	500.0	491.40	98.3
ARSENIC	500.0	490.20	98.0
BARIUM	500.0	484.40	96.9
BERYLLIUM	500.0	486.30	97.3
CADMIUM	500.0	498.30	99.7
CALCIUM	12500.0	12030.00	96.2
CHROMIUM	500.0	505.30	101.1
COBALT	500.0	500.00	100.0
COPPER	500.0	498.50	99.7
IRON	12500.0	12240.00	97.9
LEAD	500.0	505.40	101.1
MAGNESIUM	12500.0	12480.00	99.8
MANGANESE	500.0	483.00	96.6
NICKEL	500.0	502.40	100.5
POTASSIUM	12500.0	12340.00	98.7
SILVER	500.0	498.70	99.7
SODIUM	12500.0	12180.00	97.4
THALLIUM	500.0	506.40	101.3
VANADIUM	500.0	502.30	100.5
ZINC	500.0	498.30	99.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICV

File: IID20A Apr 20, 2015 15:27

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10550.00	105.5
CALCIUM	10000.0	10100.00	101.0
IRON	10000.0	9977.00	99.8
MAGNESIUM	10000.0	10240.00	102.4
SELENIUM	400.0	396.60	99.2

SAMPLE: CCV

File: IID20A Apr 20, 2015 16:06

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13130.00	105.0
CALCIUM	12500.0	13230.00	105.8
IRON	12500.0	12950.00	103.6
MAGNESIUM	12500.0	12980.00	103.8
SELENIUM	500.0	494.30	98.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCV

File: IID20A Apr 20, 2015 17:02

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13080.00	104.6
CALCIUM	12500.0	13080.00	104.6
IRON	12500.0	12850.00	102.8
MAGNESIUM	12500.0	12800.00	102.4
SELENIUM	500.0	487.50	97.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICV

File: IID21A Apr 21, 2015 11:16

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10660.00	106.6
CALCIUM	10000.0	10250.00	102.5
IRON	10000.0	10110.00	101.1
MAGNESIUM	10000.0	10110.00	101.1
SELENIUM	400.0	394.50	98.6

SAMPLE: CCV

File: IID21A Apr 21, 2015 11:55

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13060.00	104.5
CALCIUM	12500.0	12940.00	103.5
IRON	12500.0	12840.00	102.7
MAGNESIUM	12500.0	12660.00	101.3
SELENIUM	500.0	498.00	99.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCV

File: IID21A Apr 21, 2015 12:52

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12870.00	103.0
CALCIUM	12500.0	12620.00	101.0
IRON	12500.0	12720.00	101.8
MAGNESIUM	12500.0	12910.00	103.3
SELENIUM	500.0	492.50	98.5

SAMPLE: CCV

File: IID21A Apr 21, 2015 13:29

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12860.00	102.9
CALCIUM	12500.0	12620.00	101.0
IRON	12500.0	12760.00	102.1
MAGNESIUM	12500.0	12770.00	102.2
SELENIUM	500.0	500.90	100.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: PQL

File: HID03A Apr 03, 2015 11:14

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.20	100.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: PQL

File: IID02A Apr 02, 2015 13:45

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	278.00	92.7
ANTIMONY	8.0	8.28	103.5
ARSENIC	8.0	8.27	103.4
BARIUM	5.0	5.02	100.4
BERYLLIUM	5.0	4.74	94.8
CADMIUM	5.0	4.93	98.6
CALCIUM	100.0	39.47	39.5•
CHROMIUM	10.0	9.80	98.0
COBALT	10.0	10.33	103.3
COPPER	25.0	24.75	99.0
IRON	100.0	79.79	79.8
MAGNESIUM	100.0	-29.41	-29.4•
MANGANESE	5.0	4.57	91.4
NICKEL	10.0	10.42	104.2
POTASSIUM	1000.0	989.70	99.0
SELENIUM	10.0	10.23	102.3
SODIUM	1000.0	1004.00	100.4
THALLIUM	15.0	15.93	106.2
VANADIUM	10.0	9.76	97.6
ZINC	20.0	19.96	99.8

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: PQL

File: IID03A Apr 03, 2015 13:08

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	316.40	105.5
ANTIMONY	8.0	7.75	96.9
ARSENIC	8.0	8.50	106.3
BARIUM	5.0	5.30	106.0
BERYLLIUM	5.0	5.30	106.0
CADMIUM	5.0	5.02	100.4
CALCIUM	100.0	109.80	109.8
CHROMIUM	10.0	10.14	101.4
COBALT	10.0	10.12	101.2
COPPER	25.0	25.37	101.5
IRON	100.0	113.40	113.4
LEAD	5.0	5.04	100.8
MAGNESIUM	100.0	102.20	102.2
MANGANESE	5.0	4.97	99.4
NICKEL	10.0	10.28	102.8
POTASSIUM	1000.0	1068.00	106.8
SILVER	10.0	10.15	101.5
SODIUM	1000.0	1103.00	110.3
THALLIUM	15.0	17.28	115.2
VANADIUM	10.0	10.11	101.1
ZINC	20.0	19.93	99.6

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: PQL

File: IID20A Apr 20, 2015 15:36

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	326.90	109.0
CALCIUM	100.0	120.40	120.4
IRON	100.0	107.90	107.9
MAGNESIUM	100.0	106.50	106.5
SELENIUM	10.0	8.67	86.7

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: PQL

File: IID21A Apr 21, 2015 11:26

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	335.00	111.7
CALCIUM	100.0	124.30	124.3•
IRON	100.0	113.80	113.8
MAGNESIUM	100.0	106.60	106.6
SELENIUM	10.0	8.76	87.6

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICB

File: HID03A Apr 03, 2015 11:11

Analyte	Result	C
MERCURY	0.033	U

SAMPLE: CCB

File: HID03A Apr 03, 2015 11:18

Analyte	Result	C
MERCURY	0.033	U

SAMPLE: CCB

File: HID03A Apr 03, 2015 11:41

Analyte	Result	C
MERCURY	0.033	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCB

File: HID03A Apr 03, 2015 12:07

Analyte	Result	C
MERCURY	0.033	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICB

File: IID02A Apr 02, 2015 13:40

Analyte	Result	C
ALUMINUM	-21.990	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.310	U
BERYLLIUM	0.270	J
CADMIUM	0.074	U
CALCIUM	-44.970	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	-6.150	U
MAGNESIUM	-128.400	B
MANGANESE	0.560	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	3.109	J
SODIUM	33.000	U
THALLIUM	1.837	J
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB

File: IID02A Apr 02, 2015 14:18

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	2.165	J
BARIUM	0.531	J
BERYLLIUM	0.231	J
CADMIUM	0.078	J
CALCIUM	-49.530	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	-9.826	U
MAGNESIUM	-130.800	B
MANGANESE	-0.732	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	4.136	J
SODIUM	33.000	U
THALLIUM	1.539	J
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB

File: IID02A Apr 02, 2015 15:15

Analyte	Result	C
ALUMINUM	-26.430	U
ANTIMONY	1.600	U
ARSENIC	2.002	J
BARIUM	0.310	U
BERYLLIUM	0.278	J
CADMIUM	0.111	J
CALCIUM	-48.120	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	-10.530	U
MAGNESIUM	-130.100	B
MANGANESE	0.560	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SODIUM	33.000	U
THALLIUM	1.650	J
VANADIUM	0.410	U
ZINC	0.450	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCB

File: IID02A Apr 02, 2015 16:12

Analyte	Result	C
ALUMINUM	-27.240	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.310	U
BERYLLIUM	0.095	U
CADMIUM	0.084	J
CALCIUM	-48.110	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	-13.000	U
MAGNESIUM	-131.900	B
MANGANESE	-0.716	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SODIUM	33.000	U
THALLIUM	1.100	U
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB

File: IID02A Apr 02, 2015 17:09

Analyte	Result	C
ALUMINUM	-27.660	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.310	U
BERYLLIUM	0.221	J
CADMIUM	0.081	J
CALCIUM	-40.940	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	-11.370	U
MAGNESIUM	-126.700	B
MANGANESE	-0.796	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	3.548	J
SODIUM	33.000	U
THALLIUM	2.089	J
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB

File: IID02A Apr 02, 2015 18:06

Analyte	Result	C
ALUMINUM	-30.010	U
ANTIMONY	1.600	U
ARSENIC	1.919	J
BARIUM	0.329	J
BERYLLIUM	0.220	J
CADMIUM	0.165	J
CALCIUM	-49.040	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	-12.080	U
MAGNESIUM	-128.000	B
MANGANESE	-0.691	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SODIUM	33.000	U
THALLIUM	1.955	J
VANADIUM	0.410	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCB
File: IID02A Apr 02, 2015 19:02

Analyte	Result	C
ALUMINUM	-18.380	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.451	J
BERYLLIUM	0.329	J
CADMIUM	0.242	J
CALCIUM	-44.170	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	-6.911	U
MAGNESIUM	-125.300	B
MANGANESE	0.560	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SODIUM	33.000	U
THALLIUM	2.923	J
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB
File: IID02A Apr 02, 2015 20:00

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.319	J
BERYLLIUM	0.311	J
CADMIUM	0.343	J
CALCIUM	-46.230	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.897	J
IRON	-8.422	U
MAGNESIUM	-122.200	B
MANGANESE	0.560	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SODIUM	33.000	U
THALLIUM	1.100	U
VANADIUM	0.480	J
ZINC	0.450	U

SAMPLE: CCB
File: IID02A Apr 02, 2015 20:47

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.377	J
BERYLLIUM	0.419	J
CADMIUM	0.243	J
CALCIUM	-51.550	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	1.022	J
IRON	-8.490	U
MAGNESIUM	-128.500	B
MANGANESE	-1.028	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SODIUM	42.380	J
THALLIUM	1.100	U
VANADIUM	0.476	J
ZINC	0.450	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICB

File: IID03A Apr 03, 2015 13:03

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.310	U
BERYLLIUM	0.347	J
CADMIUM	0.098	J
CALCIUM	8.700	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	10.300	J
LEAD	1.000	U
MAGNESIUM	7.700	U
MANGANESE	-1.134	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SILVER	0.540	U
SODIUM	33.000	U
THALLIUM	2.718	J
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB

File: IID03A Apr 03, 2015 13:42

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.487	J
BERYLLIUM	0.280	J
CADMIUM	0.142	J
CALCIUM	8.700	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	1.193	J
IRON	9.760	J
LEAD	1.000	U
MAGNESIUM	7.700	U
MANGANESE	-0.961	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SILVER	0.540	U
SODIUM	33.000	U
THALLIUM	2.417	J
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB

File: IID03A Apr 03, 2015 14:39

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.310	U
BERYLLIUM	0.305	J
CADMIUM	0.192	J
CALCIUM	8.700	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	10.940	J
LEAD	1.000	U
MAGNESIUM	7.700	U
MANGANESE	-0.903	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SILVER	0.540	U
SODIUM	33.000	U
THALLIUM	2.122	J
VANADIUM	0.410	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCB

File: IID03A Apr 03, 2015 15:36

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.310	U
BERYLLIUM	0.391	J
CADMIUM	0.168	J
CALCIUM	14.020	J
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	12.280	J
LEAD	1.000	U
MAGNESIUM	7.700	U
MANGANESE	-0.884	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SILVER	0.540	U
SODIUM	33.000	U
THALLIUM	1.920	J
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB

File: IID03A Apr 03, 2015 16:33

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.310	U
BERYLLIUM	0.340	J
CADMIUM	0.201	J
CALCIUM	12.450	J
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	8.177	J
LEAD	1.000	U
MAGNESIUM	7.700	U
MANGANESE	-1.135	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SILVER	0.540	U
SODIUM	33.000	U
THALLIUM	2.425	J
VANADIUM	0.410	U
ZINC	0.450	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICB

File: IID20A Apr 20, 2015 15:31

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U
SELENIUM	3.367	J

SAMPLE: CCB

File: IID20A Apr 20, 2015 16:10

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U
SELENIUM	2.800	U

SAMPLE: CCB

File: IID20A Apr 20, 2015 17:07

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	9.700	U
IRON	7.517	J
MAGNESIUM	5.200	U
SELENIUM	3.214	J

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICB

File: IID21A Apr 21, 2015 11:21

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U
SELENIUM	2.800	U

SAMPLE: CCB

File: IID21A Apr 21, 2015 12:00

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	32.470	J
IRON	24.370	J
MAGNESIUM	8.364	J
SELENIUM	2.800	U

SAMPLE: CCB

File: IID21A Apr 21, 2015 12:56

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	34.530	J
IRON	24.380	J
MAGNESIUM	12.610	J
SELENIUM	2.800	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: CCB

File: IID21A Apr 21, 2015 13:34

Analyte	Result	C
ALUMINUM	24.540	J
CALCIUM	32.390	J
IRON	21.390	J
MAGNESIUM	13.430	J
SELENIUM	2.800	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWID02HGW2

Matrix: WATER **SDG Name:** SI2008

QC Batch ID: ID02HGW2

Concentration Units : ug/L

Analyte	RESULT	C
MERCURY	0.10	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWID02ICW2

Matrix: WATER **SDG Name:** SI2008

QC Batch ID: ID02ICW2

Concentration Units : ug/L

Analyte	RESULT	C
ALUMINUM	100	U
ANTIMONY	5.0	U
ARSENIC	5.0	U
BARIUM	3.0	U
BERYLLIUM	0.50	U
CADMIUM	3.0	U
CALCIUM	80	U
CHROMIUM	4.0	U
COBALT	4.0	U
COPPER	0.72	J
IRON	80	U
LEAD	4.0	U
MAGNESIUM	80	U
MANGANESE	4.0	U
NICKEL	4.0	U
POTASSIUM	500	U
SELENIUM	7.0	U
SILVER	4.0	U
SODIUM	26	J
THALLIUM	5.0	U
VANADIUM	4.0	U
ZINC	10	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWID17ICW1

Matrix: WATER **SDG Name:** SI2008

QC Batch ID: ID17ICW1

Concentration Units : ug/L

Analyte	RESULT	C
SELENIUM	7.0	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICSA

File: IID02A Apr 02, 2015 14:05

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	491200	98.2
ANTIMONY	0	-1	
ARSENIC	0	-1	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	1	
CALCIUM	500000	452100	90.4
CHROMIUM	0	0	
COBALT	0	0	
COPPER	0	-2	
IRON	200000	176900	88.4
MAGNESIUM	500000	475000	95.0
MANGANESE	0	-3	
NICKEL	0	3	
POTASSIUM	0	174	
SELENIUM	0	5	
SODIUM	0	80	
THALLIUM	0	2	
VANADIUM	0	-1	
ZINC	0	0	

SAMPLE: ICSAB

File: IID02A Apr 02, 2015 14:09

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	467300	93.5
ANTIMONY	600	573	95.5
ARSENIC	100	89	89.0
BARIUM	500	461	92.2
BERYLLIUM	500	455	91.0
CADMIUM	1000	890	89.0
CALCIUM	500000	436000	87.2
CHROMIUM	500	461	92.2
COBALT	500	440	88.0
COPPER	500	487	97.4
IRON	200000	168200	84.1
MAGNESIUM	500000	458800	91.8
MANGANESE	500	435	87.0
NICKEL	1000	870	87.0
POTASSIUM	20000	19280	96.4
SELENIUM	50	47	94.0
SODIUM	20000	19700	98.5
THALLIUM	100	91	91.0
VANADIUM	500	470	94.0
ZINC	1000	863	86.3

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICSA

File: IID03A Apr 03, 2015 13:28

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	485600	97.1
ANTIMONY	0	0	
ARSENIC	0	-1	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	2	
CALCIUM	500000	448800	89.8
CHROMIUM	0	0	
COBALT	0	0	
COPPER	0	-1	
IRON	200000	177000	88.5
LEAD	0	2	
MAGNESIUM	500000	472300	94.5
MANGANESE	0	-2	
NICKEL	0	0	
POTASSIUM	0	171	
SILVER	0	-4	
SODIUM	0	100	
THALLIUM	0	3	
VANADIUM	0	0	
ZINC	0	0	

SAMPLE: ICSAB

File: IID03A Apr 03, 2015 13:33

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	464200	92.8
ANTIMONY	600	572	95.3
ARSENIC	100	88	88.0
BARIUM	500	454	90.8
BERYLLIUM	500	450	90.0
CADMIUM	1000	881	88.1
CALCIUM	500000	426500	85.3
CHROMIUM	500	458	91.6
COBALT	500	440	88.0
COPPER	500	489	97.8
IRON	200000	168700	84.4
LEAD	50	44	88.0
MAGNESIUM	500000	452700	90.5
MANGANESE	500	428	85.6
NICKEL	1000	866	86.6
POTASSIUM	20000	19360	96.8
SILVER	200	201	100.5
SODIUM	20000	19440	97.2
THALLIUM	100	88	88.0
VANADIUM	500	468	93.6
ZINC	1000	869	86.9

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICSA

File: IID20A Apr 20, 2015 15:56

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	525900	105.2
CALCIUM	500000	489100	97.8
IRON	200000	193300	96.7
MAGNESIUM	500000	483800	96.8
SELENIUM	0	7	

SAMPLE: ICSAB

File: IID20A Apr 20, 2015 16:01

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	493500	98.7
CALCIUM	500000	456000	91.2
IRON	200000	184700	92.3
MAGNESIUM	500000	468900	93.8
SELENIUM	50	56	112.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Concentration Units: ug/L

SAMPLE: ICSA

File: IID21A Apr 21, 2015 11:46

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	502600	100.5
CALCIUM	500000	472700	94.5
IRON	200000	192100	96.0
MAGNESIUM	500000	475600	95.1
SELENIUM	0	5	

SAMPLE: ICSAB

File: IID21A Apr 21, 2015 11:50

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	496700	99.3
CALCIUM	500000	468300	93.7
IRON	200000	187000	93.5
MAGNESIUM	500000	460700	92.1
SELENIUM	50	54	108.0

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-09-GW-033115S

Matrix: WATER **SDG Name:** SI2008

Percent Solids: 0.00 **Lab Sample ID:** SI2008-001P

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, TOTAL	2160		58	J	2000	105.3		80	120	P
ANTIMONY, TOTAL	104		5.0	U	100	103.9		80	120	P
ARSENIC, TOTAL	105		5.0	U	100	104.6		80	120	P
BARIUM, TOTAL	2010		33.2		2000	99.0		80	120	P
BERYLLIUM, TOTAL	52.2		0.10	J	50	104.2		80	120	P
CADMIUM, TOTAL	286		22.7		250	105.5		80	120	P
CALCIUM, TOTAL	15600		12600		2500	119.6		80	120	P
CHROMIUM, TOTAL	222		9.35	J	200	106.1		80	120	P
COBALT, TOTAL	522		4.0	U	500	104.5		80	120	P
COPPER, TOTAL	260		0.76	J	250	103.9		80	120	P
IRON, TOTAL	1110		48	J	1000	106.2		80	120	P
LEAD, TOTAL	105		4.0	U	100	104.9		80	120	P
MAGNESIUM, TOTAL	7550		2310		5000	104.8		80	120	P
MANGANESE, TOTAL	507		4.0	U	500	101.4		80	120	P
MERCURY, TOTAL	1.19		0.10	U	1	119.1		80	120	CV
NICKEL, TOTAL	522		0.85	J	500	104.2		80	120	P
POTASSIUM, TOTAL	12400		1840		10000	106.1		80	120	P
SELENIUM, TOTAL	107		7.0	U	100	107.2		80	120	P
SILVER, TOTAL	51.3		4.0	U	50	102.5		80	120	P
SODIUM, TOTAL	33100		25000		7500	107.5		80	120	P
THALLIUM, TOTAL	121		1.2	J	100	120.0		80	120	P
VANADIUM, TOTAL	532		0.60	J	500	106.3		80	120	P
ZINC, TOTAL	547		25.8		500	104.3		80	120	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-09-GW-033115S

Matrix: WATER **SDG Name:** SI2008

Percent Solids: 0.00 **Lab Sample ID:** SI2008-001S

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, TOTAL	2130		58	J	2000	103.4		80	120	P
ANTIMONY, TOTAL	103		5.0	U	100	103.2		80	120	P
ARSENIC, TOTAL	105		5.0	U	100	104.6		80	120	P
BARIUM, TOTAL	1990		33.2		2000	97.8		80	120	P
BERYLLIUM, TOTAL	51.6		0.10	J	50	103.1		80	120	P
CADMIUM, TOTAL	282		22.7		250	103.5		80	120	P
CALCIUM, TOTAL	15300		12600		2500	109.6		80	120	P
CHROMIUM, TOTAL	219		9.35	J	200	105.0		80	120	P
COBALT, TOTAL	515		4.0	U	500	103.0		80	120	P
COPPER, TOTAL	260		0.76	J	250	103.5		80	120	P
IRON, TOTAL	1100		48	J	1000	105.1		80	120	P
LEAD, TOTAL	104		4.0	U	100	104.0		80	120	P
MAGNESIUM, TOTAL	7420		2310		5000	102.3		80	120	P
MANGANESE, TOTAL	503		4.0	U	500	100.6		80	120	P
MERCURY, TOTAL	1.07		0.10	U	1	106.9		80	120	CV
NICKEL, TOTAL	515		0.85	J	500	102.8		80	120	P
POTASSIUM, TOTAL	12400		1840		10000	105.5		80	120	P
SELENIUM, TOTAL	103		7.0	U	100	102.9		80	120	P
SILVER, TOTAL	50.8		4.0	U	50	101.6		80	120	P
SODIUM, TOTAL	32600		25000		7500	101.3		80	120	P
THALLIUM, TOTAL	121		1.2	J	100	120.0		80	120	P
VANADIUM, TOTAL	526		0.60	J	500	105.1		80	120	P
ZINC, TOTAL	539		25.8		500	102.7		80	120	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-09-GW-033115S

Matrix: WATER **SDG Name:** SI2008

Percent Solids: 0.00 **Lab Sample ID:** SI2008-001A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, TOTAL	11000		58	J	10500	103.7		75	125	P
ANTIMONY, TOTAL	533		1.3	U	500	106.6		75	125	P
ARSENIC, TOTAL	530		1.4	U	500	105.9		75	125	P
BARIUM, TOTAL	540		33.2		500	101.4		75	125	P
BERYLLIUM, TOTAL	544		0.10	J	500	108.8		75	125	P
CADMIUM, TOTAL	572		22.7		500	109.8		75	125	P
CALCIUM, TOTAL	17800		12600		5500	94.7		75	125	P
CHROMIUM, TOTAL	569		9.35	J	500	111.9		75	125	P
COBALT, TOTAL	555		0.24	U	500	110.9		75	125	P
COPPER, TOTAL	556		0.76	J	500	111.0		75	125	P
IRON, TOTAL	5740		48	J	5500	103.4		75	125	P
LEAD, TOTAL	544		1.1	U	500	108.8		75	125	P
MAGNESIUM, TOTAL	8040		2310		5500	104.2		75	125	P
MANGANESE, TOTAL	534		1.1	U	500	106.9		75	125	P
MERCURY, TOTAL	1.08		0.013	U	1	107.9		75	125	CV
NICKEL, TOTAL	555		0.85	J	500	110.9		75	125	P
POTASSIUM, TOTAL	12500		1840		10000	106.6		75	125	P
SELENIUM, TOTAL	680		2.4	U	500	136.0	A	75	125	P
SILVER, TOTAL	530		0.27	U	500	106.1		75	125	P
SODIUM, TOTAL	29500		25000		5500	82.5		75	125	P
THALLIUM, TOTAL	573		1.2	J	500	114.4		75	125	P
VANADIUM, TOTAL	569		0.60	J	500	113.7		75	125	P
ZINC, TOTAL	598		25.8		500	114.3		75	125	P

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-09-GW-033115

Matrix: WATER **SDG Name:** SI2008

Percent Solids: 0.00 **Lab Sample ID:** SI2008-001

Concentration Units : ug/L

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ALUMINUM, TOTAL		2130		2160		1.7		P
ANTIMONY, TOTAL		103		104		0.7		P
ARSENIC, TOTAL		105		105		0.0		P
BARIUM, TOTAL		1990		2010		1.2		P
BERYLLIUM, TOTAL		51.6		52.2		1.1		P
CADMIUM, TOTAL		282		286		1.8		P
CALCIUM, TOTAL		15300		15600		1.6		P
CHROMIUM, TOTAL		219		222		1.0		P
COBALT, TOTAL		515		522		1.4		P
COPPER, TOTAL		260		260		0.4		P
IRON, TOTAL		1100		1110		1.0		P
LEAD, TOTAL		104		105		0.9		P
MAGNESIUM, TOTAL		7420		7550		1.7		P
MANGANESE, TOTAL		503		507		0.7		P
MERCURY, TOTAL		1.07		1.19		10.8		CV
NICKEL, TOTAL		515		522		1.4		P
POTASSIUM, TOTAL		12400		12400		0.5		P
SELENIUM, TOTAL		103		107		4.1		P
SILVER, TOTAL		50.8		51.3		0.9		P
SODIUM, TOTAL		32600		33100		1.4		P
THALLIUM, TOTAL		121		121		0.0		P
VANADIUM, TOTAL		526		532		1.1		P
ZINC, TOTAL		539		547		1.5		P

Comments:

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWID02HGW2

Matrix: WATER **SDG Name:** SI2008

QC Batch ID: ID02HGW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.00	5.31	106.2	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWID02ICW2

Matrix: WATER **SDG Name:** SI2008

QC Batch ID: ID02ICW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	2000	1970	98.6	80	120
ANTIMONY	100	104	103.9	80	120
ARSENIC	100	102	102.5	80	120
BARIUM	2000	2000	99.8	80	120
BERYLLIUM	50.0	50.3	100.6	80	120
CADMIUM	250	267	106.6	80	120
CALCIUM	2500	2620	105.0	80	120
CHROMIUM	200	210	104.8	80	120
COBALT	500	511	102.2	80	120
COPPER	250	250	99.8	80	120
IRON	1000	938	93.8	80	120
LEAD	100	106	106.2	80	120
MAGNESIUM	5000	5240	104.7	80	120
MANGANESE	500	509	101.9	80	120
NICKEL	500	523	104.6	80	120
POTASSIUM	10000	9970	99.7	80	120
SELENIUM	100	103	103.1	80	120
SILVER	50.0	51.2	102.3	80	120
SODIUM	7500	7870	104.9	80	120
THALLIUM	100	119	119.1	80	120
VANADIUM	500	509	101.7	80	120
ZINC	500	492	98.5	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWID17ICW1

Matrix: WATER **SDG Name:** SI2008

QC Batch ID: ID17ICW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
SELENIUM	100	99.7	99.7	80	120

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-09-GW-033115L

Matrix: WATER **SDG Name:** SI2008

Lab Sample ID: SI2008-001L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ALUMINUM, TOTAL	58	J	200	J	244.8		P
ANTIMONY, TOTAL	1.3	U	6.5	U			P
ARSENIC, TOTAL	1.4	U	7.0	U			P
BARIUM, TOTAL	33.2		33.7		1.5		P
BERYLLIUM, TOTAL	0.10	J	0.50	U	100.0		P
CADMIUM, TOTAL	22.7		22.2	J	2.2		P
CALCIUM, TOTAL	12600		12800		1.6		P
CHROMIUM, TOTAL	9.35	J	10	J	7.0		P
COBALT, TOTAL	0.24	U	1.2	U			P
COPPER, TOTAL	0.76	J	3.1	U	100.0		P
IRON, TOTAL	48	J	402	J	737.5		P
LEAD, TOTAL	1.1	U	5.5	U			P
MAGNESIUM, TOTAL	2310		2360		2.2		P
MANGANESE, TOTAL	1.1	U	5.5	U			P
MERCURY, TOTAL	0.013	U	0.065	U			CV
NICKEL, TOTAL	0.85	J	1.4	U	100.0		P
POTASSIUM, TOTAL	1840		1900	J	3.3		P
SELENIUM, TOTAL	2.4	U	12.	U			P
SILVER, TOTAL	0.27	U	1.4	U			P
SODIUM, TOTAL	25000		25100		0.4		P
THALLIUM, TOTAL	1.2	J	5.5	U	100.0		P
VANADIUM, TOTAL	0.60	J	1.2	U	100.0		P
ZINC, TOTAL	25.8		30	J	16.3		P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 1/30/2013

Concentration Units: ug/L

Analyte	CRDL	IDL	M
MERCURY	0.20	0.033	CV

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 5/21/2012

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	17.	P
ANTIMONY	8.0	1.6	P
ARSENIC	8.0	1.5	P
BARIUM	5.0	0.31	P
BERYLLIUM	5.0	0.095	P
CADMIUM	5.0	0.074	P
CALCIUM	100	8.7	P
CHROMIUM	10	0.41	P
COBALT	10	0.33	P
COPPER	25	0.80	P
IRON	100	4.0	P
LEAD	5.0	1.0	P
MAGNESIUM	100	7.7	P
MANGANESE	5.0	0.56	P
NICKEL	10	0.60	P
POTASSIUM	1000	64.	P
SELENIUM	10	2.6	P
SILVER	10	0.54	P
SODIUM	1000	33.	P
THALLIUM	15	1.1	P
VANADIUM	10	0.41	P
ZINC	20	0.45	P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 4/13/2015

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	24.	P
ANTIMONY	8.0	1.8	P
ARSENIC	8.0	2.4	P
BARIUM	5.0	0.50	P
BERYLLIUM	5.0	0.13	P
CADMIUM	5.0	0.078	P
CALCIUM	100	9.7	P
CHROMIUM	10	0.31	P
COBALT	10	0.25	P
COPPER	25	0.47	P
IRON	100	5.2	P
LEAD	5.0	1.2	P
MAGNESIUM	100	5.2	P
MANGANESE	5.0	1.1	P
NICKEL	10	0.42	P
POTASSIUM	1000	45.	P
SELENIUM	10	2.8	P
SILVER	10	0.41	P
SODIUM	1000	40.	P
THALLIUM	15	1.5	P
VANADIUM	10	0.25	P
ZINC	20	0.51	P

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 2/9/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
MERCURY	0.10	ug/L	CV	SW846 7470A / SW846 7470A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/19/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ALUMINUM	100.	ug/L	P	SW846 3010A / SW846 6010C
ANTIMONY	5.0	ug/L	P	SW846 3010A / SW846 6010C
ARSENIC	5.0	ug/L	P	SW846 3010A / SW846 6010C
BARIUM	3.0	ug/L	P	SW846 3010A / SW846 6010C
BERYLLIUM	0.50	ug/L	P	SW846 3010A / SW846 6010C
CADMIUM	3.0	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	80.	ug/L	P	SW846 3010A / SW846 6010C
CHROMIUM	4.0	ug/L	P	SW846 3010A / SW846 6010C
COBALT	4.0	ug/L	P	SW846 3010A / SW846 6010C
COPPER	10.	ug/L	P	SW846 3010A / SW846 6010C
IRON	80.	ug/L	P	SW846 3010A / SW846 6010C
LEAD	4.0	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	80.	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	4.0	ug/L	P	SW846 3010A / SW846 6010C
NICKEL	4.0	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	500.	ug/L	P	SW846 3010A / SW846 6010C
SELENIUM	7.0	ug/L	P	SW846 3010A / SW846 6010C
SILVER	4.0	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	500.	ug/L	P	SW846 3010A / SW846 6010C
THALLIUM	5.0	ug/L	P	SW846 3010A / SW846 6010C
VANADIUM	4.0	ug/L	P	SW846 3010A / SW846 6010C
ZINC	10.	ug/L	P	SW846 3010A / SW846 6010C

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 2/9/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
MERCURY	0.013	ug/L	CV	SW846 7470A / SW846 7470A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/19/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ALUMINUM	15.	ug/L	P	SW846 3010A / SW846 6010C
ANTIMONY	1.3	ug/L	P	SW846 3010A / SW846 6010C
ARSENIC	1.4	ug/L	P	SW846 3010A / SW846 6010C
BARIUM	0.23	ug/L	P	SW846 3010A / SW846 6010C
BERYLLIUM	0.10	ug/L	P	SW846 3010A / SW846 6010C
CADMIUM	0.049	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	11.	ug/L	P	SW846 3010A / SW846 6010C
CHROMIUM	0.36	ug/L	P	SW846 3010A / SW846 6010C
COBALT	0.24	ug/L	P	SW846 3010A / SW846 6010C
COPPER	0.63	ug/L	P	SW846 3010A / SW846 6010C
IRON	5.4	ug/L	P	SW846 3010A / SW846 6010C
LEAD	1.1	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	7.8	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	1.1	ug/L	P	SW846 3010A / SW846 6010C
NICKEL	0.28	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	41.	ug/L	P	SW846 3010A / SW846 6010C
SELENIUM	2.4	ug/L	P	SW846 3010A / SW846 6010C
SILVER	0.27	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	24.	ug/L	P	SW846 3010A / SW846 6010C
THALLIUM	1.1	ug/L	P	SW846 3010A / SW846 6010C
VANADIUM	0.23	ug/L	P	SW846 3010A / SW846 6010C
ZINC	0.72	ug/L	P	SW846 3010A / SW846 6010C

ICP INTERELEMENT CORRECTION FACTORS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument Name: THERMO ICAP 6500 **Instrument ID:** I **Date:** 1/8/2015

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As	Cr	Co	Cu	Mn	Mo	Ni	Ti	V
ALUMINUM	396.15	0.0	0.0003680	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0300000	0.0	0.0	0.0
ANTIMONY	206.83	0.0000250	0.0	0.0000520	0.0	-0.0001350	0.0078600	0.0	0.0	0.0	-0.0018800	-0.0009470	0.0	-0.0017400
ARSENIC	189.04	0.0000120	0.0	-0.0001310	0.0	0.0	0.0006100	0.0	0.0	0.0	0.0020700	0.0	0.0	0.0
BARIUM	455.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BERYLLIUM	313.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0007160	0.0000820
BORON	208.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0296000	0.0	0.0	0.0
CADMIUM	226.50	0.0	0.0	0.0000630	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0000800	0.0000260	0.0
CALCIUM	315.89	0.0	0.0	0.0	0.0	0.0	0.0008850	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHROMIUM	267.72	0.0	0.0	0.0000070	0.0	0.0	0.0	0.0	0.0	0.0001110	0.0	0.0	0.0	0.0000720
COBALT	228.62	0.0	0.0	0.0	0.0	0.0	-0.0000420	0.0	0.0	0.0	0.0	0.0000640	0.0027000	0.0
COPPER	327.40	0.0000110	0.0	-0.0000060	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0005550	0.0003110
GOLD	242.79	0.0	0.0	0.0001410	0.0	0.0	0.0	0.0	0.0	-0.0019000	0.0	0.0	0.0	0.0
IRON	259.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAD	220.35	-0.0001240	0.0	0.0000190	0.0	0.0	-0.0005800	0.0000540	0.0001360	0.0	-0.0005810	0.0002080	0.0000970	0.0
LITHIUM	670.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAGNESIUM	202.58	0.0	0.0	0.0000370	0.0	0.0	0.0	0.2003000	0.0	0.0	0.0277000	0.0	0.0002000	0.0
MANGANESE	257.61	-0.0000010	0.0	0.0000150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOLYBDENUM	202.03	0.0	0.0	0.0	0.0	0.0	0.0001080	0.0	0.0	0.0000070	0.0	0.0	0.0	-0.0001920
NICKEL	231.60	0.0	0.0	-0.0000380	0.0	0.0	0.0	0.0001270	0.0	0.0	0.0008690	0.0	0.0	0.0
POTASSIUM	766.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SELENIUM	196.09	0.0000230	0.0	-0.0000020	0.0	-0.0000500	0.0	0.0000900	0.0	0.0004850	0.0	0.0	0.0	-0.0002080
SILICON	251.61	0.0	0.0	-0.0000080	0.0	0.0	0.0	0.0	0.0	0.0	0.0097100	0.0	0.0009940	0.0
SILVER	328.07	0.0	0.0	-0.0002370	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0002840	0.0
SODIUM	589.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRONTIUM	421.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THALLIUM	190.86	-0.0000020	0.0	0.0000020	0.0	0.0	0.0	0.0018400	0.0000120	-0.0021900	-0.0000380	0.0	-0.0010500	-0.0093600
TIN	189.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TITANIUM	334.90	0.0	0.0	0.0	0.0	0.0	0.0001290	0.0	0.0	0.0	0.0010500	0.0	0.0	0.0
VANADIUM	292.40	0.0	0.0	0.0000210	0.0	0.0	-0.0041100	0.0	0.0	-0.0003220	-0.0062800	0.0	0.0010900	0.0
ZINC	206.20	0.0	0.0	0.0	0.0	0.0	-0.0011400	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FORM XI - IN

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 10/28/2014

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	500000	P
ANTIMONY	45.00	20000	P
ARSENIC	45.00	20000	P
BARIUM	5.00	20000	P
BERYLLIUM	5.00	20000	P
CADMIUM	45.00	20000	P
CALCIUM	5.00	500000	P
CHROMIUM	10.00	20000	P
COBALT	45.00	20000	P
COPPER	10.00	20000	P
IRON	5.00	250000	P
LEAD	45.00	20000	P
MAGNESIUM	45.00	200000	P
MANGANESE	5.00	20000	P
NICKEL	10.00	20000	P
POTASSIUM	5.00	300000	P
SELENIUM	45.00	20000	P
SILVER	10.00	2000	P
SODIUM	5.00	200000	P
THALLIUM	45.00	20000	P
VANADIUM	10.00	20000	P
ZINC	45.00	20000	P

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** ID02HGW2

Matrix: WATER **SDG Name:** SI2008

Method: CV **Prep Date:** 04/02/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWID02HGW2	LCSWID02HGW2	0.025	0.025	
PBWID02HGW2	PBWID02HGW2	0.025	0.025	
MW-09-GW-033115	SI2008-001	0.025	0.025	P
MW-09-GW-033115P	SI2008-001P	0.025	0.025	P
MW-09-GW-033115S	SI2008-001S	0.025	0.025	P
MW-08-GW-033115	SI2008-002	0.025	0.025	F
MW-06-GW-033115	SI2008-003	0.025	0.025	F
MW-07-GW-033115	SI2008-004	0.025	0.025	F
DUPLICATE-GW-033115	SI2008-007	0.025	0.025	F

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** ID02ICW2

Matrix: WATER **SDG Name:** SI2008

Method: P **Prep Date:** 04/02/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWID02ICW2	LCSWID02ICW2	0.05	0.05	
PBWID02ICW2	PBWID02ICW2	0.05	0.05	
MW-09-GW-033115	SI2008-001	0.05	0.05	P
MW-09-GW-033115P	SI2008-001P	0.05	0.05	P
MW-09-GW-033115S	SI2008-001S	0.05	0.05	P
MW-08-GW-033115	SI2008-002	0.05	0.05	F
MW-06-GW-033115	SI2008-003	0.05	0.05	F
MW-07-GW-033115	SI2008-004	0.05	0.05	F
DUPLICATE-GW-033115	SI2008-007	0.05	0.05	F

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** ID17ICW1

Matrix: WATER **SDG Name:** SI2008

Method: P **Prep Date:** 04/17/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWID17ICW1	LCSWID17ICW1	0.05	0.05	
PBWID17ICW1	PBWID17ICW1	0.05	0.05	
MW-09-GW-033115	SI2008-001R	0.05	0.05	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: CETAC M6100 **File Name:** HID03A

Date: 4/3/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	10:57	Hg
Standard #1 (0.2 ppb		1	10:59	Hg
Standard #2 (0.5 ppb		1	11:01	Hg
Standard #3 (1.0 ppb		1	11:03	Hg
Standard #4 (5.0 ppb		1	11:05	Hg
Standard #5 (10.0 pp		1	11:07	Hg
ICV		1	11:09	HG
ICB		1	11:11	HG
PQL		1	11:14	HG
CCV		1	11:16	HG
CCB		1	11:18	HG
ZZZZZZ		1	11:20	
ZZZZZZ		1	11:22	
ZZZZZZ		1	11:24	
LCSWID02HGW2		1	11:26	HG
PBWID02HGW2		1	11:28	HG
ZZZZZZ		1	11:30	
ZZZZZZ		1	11:33	
ZZZZZZ		1	11:35	
ZZZZZZ		1	11:37	
CCV		1	11:39	HG
CCB		1	11:41	HG
ZZZZZZ		1	11:43	
SI2008-001	MW-09-GW-033115	1	11:45	HG
SI2008-001L	MW-09-GW-033115L	5	11:47	HG
SI2008-001A	MW-09-GW-033115A	1	11:50	HG
SI2008-001P	MW-09-GW-033115P	1	11:52	HG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: CETAC M6100 **File Name:** HID03A

Date: 4/3/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
SI2008-001S	MW-09-GW-033115S	1	11:54	HG
SI2008-002	MW-08-GW-033115	1	11:56	HG
SI2008-003	MW-06-GW-033115	1	11:58	HG
SI2008-004	MW-07-GW-033115	1	12:00	HG
SI2008-007	DUPLICATE-GW-033115	1	12:02	HG
CCV		1	12:05	HG
CCB		1	12:07	HG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: THERMO ICAP 6500 **File Name:** IID02A

Date: 4/2/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																					
Blank		1	13:26	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
Std 1		1	13:31	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
ICV		1	13:36	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
ICB		1	13:40	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
PQL		1	13:45	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
ZZZZZZ		1	13:51																					
ZZZZZZ		1	13:57																					
ICSA		1	14:05	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
ICSAB		1	14:09	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
CCV		1	14:14	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
CCB		1	14:18	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
ZZZZZZ		1	14:23																					
ZZZZZZ		1	14:28																					
ZZZZZZ		1	14:33																					
ZZZZZZ		1	14:37																					
ZZZZZZ		1	14:42																					
ZZZZZZ		1	14:47																					
ZZZZZZ		1	14:52																					
ZZZZZZ		1	14:56																					
ZZZZZZ		1	15:01																					
ZZZZZZ		1	15:06																					
CCV		1	15:10	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
CCB		1	15:15	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
ZZZZZZ		1	15:20																					
ZZZZZZ		1	15:25																					
ZZZZZZ		1	15:29																					
ZZZZZZ		1	15:34																					

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: THERMO ICAP 6500 **File Name:** IID02A

Date: 4/2/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		2	15:39	
ZZZZZZ		1	15:44	
ZZZZZZ		1	15:49	
ZZZZZZ		1	15:53	
ZZZZZZ		1	15:58	
ZZZZZZ		1	16:03	
CCV		1	16:08	AL SB AS BA BE CD CA CR CO CU FE MG MN NI K SE NA TL V ZN
CCB		1	16:12	AL SB AS BA BE CD CA CR CO CU FE MG MN NI K SE NA TL V ZN
ZZZZZZ		5	16:17	
ZZZZZZ		1	16:22	
ZZZZZZ		1	16:26	
ZZZZZZ		1	16:31	
ZZZZZZ		1	16:36	
ZZZZZZ		1	16:41	
ZZZZZZ		1	16:45	
ZZZZZZ		1	16:50	
ZZZZZZ		1	16:55	
ZZZZZZ		1	16:59	
CCV		1	17:04	AL SB AS BA BE CD CA CR CO CU FE MG MN NI K SE NA TL V ZN
CCB		1	17:09	AL SB AS BA BE CD CA CR CO CU FE MG MN NI K SE NA TL V ZN
ZZZZZZ		1	17:14	
ZZZZZZ		1	17:18	
ZZZZZZ		1	17:23	
ZZZZZZ		1	17:28	
ZZZZZZ		1	17:33	
ZZZZZZ		1	17:37	
ZZZZZZ		1	17:42	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: THERMO ICAP 6500 **File Name:** IID02A

Date: 4/2/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																						
ZZZZZZ		1	17:47																							
ZZZZZZ		1	17:52																							
ZZZZZZ		5	17:56																							
CCV		1	18:01	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL	V	ZN			
CCB		1	18:06	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL	V	ZN			
ZZZZZZ		1	18:11																							
ZZZZZZ		1	18:15																							
ZZZZZZ		1	18:20																							
ZZZZZZ		1	18:25																							
ZZZZZZ		1	18:29																							
ZZZZZZ		1	18:34																							
ZZZZZZ		1	18:39																							
ZZZZZZ		1	18:44																							
ZZZZZZ		5	18:48																							
ZZZZZZ		1	18:53																							
CCV		1	18:58	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL	V	ZN			
CCB		1	19:02	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL	V	ZN			
ZZZZZZ		1	19:07																							
ZZZZZZ		1	19:12																							
ZZZZZZ		1	19:17																							
ZZZZZZ		1	19:22																							
ZZZZZZ		1	19:26																							
ZZZZZZ		1	19:31																							
ZZZZZZ		1	19:36																							
ZZZZZZ		1	19:41																							
ZZZZZZ		1	19:46																							
ZZZZZZ		1	19:50																							

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: THERMO ICAP 6500 **File Name:** IID02A

Date: 4/2/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																				
CCV		1	19:55	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
CCB		1	20:00	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
ZZZZZZ		1	20:05																					
PBWID02ICW2		1	20:09	AL	SB	AS	BA	BE	CD		CR	CO	CU	FE		MN	NI	K	SE	NA	TL		V	ZN
LCSWID02ICW2		1	20:14	AL	SB	AS	BA	BE	CD		CR	CO	CU	FE		MN	NI	K	SE	NA	TL		V	ZN
SI2008-001	MW-09-GW-033115	1	20:19	AL	SB	AS	BA	BE	CD		CR	CO	CU	FE		MN	NI	K	SE	NA	TL		V	ZN
SI2008-002	MW-08-GW-033115	1	20:24	AL	SB	AS	BA	BE	CD		CR	CO	CU	FE		MN	NI	K	SE	NA	TL		V	ZN
SI2008-003	MW-06-GW-033115	1	20:28	AL	SB	AS	BA	BE	CD		CR	CO	CU	FE		MN	NI	K	SE	NA	TL		V	ZN
SI2008-004	MW-07-GW-033115	1	20:33	AL	SB	AS	BA	BE	CD		CR	CO	CU	FE		MN	NI	K	SE	NA	TL		V	ZN
SI2008-007	DUPLICATE-GW-033115	1	20:38	AL	SB	AS	BA	BE	CD		CR	CO	CU	FE		MN	NI	K	SE	NA	TL		V	ZN
CCV		1	20:43	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN
CCB		1	20:47	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	MG	MN	NI	K	SE	NA	TL		V	ZN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: THERMO ICAP 6500 **File Name:** IID03A

Date: 4/3/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																											
Blank		1	12:49	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
Std 1		1	12:54	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
ICV		1	12:59	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
ICB		1	13:03	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
PQL		1	13:08	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
ZZZZZZ		1	13:15																					
ZZZZZZ		1	13:20																					
ICSA		1	13:28	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
ICSAB		1	13:33	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
CCV		1	13:37	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
CCB		1	13:42	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
ZZZZZZ		1	13:47																					
ZZZZZZ		1	13:51																					
ZZZZZZ		1	13:56																					
ZZZZZZ		1	14:01																					
ZZZZZZ		5	14:06																					
SI2008-001P	MW-09-GW-033115P	1	14:11	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
SI2008-001S	MW-09-GW-033115S	1	14:16	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
LCSWID02ICW2		1	14:20							CA					PB	MG				AG				
PBWID02ICW2		1	14:25							CA					PB	MG				AG				
SI2008-001	MW-09-GW-033115	1	14:30							CA					PB	MG				AG				
CCV		1	14:35	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
CCB		1	14:39	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
SI2008-001A	MW-09-GW-033115A	1	14:44	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN
ZZZZZZ		1	14:49																					
ZZZZZZ		1	14:53																					
ZZZZZZ		1	14:58																					

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: THERMO ICAP 6500 **File Name:** IID03A

Date: 4/3/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																											
ZZZZZZ		1	15:03																												
ZZZZZZ		1	15:08																												
ZZZZZZ		1	15:12																												
SI2008-001L	MW-09-GW-033115L	5	15:17	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN							
SI2008-002	MW-08-GW-033115	1	15:22							CA					PB	MG				AG											
SI2008-003	MW-06-GW-033115	1	15:27							CA					PB	MG				AG											
CCV		1	15:31	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN							
CCB		1	15:36	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN							
SI2008-004	MW-07-GW-033115	1	15:41							CA					PB	MG				AG											
ZZZZZZ		1	15:46																												
ZZZZZZ		1	15:50																												
ZZZZZZ		1	15:55																												
SI2008-007	DUPLICATE-GW-033115	1	16:00							CA					PB	MG				AG											
ZZZZZZ		1	16:05																												
ZZZZZZ		1	16:09																												
ZZZZZZ		1	16:14																												
ZZZZZZ		1	16:19																												
ZZZZZZ		5	16:24																												
CCV		1	16:28	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN							
CCB		1	16:33	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	AG	NA	TL	V	ZN							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: THERMO ICAP 6500 **File Name:** IID20A

Date: 4/20/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
Blank		1	15:17	AL	CA	FE	MG	SE
Std 1		1	15:22	AL	CA	FE	MG	SE
ICV		1	15:27	AL	CA	FE	MG	SE
ICB		1	15:31	AL	CA	FE	MG	SE
PQL		1	15:36	AL	CA	FE	MG	SE
ZZZZZZ		1	15:42					
ZZZZZZ		1	15:48					
ICSA		1	15:56	AL	CA	FE	MG	SE
ICSAB		1	16:01	AL	CA	FE	MG	SE
CCV		1	16:06	AL	CA	FE	MG	SE
CCB		1	16:10	AL	CA	FE	MG	SE
LCSWID17ICW1		1	16:15					SE
PBWID17ICW1		1	16:20					SE
ZZZZZZ		1	16:24					
ZZZZZZ		1	16:29					
ZZZZZZ		1	16:34					
ZZZZZZ		1	16:39					
ZZZZZZ		1	16:43					
ZZZZZZ		2	16:48					
ZZZZZZ		1	16:53					
ZZZZZZ		2	16:57					
CCV		1	17:02	AL	CA	FE	MG	SE
CCB		1	17:07	AL	CA	FE	MG	SE

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: THERMO ICAP 6500 **File Name:** IID21A

Date: 4/21/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
Blank		1	11:07	AL	CA	FE	MG	SE
Std 1		1	11:12	AL	CA	FE	MG	SE
ICV		1	11:16	AL	CA	FE	MG	SE
ICB		1	11:21	AL	CA	FE	MG	SE
PQL		1	11:26	AL	CA	FE	MG	SE
ZZZZZZ		1	11:32					
ZZZZZZ		1	11:37					
ICSA		1	11:46	AL	CA	FE	MG	SE
ICSAB		1	11:50	AL	CA	FE	MG	SE
CCV		1	11:55	AL	CA	FE	MG	SE
CCB		1	12:00	AL	CA	FE	MG	SE
ZZZZZZ		1	12:05					
ZZZZZZ		1	12:09					
ZZZZZZ		1	12:14					
ZZZZZZ		2	12:19					
ZZZZZZ		2	12:23					
ZZZZZZ		2	12:28					
ZZZZZZ		2	12:33					
ZZZZZZ		2	12:38					
ZZZZZZ		2	12:42					
ZZZZZZ		2	12:47					
CCV		1	12:52	AL	CA	FE	MG	SE
CCB		1	12:56	AL	CA	FE	MG	SE
ZZZZZZ		2	13:01					
ZZZZZZ		1	13:06					
SI2008-001RA	MW-09-GW-033115A	1	13:10					SE
SI2008-001RL	MW-09-GW-033115L	5	13:15					SE

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2008

Instrument ID: THERMO ICAP 6500 **File Name:** IID21A

Date: 4/21/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
SI2008-001P	MW-09-GW-033115P	1	13:20					SE
SI2008-001S	MW-09-GW-033115S	1	13:25					SE
CCV		1	13:29	AL	CA	FE	MG	SE
CCB		1	13:34	AL	CA	FE	MG	SE

Raw Data Section

KATAHDIN ANALYTICAL SERVICES, INC.
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: Cetac M6100 (H) **ANALYST:** MTM **DATE:** 4-3-15

FILE NAME: H1D03A **METHOD: CVAA**

245.1

Analyte : Mercury

7470

CLP

$SnCl_2$: M21446

Other (List): _____

REVIEWED
Gm 04-03-15
KATAHDIN ANALYTICAL
METALS SECTION

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
CalBlank/ICB/CCB	N/A	4-2-15	4-30-15	0.00 ug/L
Standard #1 / PQL				0.20 ug/L
Standard #2				0.50 ug/L
Standard #3				1.00 ug/L
Standard #4 / CCV				5.00 ug/L
Standard #5				10.00 ug/L
ICV			4-13-15	8.00 ug/L
		MTM 4-3-15		

Additional Comments and Notes:

Gm 04-03-15

0000688

INSTRUMENT RUNLOG

Instrument: CETAC M6100

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Calibration Blank	1.0000	HID03A	4/3/2015	10:57	HHM
Standard #1 (0.2 ppb)	1.0000	HID03A	4/3/2015	10:59	HHM
Standard #2 (0.5 ppb)	1.0000	HID03A	4/3/2015	11:01	HHM
Standard #3 (1.0 ppb)	1.0000	HID03A	4/3/2015	11:03	HHM
Standard #4 (5.0 ppb)	1.0000	HID03A	4/3/2015	11:05	HHM
Standard #5 (10.0 ppb)	1.0000	HID03A	4/3/2015	11:07	HHM
ICV	1.0000	HID03A	4/3/2015	11:09	HHM
ICB	1.0000	HID03A	4/3/2015	11:11	HHM
PQL	1.0000	HID03A	4/3/2015	11:14	HHM
CCV	1.0000	HID03A	4/3/2015	11:16	HHM
CCB	1.0000	HID03A	4/3/2015	11:18	HHM
LCSWID02HGW1	1.0000	HID03A	4/3/2015	11:20	HHM
PBWID02HGW1	1.0000	HID03A	4/3/2015	11:22	HHM
SI2003-001	1.0000	HID03A	4/3/2015	11:24	HHM
LCSWID02HGW2	1.0000	HID03A	4/3/2015	11:26	HHM
PBWID02HGW2	1.0000	HID03A	4/3/2015	11:28	HHM
PBT1236A	1.0000	HID03A	4/3/2015	11:30	HHM
SI1693-001	1.0000	HID03A	4/3/2015	11:33	HHM
SI1978-001	1.0000	HID03A	4/3/2015	11:35	HHM
SI1979-001	1.0000	HID03A	4/3/2015	11:37	HHM
CCV	1.0000	HID03A	4/3/2015	11:39	HHM
CCB	1.0000	HID03A	4/3/2015	11:41	HHM
SI2006-023	1.0000	HID03A	4/3/2015	11:43	HHM
SI2008-001	1.0000	HID03A	4/3/2015	11:45	HHM
SI2008-001L	5.0000	HID03A	4/3/2015	11:47	HHM
SI2008-001A	1.0000	HID03A	4/3/2015	11:50	HHM
SI2008-001P	1.0000	HID03A	4/3/2015	11:52	HHM
SI2008-001S	1.0000	HID03A	4/3/2015	11:54	HHM
SI2008-002	1.0000	HID03A	4/3/2015	11:56	HHM
SI2008-003	1.0000	HID03A	4/3/2015	11:58	HHM
SI2008-004	1.0000	HID03A	4/3/2015	12:00	HHM
SI2008-007	1.0000	HID03A	4/3/2015	12:02	HHM
CCV	1.0000	HID03A	4/3/2015	12:05	HHM
CCB	1.0000	HID03A	4/3/2015	12:07	HHM

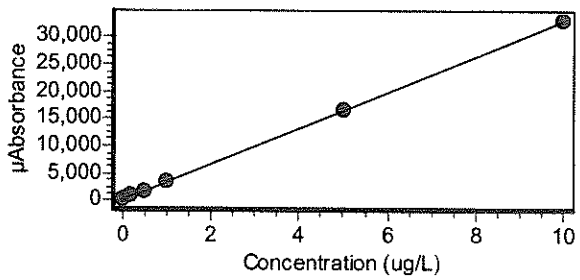
Report Generated By CETAC QuickTrace
Analyst: metals
Worksheet file: C:\Program Files\QuickTrace\Worksheets\HID03A.wsz
Date Started: 4/3/2015 10:54:12 AM
Comment:

Results

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
Calibration Blank					STD	04/03/15 10:57:10 am	0.000	76	19.33		1.00
Replicates	80.9	91.7	76.9	56.4							
Standard #1 (0.2 ppb)					STD	04/03/15 10:59:15 am	0.200	688	6.58		1.00
Replicates	647.4	664.3	689.3	750.8							
Standard #2 (0.5 ppb)					STD	04/03/15 11:01:22 am	0.500	1683	3.28		1.00
Replicates	1718.8	1699.6	1601.4	1713.1							
Standard #3 (1.0 ppb)					STD	04/03/15 11:03:29 am	1.000	3364	1.16		1.00
Replicates	3379.1	3357.3	3313.8	3406.1							
Standard #4 (5.0 ppb)					STD	04/03/15 11:05:36 am	5.000	16711	0.32		1.00
Replicates	16733.4	16773.9	16684.1	16653.8							
Standard #5 (10.0 ppb)					STD	04/03/15 11:07:44 am	10.000	32964	0.09		1.00
Replicates	32973.2	33000.1	32941.1	32940.1							

Calibration

Equation: A = 72.152 + 3296.630C
R2: 0.99996
SEE: 91.1806
Flags:



ICV					ICV	04/03/15 11:09:52 am	5.858	19385	0.21		1.00
Replicates	19411.8	19333.4	19370.2	19422.7							
% Recovery	97.64										
ICB					ICB	04/03/15 11:11:58 am	-0.010	38	86.45		1.00
Replicates	63.0	-5.2	30.2	65.2							

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
PQL					CRDL	04/03/15 11:14:04 am	0.196	720	7.68		1.00
Replicates	739.0	715.9	777.4	645.9							
% Recovery	98.18										
CCV					IPR	04/03/15 11:16:11 am	4.995	16537	0.45		1.00
Replicates	16638.5	16542.7	16500.7	16467.4							
% Recovery	99.89										
CCB					CCB	04/03/15 11:18:17 am	-0.009	42	108.35		1.00
Replicates	60.6	76.2	58.2	-25.5							
LCSWID02HGW1					LCS	04/03/15 11:20:23 am	5.394	17856	0.15		1.00
Replicates	17889.1	17838.5	17828.5	17865.9							
% Recovery	107.89										
PBWID02HGW1					PBK	04/03/15 11:22:30 am	-0.003	63	19.48		1.00
Replicates	45.7	72.5	70.6	62.3							
SI2003-001					UNK	04/03/15 11:24:37 am	-0.028	-21	122.75		1.00
Replicates	-47.7	9.6	-9.9	-35.9							
LCSWID02HGW2					LCS	04/03/15 11:26:44 am	5.312	17582	0.12		1.00
Replicates	17597.0	17602.6	17569.1	17561.0							
% Recovery	106.23										
PBWID02HGW2					PBK	04/03/15 11:28:52 am	0.005	89	23.42		1.00
Replicates	63.4	92.4	86.7	114.2							
PBT1236A					UNK	04/03/15 11:30:59 am	-0.017	17	247.12		1.00
Replicates	5.0	-36.7	47.3	51.4							
SI1693-001					UNK	04/03/15 11:33:06 am	0.037	194	5.48		1.00
Replicates	203.7	187.1	202.3	182.6							
SI1978-001					UNK	04/03/15 11:35:13 am	-0.017	16	138.60		1.00
Replicates	46.7	-4.2	9.3	11.1							
SI1979-001					UNK	04/03/15 11:37:21 am	-0.019	11	335.84		1.00
Replicates	26.2	52.1	-26.5	-9.7							

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
CCV					CCV	04/03/15 11:39:28 am	5.028	16649	0.51		1.00
Replicates	16737.1	16702.5	16597.1	16557.6							
% Recovery	100.57										
CCB					CCB	04/03/15 11:41:34 am	-0.014	25	52.76		1.00
Replicates	19.2	39.5	31.5	9.7							
SI2006-023					UNK	04/03/15 11:43:42 am	-0.029	-25	65.53		1.00
Replicates	-43.7	-4.8	-29.6	-21.1							
SI2008-001					UNK	04/03/15 11:45:49 am	-0.019	11	256.81		1.00
Replicates	-15.6	-7.7	42.4	22.9							
SI2008-001L					UNK	04/03/15 11:47:57 am	-0.015	62	56.43		5.00
Replicates	24.0	40.9	94.2	89.5							
SI2008-001A					UNK	04/03/15 11:50:04 am	1.079	3628	1.50		1.00
Replicates	3641.0	3625.8	3689.1	3557.1							
SI2008-001P					UNK	04/03/15 11:52:12 am	1.191	4000	0.80		1.00
Replicates	3962.3	4035.9	4013.5	3987.2							
SI2008-001S					UNK	04/03/15 11:54:21 am	1.069	3598	0.76		1.00
Replicates	3586.7	3565.4	3611.2	3627.4							
SI2008-002					UNK	04/03/15 11:56:28 am	-0.009	43	33.56		1.00
Replicates	49.1	50.5	49.9	21.2							
SI2008-003					UNK	04/03/15 11:58:36 am	0.312	1102	2.46		1.00
Replicates	1097.2	1094.1	1076.6	1140.5							
SI2008-004					UNK	04/03/15 12:00:44 pm	-0.015	24	122.07		1.00
Replicates	46.3	-17.8	42.5	25.3							
SI2008-007					UNK	04/03/15 12:02:52 pm	-0.017	17	233.87		1.00
Replicates	-21.5	7.0	70.3	10.2							

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
CCV					CCV	04/03/15 12:05:00 pm	5.005	16573	0.43		1.00
	Replicates	16655.7	16587.8	16564.8	16483.8						
	% Recovery	100.11									
CCB					CCB	04/03/15 12:07:06 pm	-0.003	62	54.55		1.00
	Replicates	74.1	103.1	24.3	47.6						

KATAHDIN ANALYTICAL SERVICES
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST:** GEJ **ANALYSIS DATE:** 04·02·15

FILE NAME: II002A **METHOD:** ICP

- ☑ 200.7
- ☑ 6010C
- ☑ DoD
- ☐ _____

REVIEWED
EM 04-23-15
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initals) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep. Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW15408	03·25·15	03·25·16	0 ug/L
Standard 1	MW15403	03·23·15	06·23·15	Varies by Element
ICV	MW15401	03·23·15	04·30·15	Varies by Element
PQL	MW15374	03·05·15	05·01·15	Varies by Element
LRS1	MW15405	03·24·15	05·26·15	Varies by Element
LRS2	MW15409	03·25·15	06·25·15	Varies by Element
ICSA	MW15422	04·01·15	07·01·15	Varies by Element
ICSAB	MW15368	03·05·15	05·01·15	Varies by Element
CCV	MW15423	04·01·15	07·01·15	Varies by Element
Internal Standard	MW15416	03·30·15	06·30·15	5.0 mg/L Yttrium

Additional Comments and Notes:

GEJ 04·03·15

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IID02A	4/2/2015	13:26	GEJ
Std 1	1.000	IID02A	4/2/2015	13:31	GEJ
ICV	1.000	IID02A	4/2/2015	13:36	GEJ
ICB	1.000	IID02A	4/2/2015	13:40	GEJ
PQL	1.000	IID02A	4/2/2015	13:45	GEJ
LRS1	1.000	IID02A	4/2/2015	13:51	GEJ
LRS2	1.000	IID02A	4/2/2015	13:57	GEJ
ICSA	1.000	IID02A	4/2/2015	14:05	GEJ
ICSAB	1.000	IID02A	4/2/2015	14:09	GEJ
CCV	1.000	IID02A	4/2/2015	14:14	GEJ
CCB	1.000	IID02A	4/2/2015	14:18	GEJ
LC2OID01ICS1	1.000	IID02A	4/2/2015	14:23	GEJ
LCSOID01ICS1	1.000	IID02A	4/2/2015	14:28	GEJ
PBSID01ICS1	1.000	IID02A	4/2/2015	14:33	GEJ
SI2001-001	1.000	IID02A	4/2/2015	14:37	GEJ
SI2001-002	1.000	IID02A	4/2/2015	14:42	GEJ
SI2001-003	1.000	IID02A	4/2/2015	14:47	GEJ
SI2001-004	1.000	IID02A	4/2/2015	14:52	GEJ
SI2001-005	1.000	IID02A	4/2/2015	14:56	GEJ
SI2001-007	1.000	IID02A	4/2/2015	15:01	GEJ
LC2WID01ICW2	1.000	IID02A	4/2/2015	15:06	GEJ
CCV	1.000	IID02A	4/2/2015	15:10	GEJ
CCB	1.000	IID02A	4/2/2015	15:15	GEJ
LCSWID01ICW2	1.000	IID02A	4/2/2015	15:20	GEJ
PBWID01ICW2	1.000	IID02A	4/2/2015	15:25	GEJ
SI1950-002	1.000	IID02A	4/2/2015	15:29	GEJ
SI1950-004	1.000	IID02A	4/2/2015	15:34	GEJ
SI1694-001R	2.000	IID02A	4/2/2015	15:39	GEJ
LCSWIC26ICW2	1.000	IID02A	4/2/2015	15:44	GEJ
PBWIC26ICW2	1.000	IID02A	4/2/2015	15:49	GEJ
SI1841-028	1.000	IID02A	4/2/2015	15:53	GEJ
SI1847-001	1.000	IID02A	4/2/2015	15:58	GEJ
SI1847-001A	1.000	IID02A	4/2/2015	16:03	GEJ
CCV	1.000	IID02A	4/2/2015	16:08	GEJ
CCB	1.000	IID02A	4/2/2015	16:12	GEJ
SI1847-001L	5.000	IID02A	4/2/2015	16:17	GEJ
SI1847-001P	1.000	IID02A	4/2/2015	16:22	GEJ
SI1847-001S	1.000	IID02A	4/2/2015	16:26	GEJ
SI1847-002	1.000	IID02A	4/2/2015	16:31	GEJ
SI1847-003	1.000	IID02A	4/2/2015	16:36	GEJ
SI1847-004	1.000	IID02A	4/2/2015	16:41	GEJ
SI1847-005	1.000	IID02A	4/2/2015	16:45	GEJ
SI1878-001	1.000	IID02A	4/2/2015	16:50	GEJ
SI1907-003	1.000	IID02A	4/2/2015	16:55	GEJ

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SI1907-004	1.000	IID02A	4/2/2015	16:59	GEJ
CCV	1.000	IID02A	4/2/2015	17:04	GEJ
CCB	1.000	IID02A	4/2/2015	17:09	GEJ
SI1907-005	1.000	IID02A	4/2/2015	17:14	GEJ
SI1907-007	1.000	IID02A	4/2/2015	17:18	GEJ
SI1907-008	1.000	IID02A	4/2/2015	17:23	GEJ
SI1907-009	1.000	IID02A	4/2/2015	17:28	GEJ
SI1907-010	1.000	IID02A	4/2/2015	17:33	GEJ
SI1907-011	1.000	IID02A	4/2/2015	17:37	GEJ
SI1907-012	1.000	IID02A	4/2/2015	17:42	GEJ
SI1907-014	1.000	IID02A	4/2/2015	17:47	GEJ
SI1907-014A	1.000	IID02A	4/2/2015	17:52	GEJ
SI1907-014L	5.000	IID02A	4/2/2015	17:56	GEJ
CCV	1.000	IID02A	4/2/2015	18:01	GEJ
CCB	1.000	IID02A	4/2/2015	18:06	GEJ
SI1907-014P	1.000	IID02A	4/2/2015	18:11	GEJ
SI1907-014S	1.000	IID02A	4/2/2015	18:15	GEJ
SI1907-0~~15~~ 14R	1.000	IID02A	4/2/2015	18:20	GEJ
SI1907-0~~16~~ 15 gm	1.000	IID02A	4/2/2015	18:25	GEJ
SI1907-019 04082	1.000	IID02A	4/2/2015	18:29	GEJ
SI1907-020	1.000	IID02A	4/2/2015	18:34	GEJ
SI1907-018	1.000	IID02A	4/2/2015	18:39	GEJ
SI1907-018A	1.000	IID02A	4/2/2015	18:44	GEJ
SI1907-018L	5.000	IID02A	4/2/2015	18:48	GEJ
SI1907-018P	1.000	IID02A	4/2/2015	18:53	GEJ
CCV	1.000	IID02A	4/2/2015	18:58	GEJ
CCB	1.000	IID02A	4/2/2015	19:02	GEJ
SI1907-018S	1.000	IID02A	4/2/2015	19:07	GEJ
3050 MDL 1	1.000	IID02A	4/2/2015	19:12	GEJ
3050 MDL 2	1.000	IID02A	4/2/2015	19:17	GEJ
3050 MDL 3	1.000	IID02A	4/2/2015	19:22	GEJ
3050 MDL 4	1.000	IID02A	4/2/2015	19:26	GEJ
3050 MDL 5	1.000	IID02A	4/2/2015	19:31	GEJ
3050 MDL 6	1.000	IID02A	4/2/2015	19:36	GEJ
3050 MDL 7	1.000	IID02A	4/2/2015	19:41	GEJ
3050 MDL 8	1.000	IID02A	4/2/2015	19:46	GEJ
3050 MDL 9	1.000	IID02A	4/2/2015	19:50	GEJ
CCV	1.000	IID02A	4/2/2015	19:55	GEJ
CCB	1.000	IID02A	4/2/2015	20:00	GEJ
3050 MDL 10	1.000	IID02A	4/2/2015	20:05	GEJ
PBWID02ICW2	1.000	IID02A	4/2/2015	20:09	GEJ
LCSWID02ICW2	1.000	IID02A	4/2/2015	20:14	GEJ
SI2008-001	1.000	IID02A	4/2/2015	20:19	GEJ
SI2008-002	1.000	IID02A	4/2/2015	20:24	GEJ
SI2008-003	1.000	IID02A	4/2/2015	20:28	GEJ
SI2008-004	1.000	IID02A	4/2/2015	20:33	GEJ
SI2008-007	1.000	IID02A	4/2/2015	20:38	GEJ

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
CCV	1.000	IID02A	4/2/2015	20:43	GEJ
CCB	1.000	IID02A	4/2/2015	20:47	GEJ
PQL	1.000	IID02A	4/2/2015	20:52	GEJ
ICSA	1.000	IID02A	4/2/2015	20:57	GEJ
ICSAB	1.000	IID02A	4/2/2015	21:02	GEJ
CCV	1.000	IID02A	4/2/2015	21:06	GEJ
CCB	1.000	IID02A	4/2/2015	21:11	GEJ

Intensity Report

Author:

Published: 4/3/2015 9:22:51AM

Notes:

Blank

Method Name: K6010-2011 Method Revision: 1,724

Analyst Name: GEJ

Acquire Date: 4/2/2015 1:26:44PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.00002200	Cts/S	0.000007000	33.85	8.113
Al3961_R		0.0005720	Cts/S	0.0006930	121.2	5.599
As1891_A		-0.00007300	Cts/S	0.00002500	34.76	-0.7023
Au2427_A		0.00005200	Cts/S	0.00001800	35.30	0.5000
B_2089_A		0.00008000	Cts/S	0.00002300	28.42	0.7689
Ba4554_R		0.003408	Cts/S	0.0003290	9.651	33.52
Be3130_R		-0.0003430	Cts/S	0.0001460	42.62	-3.369
Ca3158_R		0.002269	Cts/S	0.001378	60.73	22.27
Cd2265_A		0.0001600	Cts/S	0.00003600	22.51	1.535
Co2286_A		0.0003530	Cts/S	0.00005900	16.87	3.387
Cr2677_A		0.000007000	Cts/S	0.00001300	201.3	2.411
Cu3273_A		0.00008400	Cts/S	0.00002400	28.14	31.06
Fe2599_R		0.001463	Cts/S	0.0001080	7.381	14.38
K_7664_R		-0.0003300	Cts/S	0.00006900	20.82	-3.250
Li6707_R		0.001690	Cts/S	0.00008800	5.190	16.63
Mg2025_A		0.001951	Cts/S	0.0009270	47.52	18.74
Mn2576_R		0.0003100	Cts/S	0.0003840	124.1	3.031
Mo2020_A		0.00003300	Cts/S	0.00005800	176.3	0.3142
Na5895_R		0.01216	Cts/S	0.001087	8.943	119.5
Ni2316_A		-0.0001350	Cts/S	0.00003000	21.91	-1.297
Pb2203_A		-0.0002390	Cts/S	0.00005100	21.28	-2.299
Sb2068_A		-0.00002900	Cts/S	0.00003900	134.3	-0.2754
Se1960_A		0.00007500	Cts/S	0.00001900	25.00	0.7199
Si2516_R		0.0003170	Cts/S	0.0001420	44.62	3.125
Sn1899_A		0.00009300	Cts/S	0.00001900	20.41	0.8935
Sr4215_R		-0.001026	Cts/S	0.0001250	12.16	-10.09
Ti3349_A		-0.00008500	Cts/S	0.000004000	5.292	-31.13
Tl1908_A		-0.00005200	Cts/S	0.00003300	63.72	-0.5014
V_2924_A		-0.00002600	Cts/S	0.00001000	38.33	-9.638
Zn2062_A		-0.00002900	Cts/S	0.00004900	172.2	-0.2752
Y_3600_R		9,832.8	Cts/S	69.554	0.70736	9,832.8
Y_2243_A		9,603.7	Cts/S	5.8938	0.061371	9,603.7
Y_3600_A		367,740	Cts/S	1,426.5	0.38790	367,740

Std 1

Method Name: K6010-2011 Method Revision: 1,724

Analyst Name: GEJ

Acquire Date: 4/2/2015 1:31:30PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1017	Cts/S	0.0004210	0.4140	36,180
Al3961_R		1.007	Cts/S	0.02230	2.215	9,469
As1891_A		0.02961	Cts/S	0.00008300	0.2812	278.1
Au2427_A		0.4669	Cts/S	0.01839	3.939	4,384
B_2089_A		0.09851	Cts/S	0.00008200	0.08351	925.2
Ba4554_R		2.930	Cts/S	0.05730	1.955	27,560
Be3130_R		4.350	Cts/S	0.08674	1.994	40,910
Ca3158_R		1.440	Cts/S	0.01545	1.073	13,540
Cd2265_A		1.696	Cts/S	0.0006370	0.03755	15,930
Co2286_A		0.4459	Cts/S	0.0004860	0.1091	4,187
Cr2677_A		0.05213	Cts/S	0.0002600	0.4987	18,550
Cu3273_A		0.05869	Cts/S	0.0004010	0.6828	20,880
Fe2599_R		1.684	Cts/S	0.03374	2.003	15,840

Std 1

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 1:31:30PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
K_7664_R		1.265	Cts/S	0.008864	0.7009	11,900
Li6707_R		0.8246	Cts/S	0.01190	1.443	7,757
Mg2025_A		0.4335	Cts/S	0.0007170	0.1653	4,071
Mn2576_R		0.3780	Cts/S	0.006042	1.598	3,556
Mo2020_A		0.1669	Cts/S	0.0008580	0.5143	1,567
Na5895_R		3.259	Cts/S	0.04464	1.369	30,660
Ni2316_A		0.2760	Cts/S	0.0001270	0.04594	2,592
Pb2203_A		0.1147	Cts/S	0.0002890	0.2519	1,077
Sb2068_A		0.03722	Cts/S	0.00001100	0.02897	349.5
Se1960_A		0.01731	Cts/S	0.00001700	0.09675	162.5
Si2516_R		0.4851	Cts/S	0.004571	0.9422	4,563
Sn1899_A		0.04181	Cts/S	0.00001700	0.03977	392.6
Sr4215_R		3.597	Cts/S	0.06143	1.708	33,840
Ti3349_A		0.1363	Cts/S	0.00008300	0.06070	48,490
Tl1908_A		0.03776	Cts/S	0.0001030	0.2720	354.6
V_2924_A		0.06806	Cts/S	0.0001930	0.2833	24,210
Zn2062_A		0.2827	Cts/S	0.0002560	0.09048	2,655
Y_3600_R		9,407.3	Cts/S	97.967	1.0414	9,407.3
Y_2243_A		9,391.2	Cts/S	17.975	0.19141	9,391.2
Y_3600_A		355,800	Cts/S	1,005.6	0.28264	355,800

ICV

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 1:36:05PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		399.1	ug/L	2.300	0.5764	14,850
Al3961_R		10,180	ug/L	123.2	1.210	3,906
As1891_A		392.5	ug/L	0.4930	0.1256	110.4
Au2427_A		407.2	ug/L	19.75	4.849	1,813
B_2089_A		407.9	ug/L	0.1456	0.03570	383.8
Ba4554_R		402.7	ug/L	3.372	0.8372	11,250
Be3130_R		404.8	ug/L	3.766	0.9304	16,760
Ca3158_R		10,260	ug/L	133.4	1.300	5,639
Cd2265_A		408.1	ug/L	0.6797	0.1666	6,602
Co2286_A		411.4	ug/L	0.2084	0.05065	1,751
Cr2677_A		407.1	ug/L	0.9324	0.2290	7,767
Cu3273_A		397.6	ug/L	1.213	0.3051	8,555
Fe2599_R		10,150	ug/L	154.9	1.526	6,519
K_7664_R		13,680	ug/L	121.6	0.8888	6,584
Li6707_R		401.7	ug/L	2.703	0.6728	3,163
Mg2025_A		10,370	ug/L	13.86	0.1336	1,726
Mn2576_R		405.1	ug/L	3.414	0.8428	1,460
Mo2020_A		413.6	ug/L	1.798	0.4349	658.4
Na5895_R		10,310	ug/L	141.2	1.370	12,870
Ni2316_A		412.7	ug/L	0.3197	0.07747	1,086
Pb2203_A		414.4	ug/L	1.392	0.3361	451.8
Sb2068_A		403.7	ug/L	0.06459	0.01600	143.1
Se1960_A		402.4	ug/L	0.8410	0.2090	66.84
Si2516_R		9,968	ug/L	140.9	1.413	1,843
Sn1899_A		412.4	ug/L	0.9020	0.2187	165.0
Sr4215_R		405.5	ug/L	3.835	0.9458	13,880
Ti3349_A		397.9	ug/L	1.761	0.4427	19,820
Tl1908_A		420.5	ug/L	0.4858	0.1155	151.2
V_2924_A		406.8	ug/L	0.8467	0.2082	10,120
Zn2062_A		408.0	ug/L	0.1739	0.04263	1,100
Y_3600_R		9,521.7	Cts/S	292.48	3.0717	9,521.7

ICV

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 1:36:05PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Y_2243_A		9,536.9	Cts/S	0.43689	0.0045810	9,536.9
Y_3600_A		365,880	Cts/S	2,527.5	0.69079	365,880

ICB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 1:40:41PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2240	ug/L	0.02724	12.16	16.58
Al3961_R		-21.99	ug/L	0.3858	1.754	-3.000
As1891_A		0.6916	ug/L	0.3126	45.20	-0.5024
Au2427_A		3.133	ug/L	0.5098	16.27	14.50
B_2089_A		0.9787	ug/L	0.04923	5.030	1.730
Ba4554_R		0.2182	ug/L	0.2889	132.4	39.20
Be3130_R		0.2702	ug/L	0.05608	20.75	8.043
Ca3158_R		-44.97	ug/L	2.281	5.073	-3.068
Cd2265_A		0.02163	ug/L	0.03612	167.0	1.873
Co2286_A		-0.03109	ug/L	0.07093	228.2	3.258
Cr2677_A		0.09314	ug/L	0.1854	199.0	4.158
Cu3273_A		0.3661	ug/L	0.09838	26.87	38.71
Fe2599_R		-6.150	ug/L	3.517	57.19	10.16
K_7664_R		-4.513	ug/L	1.062	23.53	-5.415
Li6707_R		-2.556	ug/L	1.119	43.76	-4.026
Mg2025_A	F	-128.4	ug/L	2.006	1.563	-2.333
Mn2576_R		-0.3594	ug/L	0.2877	80.05	1.688
Mo2020_A		2.424	ug/L	0.3408	14.06	4.191
Na5895_R		26.17	ug/L	11.43	43.65	150.7
Ni2316_A		-0.01456	ug/L	0.07151	491.3	-1.327
Pb2203_A		0.6928	ug/L	1.100	158.8	-1.529
Sb2068_A		0.6819	ug/L	0.2323	34.07	-0.03453
Se1960_A		3.109	ug/L	2.141	68.88	1.231
Si2516_R		9.682	ug/L	18.00	185.9	4.906
Sn1899_A		0.7628	ug/L	0.8095	106.1	1.197
Sr4215_R		0.4507	ug/L	0.03731	8.278	5.776
Ti3349_A		0.8665	ug/L	0.05604	6.467	12.34
Tl1908_A		1.837	ug/L	0.6898	37.56	0.1716
V_2924_A		0.2645	ug/L	0.1388	52.47	-3.304
Zn2062_A		0.08597	ug/L	0.1185	137.8	-0.04183
Y_3600_R		9,690.4	Cts/S	45.898	0.47364	9,690.4
Y_2243_A		9,586.8	Cts/S	13.367	0.13944	9,586.8
Y_3600_A		365,780	Cts/S	1,051.4	0.28745	365,780

PQL

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 1:45:28PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.20	ug/L	0.2214	2.171	391.7
Al3961_R		278.0	ug/L	23.34	8.393	112.5
As1891_A		8.267	ug/L	0.1455	1.760	1.663
Au2427_A		98.23	ug/L	3.534	3.598	440.7
B_2089_A		48.58	ug/L	0.1591	0.3274	45.70
Ba4554_R		5.016	ug/L	0.2823	5.628	173.2
Be3130_R		4.740	ug/L	0.03588	0.7570	193.9
Ca3158_R	F	39.47	ug/L	6.601	16.73	43.50
Cd2265_A		4.934	ug/L	0.007021	0.1423	81.90
Co2286_A		10.33	ug/L	0.04343	0.4204	47.68

PQL

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 1:45:28PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Cr2677_A		9.800	ug/L	0.2532	2.584	190.0
Cu3273_A		24.75	ug/L	0.01625	0.06566	563.6
Fe2599_R		79.79	ug/L	0.1254	0.1571	65.45
K_7664_R		989.7	ug/L	48.28	4.878	476.6
Li6707_R		95.79	ug/L	0.8426	0.8796	771.1
Mg2025_A	F	-29.41	ug/L	1.401	4.762	14.32
Mn2576_R		4.572	ug/L	0.1596	3.491	19.50
Mo2020_A		10.51	ug/L	0.1489	1.418	17.16
Na5895_R		1,004	ug/L	13.29	1.324	1,365
Ni2316_A		10.42	ug/L	0.2004	1.923	26.38
Pb2203_A	F	6.884	ug/L	0.1049	1.524	5.284
Sb2068_A		8.284	ug/L	0.04569	0.5516	2.377
Se1960_A		10.23	ug/L	0.3822	3.737	2.413
Si2516_R		202.1	ug/L	11.55	5.718	40.56
Sn1899_A		102.4	ug/L	0.6107	0.5964	41.95
Sr4215_R		10.26	ug/L	0.1772	1.728	343.7
Ti3349_A		15.00	ug/L	0.01840	0.1227	719.8
Tl1908_A		15.93	ug/L	0.7062	4.435	5.313
V_2924_A		9.762	ug/L	0.2353	2.411	234.5
Zn2062_A		19.96	ug/L	0.1007	0.5042	54.01
Y_3600_R		9,577.5	Cts/S	109.87	1.1472	9,577.5
Y_2243_A		9,612.0	Cts/S	6.9156	0.071947	9,612.0
Y_3600_A		367,270	Cts/S	1,430.4	0.38946	367,270

LRS1

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 1:51:54PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2,109	ug/L	9.796	0.4646	76,030
Al3961_R		30.09	ug/L	3.784	12.58	76.26
As1891_A		20,950	ug/L	66.34	0.3167	5,685
Au2427_A	F	22,730	ug/L	96.24	0.4234	96,520
B_2089_A		20,340	ug/L	42.46	0.2088	17,870
Ba4554_R		19,570	ug/L	773.3	3.952	544,800
Be3130_R		19,660	ug/L	82.01	0.4171	813,800
Ca3158_R		-64.28	ug/L	0.8864	1.379	-4.100
Cd2265_A		19,130	ug/L	124.4	0.6502	295,300
Co2286_A		20,750	ug/L	40.81	0.1967	84,350
Cr2677_A		19,570	ug/L	171.6	0.8771	358,600
Cu3273_A		19,820	ug/L	288.5	1.455	408,500
Fe2599_R		-22.47	ug/L	0.4250	1.891	-0.4681
K_7664_R		-23.73	ug/L	12.60	53.11	-14.55
Li6707_R		19,530	ug/L	98.38	0.5037	152,900
Mg2025_A		-3,004	ug/L	1.921	0.06393	227.8
Mn2576_R		20,140	ug/L	51.44	0.2554	72,350
Mo2020_A		5,176	ug/L	16.14	0.3118	7,878
Na5895_R		37.04	ug/L	5.134	13.86	161.4
Ni2316_A		20,340	ug/L	41.40	0.2036	51,270
Pb2203_A		20,840	ug/L	38.52	0.1849	21,910
Sb2068_A		20,710	ug/L	52.15	0.2518	7,035
Se1960_A		21,100	ug/L	61.12	0.2897	3,314
Si2516_R		95.99	ug/L	7.615	7.933	33.65
Sn1899_A		20,220	ug/L	45.54	0.2252	7,697
Sr4215_R		19,920	ug/L	375.6	1.886	682,000
Ti3349_A		20,010	ug/L	51.45	0.2571	958,800
Tl1908_A		20,590	ug/L	35.27	0.1714	7,102

LRS1

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 1:51:54PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
V_2924_A		20,060	ug/L	41.61	0.2074	482,400
Zn2062_A		19,560	ug/L	41.66	0.2130	50,440
Y_3600_R		9,514.1	Cts/S	54.402	0.57180	9,514.1
Y_2243_A		9,123.2	Cts/S	4.5020	0.049347	9,123.2
Y_3600_A		351,660	Cts/S	1,985.2	0.56453	351,660

LRS2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 1:57:20PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		6.380	ug/L	2.448	38.38	-3,058
Al3961_R		492,700	ug/L	14,110	2.864	191,000
As1891_A		3.883	ug/L	0.3431	8.836	-7.982
Au2427_A		20.22	ug/L	4.377	21.65	203.4
B_2089_A		15.88	ug/L	1.558	9.810	14.03
Ba4554_R		1.029	ug/L	0.4777	46.42	61.81
Be3130_R		0.3294	ug/L	0.1014	30.78	9.955
Ca3158_R		469,600	ug/L	16,250	3.460	260,400
Cd2265_A		1.909	ug/L	0.7473	39.14	356.6
Co2286_A		0.2249	ug/L	0.08334	37.06	2.241
Cr2677_A		-3.023	ug/L	0.09342	3.090	-20.67
Cu3273_A		-1.952	ug/L	0.05975	3.062	64.43
Fe2599_R		228,400	ug/L	7,490	3.280	148,300
K_7664_R		294,900	ug/L	7,884	2.673	143,900
Li6707_R		18.38	ug/L	1.029	5.597	162.2
Mg2025_A		200,400	ug/L	60.45	0.03016	29,550
Mn2576_R		5.961	ug/L	0.2867	4.809	36.50
Mo2020_A		10.72	ug/L	3.048	28.43	15.69
Na5895_R		194,000	ug/L	5,189	2.675	243,200
Ni2316_A		5.849	ug/L	0.4065	6.951	-19.75
Pb2203_A		-0.4204	ug/L	2.518	599.0	-59.17
Sb2068_A		0.9002	ug/L	2.962	329.1	5.369
Se1960_A		12.14	ug/L	2.936	24.17	4.759
Si2516_R		48,630	ug/L	1,523	3.132	9,090
Sn1899_A		9.091	ug/L	1.737	19.11	4.068
Sr4215_R		6.840	ug/L	0.01905	0.2785	227.5
Ti3349_A		19.93	ug/L	0.7315	3.671	856.5
Tl1908_A		3.305	ug/L	3.256	98.52	1.850
V_2924_A		-0.4701	ug/L	0.08552	18.19	57.29
Zn2062_A		3.623	ug/L	0.02183	0.6026	8.595
Y_3600_R		9,645.8	Cts/S	161.74	1.6768	9,645.8
Y_2243_A		8,615.0	Cts/S	18.671	0.21672	8,615.0
Y_3600_A		325,530	Cts/S	1,783.6	0.54791	325,530

ICSA

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:05:14PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	5.270	ug/L	1.192	22.63	-2,338
Al3961_R		491,200	ug/L	12,400	2.523	184,900
As1891_A		-1.162	ug/L	2.068	177.9	-7.047
Au2427_A		0.6373	ug/L	0.9584	150.4	96.99
B_2089_A		7.787	ug/L	0.3725	4.783	7.051
Ba4554_R		-0.1276	ug/L	0.08097	63.45	28.40
Be3130_R		0.04101	ug/L	0.006264	15.28	-1.635

ICSA

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:05:14PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ca3158_R		452,100	ug/L	9,302	2.058	243,400
Cd2265_A		1.125	ug/L	0.3461	30.77	269.1
Co2286_A		0.06440	ug/L	0.08317	129.2	1.857
Cr2677_A		-0.4120	ug/L	0.09897	24.02	17.05
Cu3273_A		-1.948	ug/L	0.2775	14.25	70.13
Fe2599_R		176,900	ug/L	4,056	2.293	111,500
K_7664_R		173.5	ug/L	2.507	1.445	79.12
Li6707_R		9.576	ug/L	1.309	13.67	89.65
Mg2025_A		475,000	ug/L	76.51	0.01611	69,460
Mn2576_R		-2.836	ug/L	0.5953	20.99	1.874
Mo2020_A		0.2159	ug/L	0.2793	129.4	0.5873
Na5895_R		79.96	ug/L	5.208	6.513	211.1
Ni2316_A		3.185	ug/L	0.07005	2.199	-18.62
Pb2203_A		1.141	ug/L	0.5274	46.23	-58.28
Sb2068_A		-1.365	ug/L	0.3279	24.01	3.695
Se1960_A		5.152	ug/L	0.3757	7.292	3.522
Si2516_R		21.69	ug/L	16.57	76.39	4.993
Sn1899_A		5.916	ug/L	2.663	45.01	2.904
Sr4215_R	W	4.640	ug/L	0.03321	0.7158	146.7
Ti3349_A		3.036	ug/L	0.4717	15.54	106.3
Tl1908_A		1.673	ug/L	1.465	87.57	1.283
V_2924_A		-0.9967	ug/L	0.5010	50.27	28.81
Zn2062_A		0.4703	ug/L	0.1475	31.37	0.8941
Y_3600_R		9,362.8	Cts/S	70.445	0.75240	9,362.8
Y_2243_A		8,545.7	Cts/S	4.8944	0.057273	8,545.7
Y_3600_A		323,070	Cts/S	453.14	0.14026	323,070

ICSAB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:09:51PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		208.6	ug/L	1.879	0.9009	4,506
Al3961_R		467,300	ug/L	12,760	2.731	175,300
As1891_A		89.36	ug/L	0.3842	0.4300	16.61
Au2427_A		506.1	ug/L	15.47	3.056	2,109
B_2089_A		479.0	ug/L	0.1888	0.03942	404.6
Ba4554_R		460.6	ug/L	12.64	2.743	12,610
Be3130_R		454.7	ug/L	12.96	2.851	18,450
Ca3158_R		436,000	ug/L	14,110	3.235	233,900
Cd2265_A		890.4	ug/L	1.762	0.1979	13,150
Co2286_A		440.1	ug/L	1.236	0.2809	1,683
Cr2677_A		461.1	ug/L	1.295	0.2809	7,738
Cu3273_A		487.3	ug/L	2.472	0.5072	9,271
Fe2599_R		168,200	ug/L	5,201	3.092	105,600
K_7664_R		19,280	ug/L	571.6	2.964	9,100
Li6707_R		514.7	ug/L	15.45	3.002	3,967
Mg2025_A		458,800	ug/L	628.4	0.1370	67,290
Mn2576_R		435.0	ug/L	12.27	2.822	1,544
Mo2020_A		469.9	ug/L	1.335	0.2841	672.2
Na5895_R		19,700	ug/L	576.6	2.926	23,990
Ni2316_A		870.2	ug/L	1.334	0.1533	2,036
Pb2203_A		41.59	ug/L	2.863	6.883	-15.90
Sb2068_A		573.4	ug/L	1.165	0.2032	186.8
Se1960_A		47.16	ug/L	2.066	4.380	9.644
Si2516_R	F	192.3	ug/L	1.051	0.5468	36.86
Sn1899_A		456.7	ug/L	0.5500	0.1204	164.0

ICSAB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:09:51PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Sr4215_R		480.3	ug/L	13.07	2.721	16,120
Ti3349_A		475.0	ug/L	1.342	0.2826	20,770
Tl1908_A		90.59	ug/L	1.424	1.571	28.69
V_2924_A		469.6	ug/L	1.362	0.2901	10,310
Zn2062_A		862.5	ug/L	1.796	0.2082	2,090
Y_3600_R		9,332.9	Cts/S	200.73	2.1508	9,332.9
Y_2243_A		8,569.8	Cts/S	23.702	0.27658	8,569.8
Y_3600_A		321,070	Cts/S	3,030.7	0.94394	321,070

CCV

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:14:22PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		492.8	ug/L	0.6286	0.1275	18,150
Al3961_R		11,830	ug/L	187.9	1.588	4,602
As1891_A		488.5	ug/L	0.4200	0.08597	136.9
Au2427_A		497.1	ug/L	17.84	3.589	2,202
B_2089_A		492.9	ug/L	0.8343	0.1692	461.7
Ba4554_R		476.8	ug/L	10.31	2.163	13,500
Be3130_R		475.0	ug/L	7.284	1.533	19,930
Ca3158_R		12,050	ug/L	195.5	1.623	6,706
Cd2265_A		502.0	ug/L	0.9468	0.1886	8,081
Co2286_A		498.4	ug/L	0.6180	0.1240	2,110
Cr2677_A		500.5	ug/L	0.3798	0.07587	9,446
Cu3273_A		491.0	ug/L	1.212	0.2469	10,450
Fe2599_R	W	11,790	ug/L	209.3	1.776	7,671
K_7664_R		11,870	ug/L	242.6	2.044	5,792
Li6707_R		479.8	ug/L	10.44	2.176	3,826
Mg2025_A		12,530	ug/L	13.93	0.1112	2,071
Mn2576_R		477.0	ug/L	10.33	2.165	1,741
Mo2020_A		509.8	ug/L	2.907	0.5702	807.6
Na5895_R		11,950	ug/L	218.2	1.826	15,100
Ni2316_A		502.8	ug/L	0.1057	0.02103	1,316
Pb2203_A		506.0	ug/L	1.449	0.2863	549.6
Sb2068_A		493.1	ug/L	0.3326	0.06745	174.0
Se1960_A		486.6	ug/L	0.7449	0.1531	80.27
Si2516_R		11,960	ug/L	266.2	2.225	2,241
Sn1899_A		502.6	ug/L	0.3483	0.06931	199.8
Sr4215_R		479.8	ug/L	9.195	1.917	16,650
Ti3349_A		492.4	ug/L	0.1880	0.03819	24,270
Tl1908_A		499.8	ug/L	0.1759	0.03521	178.9
V_2924_A		493.3	ug/L	0.6389	0.1295	12,140
Zn2062_A		492.0	ug/L	0.4213	0.08562	1,320
Y_3600_R		9,649.4	Cts/S	22.735	0.23561	9,649.4
Y_2243_A		9,489.8	Cts/S	12.254	0.12913	9,489.8
Y_3600_A		361,950	Cts/S	183.84	0.050792	361,950

CCB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:18:58PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1526	ug/L	0.06468	42.39	2.488
Al3961_R		-12.47	ug/L	5.530	44.33	0.6307
As1891_A		2.165	ug/L	0.9056	41.83	-0.08251
Au2427_A		4.390	ug/L	0.9537	21.73	20.13

CCB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:18:58PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
B_2089_A		4.437	ug/L	0.4448	10.02	4.910
Ba4554_R		0.5309	ug/L	0.1852	34.88	45.64
Be3130_R		0.2315	ug/L	0.1997	86.24	5.923
Ca3158_R		-49.53	ug/L	8.460	17.08	-5.435
Cd2265_A		0.07804	ug/L	0.03258	41.74	2.783
Co2286_A		-0.003032	ug/L	0.01106	364.8	3.381
Cr2677_A		-0.2165	ug/L	0.1204	55.62	-1.752
Cu3273_A		0.2583	ug/L	0.01618	6.263	36.38
Fe2599_R		-9.826	ug/L	4.001	40.72	7.338
K_7664_R		61.62	ug/L	17.60	28.56	25.52
Li6707_R		-1.057	ug/L	1.644	155.5	7.290
Mg2025_A	F	-130.8	ug/L	2.606	1.991	-2.739
Mn2576_R		-0.7318	ug/L	0.7401	101.1	0.2500
Mo2020_A		2.747	ug/L	0.4294	15.63	4.710
Na5895_R		31.61	ug/L	16.89	53.44	149.5
Ni2316_A		0.3657	ug/L	0.005836	1.596	-0.3187
Pb2203_A		0.9585	ug/L	0.5207	54.32	-1.236
Sb2068_A		0.3082	ug/L	0.2899	94.08	-0.1693
Se1960_A		4.136	ug/L	0.1675	4.048	1.401
Si2516_R		-6.215	ug/L	1.928	31.03	1.813
Sn1899_A		0.5313	ug/L	0.3868	72.82	1.105
Sr4215_R		0.2486	ug/L	0.2539	102.1	-1.392
Ti3349_A		1.023	ug/L	0.1496	14.63	20.08
Tl1908_A		1.539	ug/L	0.3122	20.28	0.06325
V_2924_A		0.1648	ug/L	0.2319	140.7	-5.851
Zn2062_A		0.1721	ug/L	0.08321	48.35	0.1930
Y_3600_R		9,220.5	Cts/S	406.43	4.4079	9,220.5
Y_2243_A		9,589.0	Cts/S	8.8687	0.092488	9,589.0
Y_3600_A		365,450	Cts/S	4,693.5	1.2843	365,450

LC2OID01ICS1

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:23:45PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.81	ug/L	0.3434	0.7036	1,812
Al3961_R		1,972	ug/L	64.37	3.264	771.0
As1891_A		98.58	ug/L	0.9745	0.9885	27.26
Au2427_A		5.594	ug/L	0.5333	9.533	21.71
B_2089_A		474.3	ug/L	0.1437	0.03029	435.4
Ba4554_R		1,948	ug/L	46.58	2.391	55,010
Be3130_R		49.57	ug/L	0.8543	1.723	2,064
Ca3158_R		2,393	ug/L	60.77	2.539	1,349
Cd2265_A		253.1	ug/L	0.07684	0.03036	4,081
Co2286_A		516.6	ug/L	0.6016	0.1165	2,195
Cr2677_A		209.2	ug/L	1.181	0.5642	3,972
Cu3273_A		253.2	ug/L	1.955	0.7722	5,429
Fe2599_R		1,010	ug/L	26.99	2.673	669.3
K_7664_R		9,610	ug/L	238.9	2.486	4,685
Li6707_R		488.7	ug/L	9.037	1.849	3,894
Mg2025_A		4,888	ug/L	0.9513	0.01946	832.2
Mn2576_R		500.9	ug/L	12.97	2.590	1,826
Mo2020_A		105.1	ug/L	0.4689	0.4463	167.1
Na5895_R		7,385	ug/L	188.4	2.551	9,366
Ni2316_A		518.2	ug/L	0.1503	0.02900	1,362
Pb2203_A		102.7	ug/L	0.07097	0.06913	110.2
Sb2068_A		98.03	ug/L	0.03064	0.03126	32.91

LC2OID01ICS1

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:23:45PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Se1960_A		100.3	ug/L	2.558	2.550	17.19
Si2516_R		970.5	ug/L	15.83	1.631	184.7
Sn1899_A		530.2	ug/L	0.2992	0.05643	211.4
Sr4215_R		489.1	ug/L	10.16	2.077	16,960
Ti3349_A		510.3	ug/L	1.102	0.2160	25,270
Tl1908_A	W	116.8	ug/L	0.7340	0.6285	40.02
V_2924_A		510.5	ug/L	2.505	0.4906	12,730
Zn2062_A		501.7	ug/L	0.8215	0.1637	1,351
Y_3600_R		9,642.3	Cts/S	76.815	0.79665	9,642.3
Y_2243_A		9,521.5	Cts/S	9.4965	0.099737	9,521.5
Y_3600_A		363,900	Cts/S	3,495.5	0.96056	363,900

LCSOID01ICS1

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:28:25PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.65	ug/L	0.04066	0.08189	1,821
Al3961_R		1,995	ug/L	32.50	1.629	777.4
As1891_A		99.44	ug/L	1.276	1.283	27.52
Au2427_A		4.986	ug/L	0.2959	5.935	18.94
B_2089_A		478.4	ug/L	0.6710	0.1403	439.5
Ba4554_R		1,972	ug/L	41.72	2.116	55,480
Be3130_R		50.19	ug/L	1.005	2.002	2,082
Ca3158_R		2,437	ug/L	50.87	2.087	1,369
Cd2265_A		257.6	ug/L	0.1833	0.07119	4,155
Co2286_A		515.8	ug/L	0.1837	0.03562	2,193
Cr2677_A		213.0	ug/L	1.077	0.5060	3,991
Cu3273_A		257.0	ug/L	1.085	0.4222	5,440
Fe2599_R		971.8	ug/L	19.92	2.050	642.6
K_7664_R		9,861	ug/L	160.9	1.632	4,791
Li6707_R		497.3	ug/L	6.474	1.302	3,948
Mg2025_A		4,960	ug/L	10.96	0.2209	844.6
Mn2576_R		508.3	ug/L	9.812	1.930	1,847
Mo2020_A		106.2	ug/L	0.4102	0.3861	169.1
Na5895_R		7,576	ug/L	159.8	2.110	9,573
Ni2316_A		519.8	ug/L	0.2940	0.05656	1,367
Pb2203_A		103.6	ug/L	0.4176	0.4030	111.3
Sb2068_A		98.99	ug/L	0.6348	0.6413	33.26
Se1960_A		101.4	ug/L	1.027	1.012	17.38
Si2516_R		969.2	ug/L	20.90	2.156	183.8
Sn1899_A		537.1	ug/L	0.2115	0.03939	214.4
Sr4215_R		502.3	ug/L	9.297	1.851	17,350
Ti3349_A		510.2	ug/L	0.09614	0.01884	24,950
Tl1908_A	W	119.2	ug/L	1.472	1.234	40.92
V_2924_A		515.4	ug/L	0.2772	0.05378	12,690
Zn2062_A		502.8	ug/L	0.06351	0.01263	1,355
Y_3600_R		9,609.1	Cts/S	75.048	0.78102	9,609.1
Y_2243_A		9,528.5	Cts/S	6.6900	0.070211	9,528.5
Y_3600_A		359,320	Cts/S	1,697.7	0.47248	359,320

PBSID01ICS1

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:33:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.07538	ug/L	0.09366	124.3	10.69

PBSID01ICS1

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:33:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Al3961_R		-18.05	ug/L	9.618	53.28	-1.668
As1891_A		0.5247	ug/L	1.399	266.6	-0.5573
Au2427_A		1.401	ug/L	0.2852	20.36	6.838
B_2089_A		2.787	ug/L	0.2435	8.738	3.388
Ba4554_R		0.4639	ug/L	0.1041	22.45	48.43
Be3130_R		0.02320	ug/L	0.01910	82.34	-2.514
Ca3158_R		-16.40	ug/L	1.938	11.82	13.49
Cd2265_A		0.03513	ug/L	0.04340	123.6	2.122
Co2286_A		0.3146	ug/L	0.1984	63.07	4.788
Cr2677_A		0.4723	ug/L	0.02373	5.024	11.01
Cu3273_A		0.9015	ug/L	0.2201	24.41	48.43
Fe2599_R		-3.136	ug/L	2.160	68.88	12.65
K_7664_R		42.33	ug/L	4.245	10.03	18.31
Li6707_R		0.3541	ug/L	0.1819	51.36	20.05
Mg2025_A	F	-119.1	ug/L	2.556	2.145	-0.8247
Mn2576_R		-0.005935	ug/L	0.4656	7,846	3.063
Mo2020_A		0.9683	ug/L	0.07935	8.195	1.885
Na5895_R		49.78	ug/L	8.420	16.92	188.6
Ni2316_A		0.5259	ug/L	0.008968	1.705	0.1019
Pb2203_A		1.256	ug/L	0.5397	42.96	-0.9156
Sb2068_A		1.135	ug/L	0.9189	80.99	0.05078
Se1960_A		2.757	ug/L	0.2155	7.816	1.187
Si2516_R		20.06	ug/L	11.47	57.17	7.094
Sn1899_A		24.98	ug/L	0.1228	0.4915	11.01
Sr4215_R		0.2127	ug/L	0.2745	129.1	-2.949
Ti3349_A		1.015	ug/L	0.1358	13.38	18.84
Tl1908_A		0.7178	ug/L	0.1592	22.17	-0.2408
V_2924_A		0.1098	ug/L	0.01506	13.71	-6.755
Zn2062_A		0.6548	ug/L	0.01264	1.931	1.518
Y_3600_R		10,142	Cts/S	626.01	6.1722	10,142
Y_2243_A		9,699.7	Cts/S	4.8468	0.049969	9,699.7
Y_3600_A		353,910	Cts/S	21,419	6.0521	353,910

SI2001-001

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:37:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2.920	ug/L	1.904	65.20	-2,393
Al3961_R	W	139,400	ug/L	4,367	3.132	56,460
As1891_A		95.31	ug/L	1.107	1.161	19.98
Au2427_A		27.00	ug/L	1.041	3.855	176.2
B_2089_A		16.34	ug/L	0.1204	0.7363	16.13
Ba4554_R		513.7	ug/L	11.67	2.271	15,190
Be3130_R		7.570	ug/L	0.08999	1.189	120.4
Ca3158_R		19,090	ug/L	536.1	2.808	11,080
Cd2265_A		3.906	ug/L	0.3958	10.13	312.9
Co2286_A		50.54	ug/L	0.1487	0.2942	296.7
Cr2677_A		363.3	ug/L	0.6980	0.1922	6,927
Cu3273_A		304.5	ug/L	2.192	0.7197	6,465
Fe2599_R	W	151,900	ug/L	4,360	2.870	103,100
K_7664_R		11,640	ug/L	297.5	2.555	5,934
Li6707_R		221.5	ug/L	4.263	1.924	1,854
Mg2025_A	W	40,320	ug/L	48.41	0.1201	6,699
Mn2576_R	W	4,272	ug/L	114.3	2.676	16,270
Mo2020_A		8.031	ug/L	0.1610	2.004	13.32
Na5895_R		1,677	ug/L	26.55	1.583	2,318

SI2001-001

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:37:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ni2316_A		187.1	ug/L	0.2875	0.1536	475.0
Pb2203_A	W	1,331	ug/L	2.724	0.2047	1,468
Sb2068_A		-1.324	ug/L	0.1144	8.645	3.200
Se1960_A		0.6038	ug/L	3.409	564.5	2.216
Si2516_R		2,690	ug/L	50.97	1.895	528.2
Sn1899_A		54.27	ug/L	1.167	2.150	22.82
Sr4215_R		108.7	ug/L	2.299	2.115	3,932
Ti3349_A	W	6,659	ug/L	4.237	0.06364	330,300
Tl1908_A		7.114	ug/L	0.4366	6.136	-4.423
V_2924_A		284.3	ug/L	1.875	0.6593	7,273
Zn2062_A		960.1	ug/L	2.159	0.2249	2,630
Y_3600_R		10,080	Cts/S	191.82	1.9031	10,080
Y_2243_A		9,682.5	Cts/S	5.1442	0.053128	9,682.5
Y_3600_A		364,230	Cts/S	1,490.6	0.40924	364,230

SI2001-002

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:42:39PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2.821	ug/L	0.9246	32.77	-1,662
Al3961_R	W	98,110	ug/L	26.24	0.02674	38,880
As1891_A		69.68	ug/L	1.824	2.618	14.56
Au2427_A		19.57	ug/L	1.965	10.04	124.8
B_2089_A		14.72	ug/L	0.3331	2.263	14.57
Ba4554_R		364.3	ug/L	1.593	0.4372	10,550
Be3130_R		5.437	ug/L	0.02185	0.4018	74.73
Ca3158_R		18,030	ug/L	153.9	0.8536	10,250
Cd2265_A		4.269	ug/L	0.05142	1.205	247.3
Co2286_A		33.12	ug/L	0.3173	0.9581	203.6
Cr2677_A		348.4	ug/L	4.309	1.237	6,587
Cu3273_A		224.9	ug/L	3.609	1.604	4,745
Fe2599_R	W	108,000	ug/L	580.0	0.5371	71,680
K_7664_R		6,680	ug/L	18.25	0.2733	3,330
Li6707_R		165.2	ug/L	0.5123	0.3101	1,357
Mg2025_A	W	25,460	ug/L	68.74	0.2700	4,234
Mn2576_R	W	3,284	ug/L	21.60	0.6579	12,230
Mo2020_A		6.773	ug/L	0.1058	1.562	11.28
Na5895_R		3,204	ug/L	34.41	1.074	4,223
Ni2316_A		129.7	ug/L	0.08979	0.06924	328.1
Pb2203_A		761.8	ug/L	0.1433	0.01881	836.8
Sb2068_A		0.4406	ug/L	2.308	523.8	2.920
Se1960_A		-0.07086	ug/L	1.257	1,773	1.716
Si2516_R		2,510	ug/L	91.40	3.641	482.6
Sn1899_A		39.60	ug/L	0.1531	0.3866	16.88
Sr4215_R		81.46	ug/L	0.4876	0.5986	2,880
Ti3349_A	W	5,073	ug/L	69.82	1.376	249,700
Tl1908_A		4.792	ug/L	1.975	41.22	-3.753
V_2924_A		210.7	ug/L	2.304	1.093	5,340
Zn2062_A		809.4	ug/L	1.146	0.1416	2,215
Y_3600_R		9,860.1	Cts/S	45.403	0.46047	9,860.1
Y_2243_A		9,675.2	Cts/S	18.133	0.18741	9,675.2
Y_3600_A		361,520	Cts/S	5,595.4	1.5477	361,520

SI2001-003

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ

SI2001-003

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:47:20PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		5.543	ug/L	1.151	20.77	-2,204
Al3961_R	W	73,440	ug/L	424.7	0.5782	28,350
As1891_A		122.8	ug/L	1.757	1.431	26.99
Au2427_A		15.99	ug/L	0.3972	2.484	136.9
B_2089_A		8.579	ug/L	0.05264	0.6136	8.711
Ba4554_R		645.1	ug/L	6.809	1.055	18,170
Be3130_R		5.017	ug/L	0.06150	1.226	63.07
Ca3158_R	W	38,880	ug/L	724.4	1.863	21,490
Cd2265_A		1.400	ug/L	0.4677	33.41	265.6
Co2286_A		47.33	ug/L	0.1259	0.2659	255.3
Cr2677_A		171.1	ug/L	0.4773	0.2790	3,162
Cu3273_A		416.2	ug/L	2.316	0.5563	8,548
Fe2599_R	W	152,400	ug/L	1,484	0.9734	98,540
K_7664_R	W	42,040	ug/L	759.1	1.806	20,420
Li6707_R		256.2	ug/L	2.226	0.8691	2,041
Mg2025_A	W	45,010	ug/L	2,781	6.177	7,302
Mn2576_R	W	2,670	ug/L	21.11	0.7907	9,692
Mo2020_A		7.364	ug/L	0.1207	1.639	11.93
Na5895_R	W	28,800	ug/L	697.5	2.422	36,040
Ni2316_A		137.5	ug/L	0.00005600	0.00004100	334.0
Pb2203_A	W	1,796	ug/L	5.937	0.3306	1,950
Sb2068_A		3.987	ug/L	1.855	46.53	4.000
Se1960_A		0.8582	ug/L	1.738	202.5	1.853
Si2516_R		2,921	ug/L	48.95	1.676	546.0
Sn1899_A		130.3	ug/L	0.6654	0.5106	52.28
Sr4215_R		122.2	ug/L	1.155	0.9445	4,214
Ti3349_A	W	4,808	ug/L	11.16	0.2321	230,200
Tl1908_A		4.408	ug/L	0.5933	13.46	-3.136
V_2924_A		180.2	ug/L	0.5445	0.3022	4,487
Zn2062_A	W	1,953	ug/L	29.26	1.498	5,227
Y_3600_R		9,603.8	Cts/S	28.149	0.29310	9,603.8
Y_2243_A		9,456.9	Cts/S	21.155	0.22370	9,456.9
Y_3600_A		351,530	Cts/S	1,542.9	0.43892	351,530

SI2001-004

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:52:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		5.709	ug/L	1.563	27.38	-2,003
Al3961_R	W	134,100	ug/L	4,777	3.563	51,770
As1891_A		80.39	ug/L	0.02713	0.03375	16.70
Au2427_A		12.32	ug/L	0.1196	0.9710	118.2
B_2089_A		10.67	ug/L	0.07870	0.7373	10.95
Ba4554_R		372.9	ug/L	12.08	3.240	10,520
Be3130_R		6.976	ug/L	0.2299	3.295	142.6
Ca3158_R		10,430	ug/L	341.4	3.274	5,783
Cd2265_A		0.9011	ug/L	0.4102	45.53	237.4
Co2286_A		40.84	ug/L	0.1391	0.3405	237.6
Cr2677_A		252.5	ug/L	1.368	0.5419	4,859
Cu3273_A		110.8	ug/L	1.597	1.441	2,372
Fe2599_R	W	134,200	ug/L	4,483	3.340	86,830
K_7664_R		9,338	ug/L	226.7	2.427	4,537
Li6707_R		209.5	ug/L	2.853	1.362	1,673
Mg2025_A	W	34,050	ug/L	12.16	0.03571	5,731
Mn2576_R	W	2,250	ug/L	68.79	3.058	8,173
Mo2020_A		5.726	ug/L	0.2390	4.175	9.697

SI2001-004

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:52:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		903.5	ug/L	49.31	5.457	1,244
Ni2316_A		214.1	ug/L	0.6396	0.2988	556.9
Pb2203_A		578.3	ug/L	1.105	0.1911	636.3
Sb2068_A		-0.3684	ug/L	1.056	286.6	2.986
Se1960_A		0.8483	ug/L	3.329	392.4	2.037
Si2516_R		3,174	ug/L	152.7	4.812	593.5
Sn1899_A		48.39	ug/L	0.6911	1.428	20.71
Sr4215_R		67.25	ug/L	2.006	2.984	2,315
Ti3349_A	W	4,888	ug/L	21.34	0.4365	244,500
Tl1908_A		4.128	ug/L	0.4618	11.19	-2.993
V_2924_A		203.8	ug/L	0.05572	0.02734	5,274
Zn2062_A		735.7	ug/L	1.438	0.1954	2,041
Y_3600_R		9,614.2	Cts/S	333.98	3.4738	9,614.2
Y_2243_A		9,806.1	Cts/S	10.951	0.11167	9,806.1
Y_3600_A		367,310	Cts/S	1,522.6	0.41452	367,310

SI2001-005

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 2:56:44PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		8.891	ug/L	3.886	43.71	-2,482
Al3961_R	W	118,000	ug/L	6,218	5.270	43,660
As1891_A		95.34	ug/L	1.444	1.514	18.54
Au2427_A		16.23	ug/L	0.1501	0.9248	148.2
B_2089_A		44.45	ug/L	0.1164	0.2618	41.44
Ba4554_R	W	1,114	ug/L	65.33	5.863	30,050
Be3130_R		7.010	ug/L	0.1091	1.557	56.80
Ca3158_R	W	49,540	ug/L	2,787	5.625	26,240
Cd2265_A		2.103	ug/L	1.057	50.25	314.5
Co2286_A		71.56	ug/L	0.2529	0.3534	392.7
Cr2677_A		293.8	ug/L	0.8878	0.3022	5,482
Cu3273_A		721.6	ug/L	0.8996	0.1247	15,000
Fe2599_R	W	174,300	ug/L	9,618	5.520	108,000
K_7664_R	W	29,510	ug/L	1,603	5.432	13,740
Li6707_R		327.2	ug/L	20.40	6.236	2,494
Mg2025_A	W	49,190	ug/L	64.56	0.1313	8,033
Mn2576_R	W	3,098	ug/L	153.7	4.959	10,780
Mo2020_A		7.587	ug/L	0.3402	4.484	12.36
Na5895_R		8,052	ug/L	478.2	5.939	9,739
Ni2316_A		235.3	ug/L	0.9961	0.4233	590.4
Pb2203_A	W	2,001	ug/L	0.1423	0.007113	2,183
Sb2068_A		1.259	ug/L	1.730	137.4	3.634
Se1960_A		2.556	ug/L	3.138	122.8	2.410
Si2516_R		4,639	ug/L	419.7	9.046	829.6
Sn1899_A		187.3	ug/L	0.7938	0.4238	75.27
Sr4215_R		638.3	ug/L	35.85	5.615	21,130
Ti3349_A	W	7,730	ug/L	14.16	0.1832	374,700
Tl1908_A		8.446	ug/L	1.014	12.00	-3.390
V_2924_A		292.9	ug/L	0.08240	0.02813	7,370
Zn2062_A	W	2,235	ug/L	2.834	0.1268	6,021
Y_3600_R		9,217.7	Cts/S	435.28	4.7222	9,217.7
Y_2243_A		9,521.9	Cts/S	15.905	0.16704	9,521.9
Y_3600_A		355,940	Cts/S	375.84	0.10559	355,940

SI2001-007

Method Name: K6010-2011 Method Revision: 1,724

SI2001-007

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:01:33PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		14.69	ug/L	4.448	30.27	-2,395
Al3961_R	W	77,560	ug/L	4,891	6.307	28,750
As1891_A		76.23	ug/L	1.182	1.551	12.62
Au2427_A		8.521	ug/L	1.438	16.88	131.6
B_2089_A		31.92	ug/L	0.3872	1.213	30.26
Ba4554_R	W	1,001	ug/L	68.52	6.846	27,040
Be3130_R		4.197	ug/L	0.1015	2.420	58.46
Ca3158_R	W	38,060	ug/L	2,643	6.945	20,200
Cd2265_A		6.276	ug/L	1.189	18.95	394.2
Co2286_A		50.74	ug/L	0.1670	0.3292	259.4
Cr2677_A		166.9	ug/L	1.518	0.9093	3,170
Cu3273_A		702.3	ug/L	7.684	1.094	14,840
Fe2599_R	W	182,800	ug/L	12,050	6.595	113,500
K_7664_R		9,971	ug/L	616.5	6.183	4,650
Li6707_R		199.3	ug/L	11.90	5.968	1,529
Mg2025_A	W	30,540	ug/L	36.99	0.1211	5,004
Mn2576_R	W	1,591	ug/L	101.6	6.384	5,552
Mo2020_A		14.38	ug/L	0.5677	3.949	23.18
Na5895_R		2,119	ug/L	142.7	6.737	2,650
Ni2316_A		197.1	ug/L	0.1122	0.05696	489.2
Pb2203_A	W	3,742	ug/L	4.867	0.1301	4,106
Sb2068_A		16.24	ug/L	1.204	7.417	8.152
Se1960_A		44.63	ug/L	1.069	2.396	9.089
Si2516_R		2,849	ug/L	180.4	6.332	510.9
Sn1899_A		252.2	ug/L	1.605	0.6364	101.2
Sr4215_R		316.9	ug/L	21.13	6.667	10,510
Ti3349_A	W	3,737	ug/L	16.98	0.4545	183,700
Tl1908_A		4.417	ug/L	1.183	26.78	-1.886
V_2924_A		189.3	ug/L	0.8671	0.4581	4,823
Zn2062_A	W	5,198	ug/L	19.16	0.3686	14,030
Y_3600_R		9,236.9	Cts/S	475.36	5.1463	9,236.9
Y_2243_A		9,536.9	Cts/S	27.211	0.28532	9,536.9
Y_3600_A		360,990	Cts/S	3,047.0	0.84407	360,990

LC2WID01ICW2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:06:15PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.19	ug/L	0.08130	0.1558	1,931
Al3961_R		2,126	ug/L	10.26	0.4825	839.4
As1891_A		93.83	ug/L	1.098	1.170	25.98
Au2427_A		4.157	ug/L	0.2181	5.246	15.40
B_2089_A		506.4	ug/L	1.716	0.3388	465.7
Ba4554_R		1,962	ug/L	38.41	1.958	55,990
Be3130_R		50.21	ug/L	1.072	2.135	2,113
Ca3158_R		2,434	ug/L	10.27	0.4219	1,386
Cd2265_A		261.5	ug/L	0.07161	0.02739	4,228
Co2286_A		525.8	ug/L	0.5899	0.1122	2,240
Cr2677_A		215.3	ug/L	1.479	0.6870	4,076
Cu3273_A		254.9	ug/L	2.839	1.114	5,449
Fe2599_R	W	1,177	ug/L	29.10	2.473	786.2
K_7664_R		9,573	ug/L	175.2	1.830	4,717
Li6707_R		495.2	ug/L	10.80	2.180	3,987
Mg2025_A		5,069	ug/L	9.735	0.1920	864.6
Mn2576_R		510.1	ug/L	9.757	1.913	1,880
Mo2020_A		93.67	ug/L	1.625	1.735	149.5

LC2WID01ICW2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:06:15PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		7,407	ug/L	100.8	1.361	9,493
Ni2316_A		536.6	ug/L	0.05469	0.01019	1,415
Pb2203_A		107.0	ug/L	0.8486	0.7933	115.3
Sb2068_A		97.23	ug/L	1.337	1.375	33.44
Se1960_A		100.8	ug/L	1.438	1.427	17.33
Si2516_R		982.0	ug/L	13.51	1.376	188.8
Sn1899_A	F	318.7	ug/L	1.139	0.3575	127.8
Sr4215_R		490.8	ug/L	8.494	1.731	17,200
Ti3349_A		493.2	ug/L	3.318	0.6727	24,350
Tl1908_A	W	118.8	ug/L	2.871	2.416	40.89
V_2924_A		510.9	ug/L	3.541	0.6931	12,700
Zn2062_A		523.6	ug/L	0.01460	0.002789	1,414
Y_3600_R		9,744.5	Cts/S	68.883	0.70689	9,744.5
Y_2243_A		9,550.8	Cts/S	14.841	0.15539	9,550.8
Y_3600_A		362,890	Cts/S	743.77	0.20496	362,890

CCV

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:10:57PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		497.4	ug/L	3.532	0.7101	18,130
Al3961_R		12,080	ug/L	140.8	1.165	4,646
As1891_A		486.7	ug/L	1.185	0.2434	136.0
Au2427_A		497.6	ug/L	20.28	4.075	2,197
B_2089_A		487.8	ug/L	0.2946	0.06039	455.4
Ba4554_R		484.3	ug/L	5.812	1.200	13,560
Be3130_R		482.8	ug/L	6.147	1.273	20,040
Ca3158_R		12,170	ug/L	127.7	1.049	6,701
Cd2265_A		502.3	ug/L	0.3939	0.07842	8,057
Co2286_A		497.2	ug/L	1.063	0.2138	2,098
Cr2677_A		509.4	ug/L	4.648	0.9126	9,513
Cu3273_A		491.4	ug/L	2.998	0.6101	10,350
Fe2599_R		11,920	ug/L	203.4	1.706	7,670
K_7664_R		12,040	ug/L	234.6	1.949	5,808
Li6707_R		493.6	ug/L	4.985	1.010	3,892
Mg2025_A		12,540	ug/L	25.26	0.2014	2,065
Mn2576_R		490.5	ug/L	5.455	1.112	1,771
Mo2020_A		512.3	ug/L	1.366	0.2667	808.7
Na5895_R		12,200	ug/L	163.9	1.344	15,230
Ni2316_A		502.9	ug/L	0.05855	0.01164	1,312
Pb2203_A		509.5	ug/L	0.7068	0.1387	551.3
Sb2068_A		492.2	ug/L	0.7855	0.1596	173.1
Se1960_A		483.5	ug/L	2.177	0.4502	79.49
Si2516_R		12,170	ug/L	123.6	1.016	2,255
Sn1899_A		502.5	ug/L	1.476	0.2938	199.1
Sr4215_R		489.8	ug/L	5.083	1.038	16,810
Ti3349_A		496.9	ug/L	3.927	0.7903	24,240
Tl1908_A		493.1	ug/L	0.5397	0.1094	175.8
V_2924_A		498.0	ug/L	4.327	0.8689	12,130
Zn2062_A		488.6	ug/L	0.4373	0.08951	1,306
Y_3600_R		9,541.5	Cts/S	72.079	0.75543	9,541.5
Y_2243_A		9,456.2	Cts/S	1.9788	0.020926	9,456.2
Y_3600_A		358,210	Cts/S	4,492.5	1.2542	358,210

CCB

Method Name: K6010-2011 Method Revision: 1,724

CCB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:15:32PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.04466	ug/L	0.06410	143.5	9.938
Al3961_R		-26.43	ug/L	5.918	22.39	-4.690
As1891_A		2.002	ug/L	0.06860	3.427	-0.1287
Au2427_A		2.304	ug/L	0.3563	15.46	10.75
B_2089_A		1.819	ug/L	0.09085	4.994	2.480
Ba4554_R		-0.01092	ug/L	0.02218	203.2	32.45
Be3130_R		0.2781	ug/L	0.03784	13.61	8.304
Ca3158_R		-48.12	ug/L	2.445	5.081	-4.781
Cd2265_A		0.1112	ug/L	0.01549	13.94	3.306
Co2286_A		0.1439	ug/L	0.03769	26.19	3.990
Cr2677_A		0.1393	ug/L	0.002960	2.125	5.053
Cu3273_A		-0.1592	ug/L	0.01123	7.052	27.51
Fe2599_R		-10.53	ug/L	2.329	22.11	7.247
K_7664_R		-9.126	ug/L	9.353	102.5	-7.608
Li6707_R		-0.3165	ug/L	1.154	364.6	13.76
Mg2025_A	F	-130.1	ug/L	1.400	1.076	-2.607
Mn2576_R		-0.2254	ug/L	0.3544	157.3	2.156
Mo2020_A		2.018	ug/L	0.3937	19.51	3.527
Na5895_R		14.32	ug/L	23.16	161.8	134.7
Ni2316_A		0.3272	ug/L	0.04210	12.87	-0.4204
Pb2203_A		0.9705	ug/L	0.3423	35.27	-1.215
Sb2068_A		1.190	ug/L	0.1377	11.57	0.1477
Se1960_A		2.163	ug/L	0.5015	23.19	1.071
Si2516_R		13.14	ug/L	9.551	72.69	5.500
Sn1899_A		0.6932	ug/L	0.2112	30.47	1.165
Sr4215_R		0.3875	ug/L	0.2094	54.05	3.537
Ti3349_A		1.050	ug/L	0.02523	2.402	21.51
Tl1908_A		1.650	ug/L	0.2123	12.87	0.1029
V_2924_A		0.1361	ug/L	0.2004	147.2	-6.449
Zn2062_A		0.2698	ug/L	0.02334	8.651	0.4552
Y_3600_R		9,612.2	Cts/S	21.760	0.22638	9,612.2
Y_2243_A		9,548.7	Cts/S	5.8389	0.061149	9,548.7
Y_3600_A		366,590	Cts/S	4,043.1	1.1029	366,590

LCSWID01ICW2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:20:20PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.58	ug/L	1.035	2.131	1,813
Al3961_R		2,001	ug/L	52.23	2.610	766.7
As1891_A		101.1	ug/L	0.4420	0.4370	27.99
Au2427_A		4.849	ug/L	0.3976	8.200	18.38
B_2089_A		492.4	ug/L	0.09185	0.01865	451.9
Ba4554_R		1,949	ug/L	24.97	1.281	53,930
Be3130_R		49.84	ug/L	1.199	2.405	2,034
Ca3158_R		2,484	ug/L	38.97	1.569	1,371
Cd2265_A		257.4	ug/L	0.2182	0.08476	4,151
Co2286_A		500.0	ug/L	1.635	0.3270	2,125
Cr2677_A		200.4	ug/L	3.416	1.704	3,823
Cu3273_A		243.4	ug/L	3.659	1.504	5,244
Fe2599_R		958.3	ug/L	17.84	1.862	623.3
K_7664_R		10,000	ug/L	5.138	0.05137	4,779
Li6707_R		510.5	ug/L	5.983	1.172	3,986
Mg2025_A		5,032	ug/L	5.330	0.1059	855.2
Mn2576_R		500.7	ug/L	8.719	1.741	1,790
Mo2020_A		103.5	ug/L	1.229	1.187	164.7

LCSWID01ICW2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:20:20PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		7,735	ug/L	48.87	0.6318	9,608
Ni2316_A		504.9	ug/L	0.9413	0.1864	1,327
Pb2203_A		103.8	ug/L	0.4583	0.4415	111.4
Sb2068_A		100.9	ug/L	0.7286	0.7223	33.98
Se1960_A		102.1	ug/L	4.285	4.198	17.48
Si2516_R		1,029	ug/L	10.81	1.051	191.7
Sn1899_A		509.5	ug/L	1.384	0.2716	203.3
Sr4215_R		509.2	ug/L	7.606	1.494	17,300
Ti3349_A		494.5	ug/L	8.158	1.650	24,600
Tl1908_A	F	121.0	ug/L	0.9611	0.7943	41.61
V_2924_A		493.1	ug/L	7.106	1.441	12,350
Zn2062_A		489.6	ug/L	0.9495	0.1939	1,319
Y_3600_R		9,449.3	Cts/S	67.915	0.71873	9,449.3
Y_2243_A		9,523.3	Cts/S	7.4510	0.078240	9,523.3
Y_3600_A		365,620	Cts/S	5,091.3	1.3925	365,620

PBWID01ICW2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:25:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1001	ug/L	0.2492	249.0	12.13
Al3961_R		-14.02	ug/L	12.82	91.45	0.2677
As1891_A		0.6935	ug/L	1.503	216.8	-0.5049
Au2427_A		-0.06418	ug/L	0.4294	669.0	0.2125
B_2089_A		1.310	ug/L	0.1673	12.78	2.010
Ba4554_R		2.133	ug/L	0.04855	2.276	88.73
Be3130_R		0.1078	ug/L	0.1426	132.2	0.9206
Ca3158_R		-49.83	ug/L	2.871	5.761	-5.422
Cd2265_A		0.07017	ug/L	0.04573	65.17	2.660
Co2286_A		0.2540	ug/L	0.05623	22.13	4.492
Cr2677_A		0.05920	ug/L	0.1924	325.0	3.550
Cu3273_A		0.2203	ug/L	0.2044	92.78	35.34
Fe2599_R		-14.35	ug/L	0.6536	4.555	4.589
K_7664_R		2.583	ug/L	29.97	1,160	-1.297
Li6707_R		0.9635	ug/L	2.418	250.9	22.14
Mg2025_A	F	-125.4	ug/L	3.231	2.576	-1.856
Mn2576_R		-0.6653	ug/L	0.1917	28.81	0.5624
Mo2020_A		1.229	ug/L	0.1577	12.84	2.289
Na5895_R		24.58	ug/L	0.1932	0.7861	141.2
Ni2316_A		0.5097	ug/L	0.08073	15.84	0.06058
Pb2203_A		0.2074	ug/L	0.2993	144.3	-2.074
Sb2068_A		0.5946	ug/L	0.9054	152.3	-0.06661
Se1960_A		0.8947	ug/L	0.2031	22.70	0.8698
Si2516_R		-1.468	ug/L	0.8816	60.07	2.653
Sn1899_A		0.8492	ug/L	0.2226	26.21	1.237
Sr4215_R		0.2024	ug/L	0.1138	56.24	-2.881
Ti3349_A		0.7501	ug/L	0.1621	21.62	6.563
Tl1908_A		0.8916	ug/L	1.230	137.9	-0.1759
V_2924_A		0.3578	ug/L	0.01856	5.186	-0.7533
Zn2062_A		0.7312	ug/L	0.01914	2.617	1.717
Y_3600_R		9,197.9	Cts/S	710.09	7.7201	9,197.9
Y_2243_A		9,629.9	Cts/S	21.391	0.22213	9,629.9
Y_3600_A		363,810	Cts/S	10,859	2.9849	363,810

SI1950-002

Method Name: K6010-2011 Method Revision: 1,724

SI1950-002

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:29:50PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1913	ug/L	0.04232	22.12	0.9125
Al3961_R		1,757	ug/L	19.79	1.127	679.0
As1891_A		1.441	ug/L	2.569	178.3	-0.3088
Au2427_A		1.002	ug/L	0.1813	18.10	4.688
B_2089_A		12.14	ug/L	0.1375	1.133	11.30
Ba4554_R		53.99	ug/L	0.01596	0.02955	1,540
Be3130_R		0.1407	ug/L	0.001253	0.8906	1.611
Ca3158_R		2,127	ug/L	20.95	0.9852	1,188
Cd2265_A		0.009064	ug/L	0.004719	52.06	2.908
Co2286_A		1.913	ug/L	0.02826	1.477	11.28
Cr2677_A		2.425	ug/L	0.03241	1.336	45.48
Cu3273_A		1.639	ug/L	0.03014	1.839	61.36
Fe2599_R		864.0	ug/L	7.033	0.8140	568.7
K_7664_R		418.7	ug/L	28.27	6.751	198.8
Li6707_R		3.124	ug/L	1.229	39.36	40.55
Mg2025_A		333.6	ug/L	5.996	1.797	69.67
Mn2576_R		64.26	ug/L	0.08769	0.1365	234.5
Mo2020_A		0.7645	ug/L	0.1455	19.03	1.457
Na5895_R	F	269,800	ug/L	5,925	2.196	334,400
Ni2316_A		3.335	ug/L	0.002388	0.07161	7.020
Pb2203_A		1.827	ug/L	0.9170	50.19	-0.4705
Sb2068_A		0.8185	ug/L	0.6698	81.83	0.03747
Se1960_A		1.062	ug/L	0.3450	32.49	0.8611
Si2516_R		3,477	ug/L	50.79	1.461	645.9
Sn1899_A		0.6203	ug/L	0.4218	67.99	1.081
Sr4215_R		25.79	ug/L	0.3115	1.208	875.3
Ti3349_A		32.40	ug/L	1.911	5.900	1,473
Tl1908_A		1.519	ug/L	1.107	72.88	-0.006461
V_2924_A		1.537	ug/L	0.1488	9.682	27.33
Zn2062_A		25.91	ug/L	0.2257	0.8711	66.39
Y_3600_R		9,539.4	Cts/S	198.06	2.0762	9,539.4
Y_2243_A		9,089.6	Cts/S	9.4518	0.10398	9,089.6
Y_3600_A		340,390	Cts/S	739.73	0.21732	340,390

SI1950-004

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:34:44PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1922	ug/L	0.1224	63.68	-14.08
Al3961_R		2,645	ug/L	15.40	0.5823	1,027
As1891_A		0.4178	ug/L	0.2341	56.05	-0.5874
Au2427_A		-0.01666	ug/L	0.7879	4,729	0.7625
B_2089_A		13.90	ug/L	0.4415	3.175	12.85
Ba4554_R		47.84	ug/L	0.6218	1.300	1,378
Be3130_R		0.1287	ug/L	0.03869	30.07	0.8494
Ca3158_R		667.4	ug/L	17.68	2.650	390.5
Cd2265_A		0.03205	ug/L	0.02401	74.91	3.423
Co2286_A		1.839	ug/L	0.06101	3.317	11.09
Cr2677_A		5.585	ug/L	0.2707	4.846	101.2
Cu3273_A		1.351	ug/L	0.1555	11.51	55.53
Fe2599_R		966.4	ug/L	15.16	1.569	639.1
K_7664_R		402.0	ug/L	14.71	3.660	192.2
Li6707_R		2.709	ug/L	0.1589	5.865	37.68
Mg2025_A		240.8	ug/L	1.465	0.6084	55.35
Mn2576_R		23.24	ug/L	1.423	6.122	87.31
Mo2020_A		0.5829	ug/L	0.05782	9.919	1.184

SI1950-004

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:34:44PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	281,000	ug/L	11,400	4.058	350,800
Ni2316_A		6.099	ug/L	0.09333	1.530	13.97
Pb2203_A		2.089	ug/L	0.3592	17.20	-0.3144
Sb2068_A		0.2133	ug/L	1.289	604.5	-0.1570
Se1960_A		-2.730	ug/L	1.524	55.80	0.2687
Si2516_R		5,169	ug/L	40.06	0.7751	965.8
Sn1899_A		0.6388	ug/L	0.1503	23.53	1.090
Sr4215_R		22.84	ug/L	0.2102	0.9203	780.0
Ti3349_A		40.96	ug/L	0.5718	1.396	1,865
Tl1908_A		0.2014	ug/L	0.2957	146.8	-0.4347
V_2924_A		1.477	ug/L	0.2749	18.60	26.19
Zn2062_A		29.96	ug/L	0.05752	0.1920	76.93
Y_3600_R		9,610.4	Cts/S	149.89	1.5597	9,610.4
Y_2243_A		9,105.9	Cts/S	4.8016	0.052731	9,105.9
Y_3600_A		339,440	Cts/S	2,881.7	0.84895	339,440

SI1694-001R

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:39:36PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	2,855	ug/L	17.58	0.6159	53,280
Al3961_R		956.8	ug/L	1.933	0.2020	192.0
As1891_A		-1.910	ug/L	1.335	69.89	-1.005
Au2427_A		-0.2253	ug/L	0.1049	46.55	0.3618
B_2089_A		242.6	ug/L	0.2407	0.09925	111.5
Ba4554_R		5.637	ug/L	0.3453	6.126	113.1
Be3130_R		0.1123	ug/L	0.03571	31.79	-0.9940
Ca3158_R		149.7	ug/L	1.115	0.7446	63.76
Cd2265_A		0.1316	ug/L	0.02788	21.19	3.848
Co2286_A		0.07282	ug/L	0.06490	89.13	3.527
Cr2677_A		0.7466	ug/L	0.02006	2.686	9.569
Cu3273_A		159.1	ug/L	0.9140	0.5745	1,723
Fe2599_R		1,592	ug/L	10.95	0.6877	533.8
K_7664_R		6,105	ug/L	5.197	0.08512	1,495
Li6707_R		5.321	ug/L	1.982	37.24	37.66
Mg2025_A		-144.0	ug/L	5.549	3.852	7.189
Mn2576_R		23.49	ug/L	0.03965	0.1688	46.05
Mo2020_A		0.2839	ug/L	0.1519	53.51	0.5385
Na5895_R		31,470	ug/L	416.7	1.324	19,940
Ni2316_A		8.354	ug/L	0.7192	8.609	9.600
Pb2203_A		23.83	ug/L	0.3085	1.295	10.79
Sb2068_A		1.112	ug/L	1.516	136.3	-0.1779
Se1960_A		0.8057	ug/L	0.9296	115.4	0.7872
Si2516_R		4,832	ug/L	27.17	0.5624	457.3
Sn1899_A		2.404	ug/L	1.177	48.97	1.367
Sr4215_R		2.477	ug/L	0.01851	0.7473	33.29
Ti3349_A		2.273	ug/L	0.1810	7.961	25.48
Tl1908_A		1.654	ug/L	2.203	133.2	-0.2042
V_2924_A		0.09007	ug/L	0.1074	119.2	-8.205
Zn2062_A		1,720	ug/L	4.050	0.2355	2,323
Y_3600_R		9,699.2	Cts/S	62.973	0.64926	9,699.2
Y_2243_A		9,545.9	Cts/S	16.337	0.17114	9,545.9
Y_3600_A		363,100	Cts/S	2,361.1	0.65026	363,100

LCSWIC26ICW2

Method Name: K6010-2011 Method Revision: 1,724

LCSWIC26ICW2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:44:24PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.35	ug/L	0.4662	0.9079	1,921
Al3961_R		1,999	ug/L	15.08	0.7546	792.7
As1891_A		99.39	ug/L	0.3376	0.3397	27.48
Au2427_A		4.597	ug/L	0.4304	9.364	17.22
B_2089_A		485.6	ug/L	0.4797	0.09877	445.5
Ba4554_R		1,994	ug/L	21.99	1.103	57,140
Be3130_R		50.51	ug/L	0.3068	0.6074	2,135
Ca3158_R		2,371	ug/L	12.01	0.5065	1,356
Cd2265_A		253.2	ug/L	0.1813	0.07158	4,082
Co2286_A		524.2	ug/L	1.945	0.3710	2,227
Cr2677_A		210.0	ug/L	0.7685	0.3659	4,012
Cu3273_A		255.8	ug/L	0.6399	0.2501	5,521
Fe2599_R		971.3	ug/L	0.1201	0.01237	653.9
K_7664_R		9,589	ug/L	110.9	1.156	4,744
Li6707_R		493.6	ug/L	9.194	1.863	3,991
Mg2025_A		4,938	ug/L	8.379	0.1697	840.6
Mn2576_R		505.5	ug/L	3.142	0.6216	1,871
Mo2020_A		101.2	ug/L	0.08038	0.07942	161.0
Na5895_R		7,472	ug/L	47.45	0.6350	9,614
Ni2316_A		526.8	ug/L	0.4286	0.08137	1,385
Pb2203_A		101.9	ug/L	0.7808	0.7662	109.3
Sb2068_A		99.93	ug/L	0.1302	0.1303	33.66
Se1960_A		99.40	ug/L	1.929	1.941	17.04
Si2516_R		957.6	ug/L	9.034	0.9433	184.9
Sn1899_A		503.7	ug/L	1.342	0.2664	200.9
Sr4215_R		490.9	ug/L	4.066	0.8283	17,270
Ti3349_A		488.5	ug/L	1.821	0.3727	24,340
Tl1908_A	W	118.1	ug/L	0.2085	0.1766	40.46
V_2924_A		517.2	ug/L	2.354	0.4550	12,980
Zn2062_A		512.0	ug/L	1.822	0.3558	1,379
Y_3600_R		9,782.7	Cts/S	181.16	1.8518	9,782.7
Y_2243_A		9,520.2	Cts/S	21.823	0.22922	9,520.2
Y_3600_A		366,290	Cts/S	1,947.2	0.53162	366,290

PBWIC26ICW2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:49:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3461	ug/L	0.3903	112.8	21.63
Al3961_R		-19.75	ug/L	6.411	32.46	-2.111
As1891_A		1.875	ug/L	0.7615	40.61	-0.1662
Au2427_A		0.1937	ug/L	0.4689	242.1	1.363
B_2089_A		1.072	ug/L	0.4704	43.87	1.773
Ba4554_R		1.252	ug/L	0.1116	8.911	68.30
Be3130_R		0.03345	ug/L	0.04942	147.7	-1.903
Ca3158_R		-52.33	ug/L	4.512	8.623	-7.173
Cd2265_A		-0.001341	ug/L	0.05793	4,320	1.486
Co2286_A		0.1501	ug/L	0.008485	5.653	4.036
Cr2677_A		-0.2830	ug/L	0.06112	21.60	-3.026
Cu3273_A		0.03209	ug/L	0.3279	1,022	31.79
Fe2599_R		-16.55	ug/L	2.344	14.17	3.358
K_7664_R		-36.53	ug/L	9.993	27.35	-21.11
Li6707_R		1.693	ug/L	0.03560	2.103	29.79
Mg2025_A	F	-123.8	ug/L	1.158	0.9353	-1.585
Mn2576_R		-0.4630	ug/L	0.4807	103.8	1.281
Mo2020_A		0.6850	ug/L	0.02810	4.103	1.412

PBWIC26ICW2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:49:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		90.60	ug/L	4.333	4.783	231.1
Ni2316_A		0.4165	ug/L	0.1305	31.34	-0.1882
Pb2203_A		0.3890	ug/L	0.05040	12.95	-1.866
Sb2068_A		-0.1631	ug/L	0.9747	597.5	-0.3382
Se1960_A		2.105	ug/L	2.381	113.1	1.067
Si2516_R		9.392	ug/L	6.260	66.65	4.813
Sn1899_A		0.6112	ug/L	0.01018	1.665	1.139
Sr4215_R		0.2784	ug/L	0.1154	41.45	-0.1847
Ti3349_A		0.6552	ug/L	0.01041	1.588	1.738
Tl1908_A		0.8563	ug/L	0.3459	40.39	-0.1881
V_2924_A		0.3330	ug/L	0.1005	30.17	-1.301
Zn2062_A		0.4284	ug/L	0.04038	9.427	0.8904
Y_3600_R		9,661.1	Cts/S	223.39	2.3123	9,661.1
Y_2243_A		9,605.5	Cts/S	9.9994	0.10410	9,605.5
Y_3600_A		368,970	Cts/S	4,942.6	1.3396	368,970

SI1841-028

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:53:52PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.04905	ug/L	0.2245	457.7	10.15
Al3961_R		-10.61	ug/L	5.188	48.92	1.403
As1891_A		0.2032	ug/L	0.8434	415.2	-0.6460
Au2427_A		0.1565	ug/L	0.5647	360.9	1.200
B_2089_A		1.067	ug/L	0.2012	18.86	1.754
Ba4554_R		0.2757	ug/L	0.1238	44.91	41.03
Be3130_R		0.1235	ug/L	0.09552	77.32	1.858
Ca3158_R		-44.81	ug/L	7.119	15.89	-2.974
Cd2265_A		-0.01231	ug/L	0.01726	140.2	1.318
Co2286_A		0.04241	ug/L	0.01703	40.15	3.586
Cr2677_A		-0.1718	ug/L	0.09723	56.58	-0.9068
Cu3273_A		-0.1039	ug/L	0.5627	541.4	28.80
Fe2599_R		-13.57	ug/L	1.720	12.68	5.344
K_7664_R		27.82	ug/L	19.12	68.75	10.44
Li6707_R		0.5797	ug/L	1.118	192.9	21.05
Mg2025_A	F	-130.2	ug/L	0.2782	0.2137	-2.653
Mn2576_R		-0.2960	ug/L	0.8135	274.9	1.938
Mo2020_A		0.005954	ug/L	0.1347	2,263	0.3247
Na5895_R		52.64	ug/L	4.422	8.400	184.9
Ni2316_A		0.1447	ug/L	0.03627	25.06	-0.9140
Pb2203_A		0.2814	ug/L	0.3375	119.9	-1.993
Sb2068_A		0.9217	ug/L	0.04665	5.061	0.05260
Se1960_A		-0.4201	ug/L	1.347	320.5	0.6523
Si2516_R		2.834	ug/L	3.586	126.5	3.625
Sn1899_A		0.6484	ug/L	0.1820	28.07	1.157
Sr4215_R		0.1996	ug/L	0.01944	9.736	-2.986
Ti3349_A		0.5929	ug/L	0.1336	22.54	-1.388
Tl1908_A		-0.2372	ug/L	0.6460	272.3	-0.5906
V_2924_A		0.06788	ug/L	0.1233	181.6	-7.886
Zn2062_A		2.761	ug/L	0.02118	0.7669	7.255
Y_3600_R		9,729.7	Cts/S	83.330	0.85645	9,729.7
Y_2243_A		9,634.9	Cts/S	9.0382	0.093807	9,634.9
Y_3600_A		368,710	Cts/S	4,488.8	1.2174	368,710

SI1847-001

Method Name: K6010-2011 Method Revision: 1,724

SI1847-001

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 3:58:40PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04816	ug/L	0.02375	49.32	6.213
Al3961_R		7.429	ug/L	16.69	224.7	22.79
As1891_A		0.4077	ug/L	0.7898	193.7	-0.5623
Au2427_A		0.09346	ug/L	0.1710	183.0	0.8750
B_2089_A		3.822	ug/L	0.2159	5.648	4.125
Ba4554_R		161.9	ug/L	1.643	1.015	4,576
Be3130_R		0.01952	ug/L	0.00009700	0.4970	-2.482
Ca3158_R	W	101,600	ug/L	450.3	0.4434	56,020
Cd2265_A		0.002136	ug/L	0.09084	4,252	1.494
Co2286_A		0.1026	ug/L	0.005946	5.796	3.679
Cr2677_A		0.5554	ug/L	0.2283	41.10	12.57
Cu3273_A		2.786	ug/L	0.4920	17.66	87.69
Fe2599_R		-10.30	ug/L	3.057	29.68	7.373
K_7664_R		375.0	ug/L	1.871	0.4991	178.8
Li6707_R		1.619	ug/L	2.009	124.1	28.91
Mg2025_A		17,450	ug/L	19.13	0.1096	2,774
Mn2576_R		0.3064	ug/L	0.4381	143.0	4.086
Mo2020_A		0.4626	ug/L	0.08933	19.31	1.014
Na5895_R		8,541	ug/L	79.81	0.9344	10,760
Ni2316_A		0.4950	ug/L	0.04775	9.647	0.01796
Pb2203_A		1.012	ug/L	1.309	129.4	-1.134
Sb2068_A		1.441	ug/L	1.310	90.87	0.2343
Se1960_A		1.867	ug/L	0.7320	39.21	0.9884
Si2516_R		4,663	ug/L	37.51	0.8045	869.8
Sn1899_A		-0.1868	ug/L	0.7130	381.8	0.7872
Sr4215_R		330.6	ug/L	2.463	0.7449	11,400
Ti3349_A		0.2219	ug/L	0.1218	54.89	-19.23
Tl1908_A		0.3905	ug/L	0.6117	156.6	-0.3451
V_2924_A		0.2759	ug/L	0.06186	22.42	-2.689
Zn2062_A		3.237	ug/L	0.1116	3.449	8.192
Y_3600_R		9,589.4	Cts/S	90.338	0.94206	9,589.4
Y_2243_A		9,231.6	Cts/S	12.151	0.13162	9,231.6
Y_3600_A		354,040	Cts/S	1,475.7	0.41682	354,040

SI1847-001A

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:03:26PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		522.1	ug/L	2.471	0.4732	18,840
Al3961_R		11,030	ug/L	2.148	0.01948	4,220
As1891_A		530.5	ug/L	3.162	0.5960	145.8
Au2427_A		2.539	ug/L	1.405	55.32	10.26
B_2089_A		555.3	ug/L	2.247	0.4047	507.7
Ba4554_R		674.9	ug/L	1.303	0.1930	18,730
Be3130_R		547.7	ug/L	1.385	0.2529	22,550
Ca3158_R	W	104,600	ug/L	747.7	0.7151	56,930
Cd2265_A		549.8	ug/L	0.3620	0.06585	8,640
Co2286_A		542.5	ug/L	0.8545	0.1575	2,246
Cr2677_A		548.2	ug/L	1.206	0.2200	10,080
Cu3273_A		541.4	ug/L	1.294	0.2391	11,220
Fe2599_R		5,599	ug/L	11.76	0.2101	3,581
K_7664_R		11,060	ug/L	92.37	0.8351	5,295
Li6707_R		558.0	ug/L	0.09387	0.01682	4,362
Mg2025_A		22,770	ug/L	53.94	0.2369	3,653
Mn2576_R		539.7	ug/L	1.661	0.3078	1,932
Mo2020_A		548.2	ug/L	4.530	0.8262	849.0

SI1847-001A

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:03:26PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		14,190	ug/L	86.33	0.6082	17,570
Ni2316_A		548.3	ug/L	0.4391	0.08008	1,405
Pb2203_A		539.8	ug/L	0.5582	0.1034	573.4
Sb2068_A		540.7	ug/L	1.423	0.2632	188.2
Se1960_A		536.3	ug/L	1.594	0.2972	86.39
Si2516_R		4,860	ug/L	44.59	0.9176	895.7
Sn1899_A		1.683	ug/L	0.09761	5.798	1.515
Sr4215_R		854.5	ug/L	2.032	0.2378	29,090
Ti3349_A		534.9	ug/L	4.902	0.9165	25,690
Tl1908_A		549.9	ug/L	1.140	0.2073	192.4
V_2924_A		553.7	ug/L	3.324	0.6003	13,280
Zn2062_A		554.6	ug/L	0.1327	0.02393	1,454
Y_3600_R		9,465.8	Cts/S	2.5000	0.026411	9,465.8
Y_2243_A		9,278.0	Cts/S	8.4435	0.091006	9,278.0
Y_3600_A		352,640	Cts/S	1,538.6	0.43631	352,640

CCV

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:08:05PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		503.9	ug/L	0.09903	0.01965	18,130
Al3961_R		12,310	ug/L	0.5898	0.004791	4,687
As1891_A		488.2	ug/L	0.9701	0.1987	136.2
Au2427_A		499.9	ug/L	19.04	3.809	2,205
B_2089_A		488.2	ug/L	0.4478	0.09172	455.3
Ba4554_R		491.4	ug/L	2.311	0.4704	13,620
Be3130_R		492.7	ug/L	2.044	0.4149	20,250
Ca3158_R		12,340	ug/L	54.62	0.4427	6,725
Cd2265_A		503.9	ug/L	0.1565	0.03107	8,073
Co2286_A		497.0	ug/L	0.08013	0.01612	2,095
Cr2677_A		514.9	ug/L	1.533	0.2977	9,494
Cu3273_A		491.5	ug/L	0.4543	0.09245	10,210
Fe2599_R		12,110	ug/L	2.684	0.02217	7,714
K_7664_R		12,200	ug/L	51.71	0.4237	5,832
Li6707_R		500.6	ug/L	3.708	0.7408	3,909
Mg2025_A		12,570	ug/L	14.59	0.1161	2,068
Mn2576_R		498.5	ug/L	0.9491	0.1904	1,782
Mo2020_A		514.6	ug/L	1.989	0.3866	811.3
Na5895_R		12,370	ug/L	23.76	0.1920	15,300
Ni2316_A		503.9	ug/L	0.5824	0.1156	1,313
Pb2203_A		511.0	ug/L	0.1476	0.02889	552.3
Sb2068_A		494.7	ug/L	0.07910	0.01599	173.7
Se1960_A		483.6	ug/L	7.047	1.457	79.41
Si2516_R		12,350	ug/L	85.20	0.6899	2,266
Sn1899_A		506.1	ug/L	0.2763	0.05459	200.2
Sr4215_R		498.5	ug/L	1.521	0.3051	16,940
Ti3349_A		507.1	ug/L	0.2531	0.04992	24,420
Tl1908_A		493.3	ug/L	4.425	0.8969	175.6
V_2924_A		506.4	ug/L	0.6021	0.1189	12,180
Zn2062_A		488.6	ug/L	1.160	0.2373	1,304
Y_3600_R		9,449.1	Cts/S	196.23	2.0767	9,449.1
Y_2243_A		9,444.6	Cts/S	12.375	0.13103	9,444.6
Y_3600_A		353,630	Cts/S	1,922.2	0.54354	353,630

CCB

Method Name: K6010-2011 Method Revision: 1,724

CCB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:12:41PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.03805	ug/L	0.3251	854.5	6.725
Al3961_R		-27.24	ug/L	4.433	16.27	-4.938
As1891_A		-0.7923	ug/L	0.8521	107.6	-0.9234
Au2427_A		2.401	ug/L	0.3738	15.57	11.21
B_2089_A		1.064	ug/L	0.4261	40.03	1.809
Ba4554_R		0.1558	ug/L	0.1459	93.65	36.64
Be3130_R		0.07004	ug/L	0.04690	66.96	-0.3892
Ca3158_R		-48.11	ug/L	5.482	11.40	-4.716
Cd2265_A		0.08378	ug/L	0.008892	10.61	2.866
Co2286_A		0.1857	ug/L	0.07873	42.39	4.175
Cr2677_A		-0.07416	ug/L	0.08274	111.6	0.9580
Cu3273_A		-0.08179	ug/L	0.1692	206.8	28.94
Fe2599_R		-13.00	ug/L	1.181	9.082	5.577
K_7664_R		17.42	ug/L	22.59	129.7	5.210
Li6707_R		0.4740	ug/L	0.1335	28.16	19.73
Mg2025_A	F	-131.9	ug/L	4.015	3.044	-2.899
Mn2576_R		-0.7160	ug/L	0.5180	72.35	0.3750
Mo2020_A		2.539	ug/L	0.4285	16.88	4.369
Na5895_R		7.819	ug/L	6.189	79.15	125.0
Ni2316_A		0.2987	ug/L	0.2912	97.50	-0.4954
Pb2203_A		1.031	ug/L	0.7800	75.69	-1.153
Sb2068_A		0.2752	ug/L	1.423	517.1	-0.1803
Se1960_A		2.071	ug/L	1.102	53.21	1.058
Si2516_R		6.375	ug/L	4.255	66.75	4.188
Sn1899_A		0.5230	ug/L	1.016	194.4	1.100
Sr4215_R		0.1808	ug/L	0.1290	71.36	-3.548
Ti3349_A		0.7843	ug/L	0.1168	14.90	8.163
Tl1908_A		0.7864	ug/L	1.182	150.3	-0.2121
V_2924_A		0.1535	ug/L	0.08577	55.87	-6.061
Zn2062_A		0.1816	ug/L	0.09970	54.90	0.2180
Y_3600_R		9,484.1	Cts/S	31.514	0.33229	9,484.1
Y_2243_A		9,572.7	Cts/S	5.4120	0.056536	9,572.7
Y_3600_A		363,330	Cts/S	3,802.6	1.0466	363,330

SI1847-001L

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:17:28PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.6673	ug/L	0.2634	39.47	13.06
Al3961_R		-92.19	ug/L	43.37	47.04	1.236
As1891_A		6.133	ug/L	3.509	57.21	-0.3474
Au2427_A		4.410	ug/L	0.9553	21.66	4.400
B_2089_A		7.071	ug/L	1.761	24.90	2.069
Ba4554_R		158.6	ug/L	0.2241	0.1413	919.7
Be3130_R		0.4509	ug/L	0.9208	204.2	0.4403
Ca3158_R		100,900	ug/L	1,985	1.967	11,110
Cd2265_A		0.09557	ug/L	0.2117	221.5	1.800
Co2286_A		-0.1232	ug/L	0.4598	373.3	3.249
Cr2677_A		0.4072	ug/L	0.3375	82.87	3.853
Cu3273_A		4.734	ug/L	1.459	30.82	50.05
Fe2599_R		-83.55	ug/L	25.98	31.09	3.222
K_7664_R		383.8	ug/L	79.72	20.77	33.99
Li6707_R		-3.232	ug/L	1.306	40.43	11.07
Mg2025_A		17,030	ug/L	7.367	0.04325	572.5
Mn2576_R		-3.484	ug/L	2.453	70.43	0.4375
Mo2020_A		4.225	ug/L	0.4412	10.44	1.652

SI1847-001L

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:17:28PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		8,425	ug/L	115.8	1.375	2,208
Ni2316_A		1.765	ug/L	0.2560	14.51	-0.3527
Pb2203_A		2.450	ug/L	3.719	151.8	-1.737
Sb2068_A		0.2675	ug/L	0.3014	112.7	-0.2575
Se1960_A		7.796	ug/L	3.042	39.02	0.9673
Si2516_R		4,556	ug/L	100.3	2.202	171.8
Sn1899_A		3.659	ug/L	3.693	100.9	1.175
Sr4215_R		325.9	ug/L	6.229	1.912	2,232
Ti3349_A		0.4490	ug/L	0.7435	165.6	-25.85
Tl1908_A		1.147	ug/L	0.8274	72.14	-0.4123
V_2924_A		-0.2018	ug/L	0.5587	276.9	-10.50
Zn2062_A		20.37	ug/L	1.131	5.552	10.69
Y_3600_R		9,557.3	Cts/S	71.020	0.74310	9,557.3
Y_2243_A		9,506.4	Cts/S	6.1598	0.064796	9,506.4
Y_3600_A		357,790	Cts/S	1,028.2	0.28737	357,790

SI1847-001P

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:22:15PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		53.13	ug/L	0.5050	0.9504	1,867
Al3961_R		2,075	ug/L	24.07	1.160	805.4
As1891_A		103.1	ug/L	0.04991	0.04842	27.57
Au2427_A		4.834	ug/L	0.5521	11.42	17.55
B_2089_A		495.4	ug/L	0.1132	0.02285	439.1
Ba4554_R	W	2,179	ug/L	16.29	0.7475	60,050
Be3130_R		51.88	ug/L	0.5751	1.109	2,109
Ca3158_R	W	100,700	ug/L	1,600	1.589	54,520
Cd2265_A		255.1	ug/L	0.4977	0.1951	3,974
Co2286_A		518.8	ug/L	1.212	0.2335	2,130
Cr2677_A		217.0	ug/L	0.06803	0.03135	3,895
Cu3273_A		264.7	ug/L	1.184	0.4473	5,364
Fe2599_R		980.3	ug/L	17.37	1.772	634.8
K_7664_R		10,310	ug/L	73.74	0.7150	4,908
Li6707_R		511.3	ug/L	3.744	0.7323	3,976
Mg2025_A		21,710	ug/L	2.529	0.01165	3,451
Mn2576_R		519.1	ug/L	9.578	1.845	1,848
Mo2020_A		103.5	ug/L	1.079	1.042	159.1
Na5895_R		15,750	ug/L	152.4	0.9679	19,370
Ni2316_A		524.1	ug/L	1.144	0.2183	1,331
Pb2203_A		101.6	ug/L	0.08006	0.07879	105.3
Sb2068_A		102.9	ug/L	1.258	1.222	33.55
Se1960_A		103.7	ug/L	1.450	1.398	17.15
Si2516_R		5,149	ug/L	14.09	0.2736	942.6
Sn1899_A		508.4	ug/L	3.719	0.7315	195.9
Sr4215_R		817.4	ug/L	10.32	1.263	27,670
Ti3349_A		511.1	ug/L	2.102	0.4114	23,930
Tl1908_A		115.7	ug/L	1.749	1.511	38.19
V_2924_A		537.0	ug/L	1.570	0.2924	12,660
Zn2062_A		511.3	ug/L	1.832	0.3583	1,330
Y_3600_R		9,412.3	Cts/S	96.573	1.0260	9,412.3
Y_2243_A		9,199.6	Cts/S	11.123	0.12091	9,199.6
Y_3600_A		344,080	Cts/S	736.29	0.21399	344,080

SI1847-001S

Method Name: K6010-2011 Method Revision: 1,724

SI1847-001S

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:26:56PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		53.13	ug/L	0.1280	0.2408	1,873
Al3961_R		2,256	ug/L	153.0	6.781	831.4
As1891_A		103.0	ug/L	0.5815	0.5643	27.61
Au2427_A		4.690	ug/L	0.3019	6.438	16.66
B_2089_A		500.1	ug/L	1.078	0.2155	444.4
Ba4554_R	W	2,386	ug/L	155.8	6.531	62,500
Be3130_R		56.76	ug/L	3.948	6.956	2,194
Ca3158_R	W	108,500	ug/L	7,084	6.529	55,830
Cd2265_A		254.9	ug/L	0.006759	0.002651	3,980
Co2286_A		518.3	ug/L	0.6763	0.1305	2,133
Cr2677_A		218.3	ug/L	0.3643	0.1669	3,934
Cu3273_A		265.3	ug/L	0.4719	0.1779	5,398
Fe2599_R		1,083	ug/L	87.41	8.072	664.8
K_7664_R		11,150	ug/L	715.4	6.418	5,042
Li6707_R		559.3	ug/L	36.83	6.584	4,132
Mg2025_A		21,560	ug/L	13.36	0.06196	3,436
Mn2576_R		564.3	ug/L	36.12	6.401	1,909
Mo2020_A		104.7	ug/L	0.3513	0.3355	161.3
Na5895_R		17,030	ug/L	1,031	6.057	19,890
Ni2316_A		524.7	ug/L	1.359	0.2589	1,336
Pb2203_A		101.8	ug/L	0.1987	0.1952	105.7
Sb2068_A		103.1	ug/L	0.5482	0.5317	33.68
Se1960_A		102.2	ug/L	1.173	1.147	16.96
Si2516_R		5,960	ug/L	386.2	6.480	1,036
Sn1899_A		510.4	ug/L	1.233	0.2416	197.2
Sr4215_R		891.2	ug/L	56.78	6.371	28,670
Ti3349_A		515.1	ug/L	0.2683	0.05208	24,210
Tl1908_A		115.0	ug/L	2.319	2.017	37.96
V_2924_A		539.8	ug/L	0.2084	0.03860	12,780
Zn2062_A		510.4	ug/L	0.5775	0.1131	1,331
Y_3600_R		8,959.5	Cts/S	454.86	5.0769	8,959.5
Y_2243_A		9,221.0	Cts/S	3.5296	0.038278	9,221.0
Y_3600_A		345,390	Cts/S	1,551.6	0.44924	345,390

SI1847-002

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:31:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.8221	ug/L	0.04782	5.816	-153.2
Al3961_R		378.7	ug/L	22.10	5.836	153.8
As1891_A		1.805	ug/L	0.6475	35.87	-0.7522
Au2427_A		22.10	ug/L	0.4216	1.907	72.66
B_2089_A		39.32	ug/L	0.3163	0.8045	36.48
Ba4554_R		17.88	ug/L	0.2989	1.671	533.3
Be3130_R		1.640	ug/L	0.01790	1.091	65.00
Ca3158_R		19,180	ug/L	211.5	1.103	10,570
Cd2265_A		0.06336	ug/L	0.07511	118.6	21.70
Co2286_A		91.62	ug/L	0.2327	0.2540	390.0
Cr2677_A		1.099	ug/L	0.02444	2.224	32.35
Cu3273_A		3.470	ug/L	0.002502	0.07211	100.7
Fe2599_R		12,200	ug/L	125.2	1.026	7,869
K_7664_R		4,685	ug/L	86.65	1.849	2,265
Li6707_R		97.47	ug/L	1.226	1.257	783.5
Mg2025_A		15,740	ug/L	0.2772	0.001760	2,580
Mn2576_R	W	3,905	ug/L	51.63	1.322	14,110
Mo2020_A		0.5055	ug/L	0.03967	7.848	1.155

SI1847-002

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:31:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		22,260	ug/L	230.2	1.034	27,780
Ni2316_A		93.53	ug/L	0.4164	0.4452	242.3
Pb2203_A		1.759	ug/L	0.01425	0.8098	-0.02840
Sb2068_A		1.288	ug/L	0.5050	39.22	0.3443
Se1960_A		0.06373	ug/L	1.304	2,046	1.078
Si2516_R	W	27,320	ug/L	355.8	1.302	5,070
Sn1899_A		1.264	ug/L	0.4785	37.86	1.384
Sr4215_R		63.26	ug/L	0.9033	1.428	2,168
Ti3349_A		0.6210	ug/L	0.01276	2.054	0.01250
Tl1908_A		6.676	ug/L	0.2100	3.146	-1.113
V_2924_A		0.9615	ug/L	0.03275	3.406	-12.23
Zn2062_A		393.6	ug/L	0.6664	0.1693	1,058
Y_3600_R		9,565.4	Cts/S	167.88	1.7551	9,565.4
Y_2243_A		9,499.5	Cts/S	14.340	0.15096	9,499.5
Y_3600_A		355,230	Cts/S	5,949.7	1.6749	355,230

SI1847-003

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:36:20PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.06478	ug/L	0.04722	72.88	6.325
Al3961_R		3.081	ug/L	15.49	502.8	16.95
As1891_A		1.074	ug/L	1.654	153.9	-0.3899
Au2427_A		6.570	ug/L	0.3496	5.321	18.68
B_2089_A		53.81	ug/L	0.2388	0.4437	48.13
Ba4554_R		13.76	ug/L	0.2786	2.025	413.8
Be3130_R		0.1222	ug/L	0.1461	119.6	1.771
Ca3158_R	W	73,960	ug/L	616.1	0.8330	40,310
Cd2265_A		0.1540	ug/L	0.04850	31.50	4.205
Co2286_A		18.01	ug/L	0.05006	0.2781	76.94
Cr2677_A		0.8306	ug/L	0.1652	19.89	19.97
Cu3273_A		2.328	ug/L	0.3579	15.38	77.16
Fe2599_R		240.5	ug/L	2.292	0.9530	167.2
K_7664_R		2,251	ug/L	49.37	2.193	1,076
Li6707_R		73.40	ug/L	1.763	2.401	588.1
Mg2025_A	W	45,910	ug/L	27.17	0.05918	7,251
Mn2576_R	W	1,248	ug/L	8.229	0.6596	4,465
Mo2020_A		0.3425	ug/L	0.2974	86.82	0.8412
Na5895_R	W	33,940	ug/L	402.2	1.185	41,880
Ni2316_A		27.98	ug/L	0.1356	0.4846	69.91
Pb2203_A		0.2983	ug/L	0.4915	164.7	-1.875
Sb2068_A		1.235	ug/L	0.1572	12.73	0.1503
Se1960_A		2.319	ug/L	1.955	84.34	1.155
Si2516_R		14,920	ug/L	81.81	0.5482	2,743
Sn1899_A		1.091	ug/L	0.6228	57.09	1.276
Sr4215_R		264.8	ug/L	1.564	0.5906	9,015
Ti3349_A		0.2604	ug/L	0.04018	15.43	-17.16
Tl1908_A		2.167	ug/L	0.5227	24.12	-0.6682
V_2924_A		-0.09939	ug/L	0.07320	73.65	-21.24
Zn2062_A		40.77	ug/L	0.1000	0.2454	106.0
Y_3600_R		9,472.6	Cts/S	22.339	0.23583	9,472.6
Y_2243_A		9,210.0	Cts/S	7.0856	0.076934	9,210.0
Y_3600_A		349,550	Cts/S	35.187	0.010066	349,550

SI1847-004

Method Name: K6010-2011 Method Revision: 1,724

SI1847-004

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:41:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2771	ug/L	0.08932	32.24	16.68
Al3961_R		-73.21	ug/L	1.364	1.863	42.28
As1891_A		1.950	ug/L	1.434	73.53	-0.1287
Au2427_A		22.10	ug/L	0.2888	1.307	53.19
B_2089_A		169.4	ug/L	0.9175	0.5415	138.3
Ba4554_R		6.537	ug/L	0.2473	3.783	208.6
Be3130_R		0.03983	ug/L	0.09376	235.4	-1.646
Ca3158_R	W	469,200	ug/L	612.7	0.1306	249,600
Cd2265_A		0.2019	ug/L	0.05843	28.94	4.234
Co2286_A		1.755	ug/L	0.04185	2.385	9.644
Cr2677_A		2.592	ug/L	0.1726	6.659	55.33
Cu3273_A		8.009	ug/L	0.09106	1.137	182.0
Fe2599_R		-7.078	ug/L	2.854	40.33	9.127
K_7664_R		5,364	ug/L	80.03	1.492	2,508
Li6707_R		170.7	ug/L	0.9863	0.5777	1,316
Mg2025_A	F	273,800	ug/L	285.7	0.1043	39,800
Mn2576_R	W	4,635	ug/L	1.492	0.03218	16,200
Mo2020_A		0.3229	ug/L	0.001714	0.5307	0.7813
Na5895_R	W	71,610	ug/L	176.8	0.2470	86,180
Ni2316_A		13.62	ug/L	0.05853	0.4297	30.82
Pb2203_A		1.865	ug/L	1.531	82.10	-0.1971
Sb2068_A		4.249	ug/L	1.950	45.89	1.106
Se1960_A		2.021	ug/L	1.977	97.82	1.260
Si2516_R		4,231	ug/L	22.11	0.5225	761.9
Sn1899_A		0.5354	ug/L	0.5346	99.84	0.9798
Sr4215_R	W	1,545	ug/L	4.082	0.2642	51,440
Ti3349_A		2.318	ug/L	0.1649	7.114	76.00
Tl1908_A		8.439	ug/L	0.07381	0.8746	-1.001
V_2924_A		0.1382	ug/L	0.01049	7.584	-39.45
Zn2062_A		29.56	ug/L	0.07755	0.2623	70.82
Y_3600_R		9,253.3	Cts/S	38.712	0.41836	9,253.3
Y_2243_A		8,493.8	Cts/S	15.791	0.18591	8,493.8
Y_3600_A		328,640	Cts/S	2,486.1	0.75649	328,640

SI1847-005

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:45:42PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2142	ug/L	0.09177	42.85	15.78
Al3961_R		474.8	ug/L	1.278	0.2691	197.2
As1891_A		-0.02549	ug/L	0.1258	493.4	-0.6872
Au2427_A		15.92	ug/L	0.2666	1.674	45.45
B_2089_A		43.30	ug/L	0.2267	0.5237	39.34
Ba4554_R		14.92	ug/L	0.1695	1.136	452.8
Be3130_R		0.6978	ug/L	0.02071	2.968	25.93
Ca3158_R	W	57,460	ug/L	727.0	1.265	31,810
Cd2265_A		0.9687	ug/L	0.01519	1.568	16.50
Co2286_A		75.91	ug/L	0.06924	0.09120	317.9
Cr2677_A		1.018	ug/L	0.05299	5.203	27.18
Cu3273_A		1.674	ug/L	0.1022	6.104	64.88
Fe2599_R		-9.393	ug/L	3.983	42.41	8.013
K_7664_R		2,909	ug/L	53.04	1.823	1,413
Li6707_R		116.5	ug/L	1.704	1.463	938.5
Mg2025_A	W	43,850	ug/L	11.80	0.02691	7,016
Mn2576_R	W	2,944	ug/L	27.01	0.9175	10,700
Mo2020_A		-0.1555	ug/L	0.01141	7.337	0.09485

SI1847-005

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:45:42PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	66,080	ug/L	698.9	1.058	82,700
Ni2316_A		208.2	ug/L	0.2554	0.1227	535.1
Pb2203_A		2.439	ug/L	0.4769	19.55	0.3743
Sb2068_A		0.7803	ug/L	0.9287	119.0	-0.1253
Se1960_A		2.875	ug/L	2.061	71.69	1.392
Si2516_R		23,640	ug/L	208.1	0.8804	4,412
Sn1899_A		1.332	ug/L	0.5845	43.89	1.386
Sr4215_R		191.5	ug/L	0.5816	0.3037	6,622
Ti3349_A		-0.01018	ug/L	0.02874	282.5	-30.51
Tl1908_A		4.123	ug/L	0.1848	4.482	-1.266
V_2924_A		0.01544	ug/L	0.03835	248.4	-32.13
Zn2062_A		463.1	ug/L	0.6674	0.1441	1,222
Y_3600_R		9,622.8	Cts/S	126.83	1.3180	9,622.8
Y_2243_A		9,325.3	Cts/S	3.0659	0.032877	9,325.3
Y_3600_A		354,780	Cts/S	1,147.5	0.32344	354,780

SI1878-001

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:50:25PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.08811	ug/L	0.05014	56.91	3.950
Al3961_R		-21.35	ug/L	0.3751	1.757	-2.793
As1891_A		2.013	ug/L	1.375	68.32	-0.1275
Au2427_A		0.02975	ug/L	0.5083	1,708	0.5750
B_2089_A		24.84	ug/L	0.5243	2.111	23.14
Ba4554_R		1.409	ug/L	0.1693	12.01	74.49
Be3130_R		0.09027	ug/L	0.08277	91.70	0.4728
Ca3158_R		210.9	ug/L	7.728	3.665	142.3
Cd2265_A		-0.03509	ug/L	0.03385	96.47	1.017
Co2286_A		0.2601	ug/L	0.2200	84.58	4.415
Cr2677_A		-0.03815	ug/L	0.002155	5.648	1.655
Cu3273_A		11.75	ug/L	0.08473	0.7208	277.5
Fe2599_R		45.45	ug/L	5.138	11.30	44.71
K_7664_R		154.8	ug/L	46.15	29.81	74.13
Li6707_R		3.858	ug/L	0.08071	2.092	48.10
Mg2025_A		1,028	ug/L	1.591	0.1548	184.1
Mn2576_R		8.672	ug/L	0.2195	2.531	35.44
Mo2020_A		0.2941	ug/L	0.1521	51.73	0.7704
Na5895_R	W	113,300	ug/L	1,888	1.666	145,700
Ni2316_A		1.035	ug/L	0.3475	33.57	1.415
Pb2203_A		2.235	ug/L	0.4884	21.86	0.1775
Sb2068_A		-0.4874	ug/L	1.063	218.0	-0.4527
Se1960_A		-0.1890	ug/L	2.803	1,483	0.6762
Si2516_R		578.0	ug/L	3.616	0.6256	113.9
Sn1899_A		-0.01049	ug/L	0.4679	4,460	0.8725
Sr4215_R		1.496	ug/L	0.1841	12.31	43.06
Ti3349_A		0.3478	ug/L	0.1690	48.59	-13.30
Tl1908_A		1.252	ug/L	0.4475	35.75	-0.04805
V_2924_A		0.05868	ug/L	0.01918	32.68	-8.038
Zn2062_A		80.58	ug/L	0.08376	0.1039	214.6
Y_3600_R		9,886.4	Cts/S	46.074	0.46604	9,886.4
Y_2243_A		9,420.8	Cts/S	0.21869	0.0023210	9,420.8
Y_3600_A		358,830	Cts/S	4,614.8	1.2861	358,830

SI1907-003

Method Name: K6010-2011 Method Revision: 1,724

SI1907-003

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:55:12PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2807	ug/L	0.001208	0.4306	-2.250
Al3961_R		9.693	ug/L	2.549	26.29	19.79
As1891_A		1.519	ug/L	0.4013	26.41	-0.2612
Au2427_A		-1.300	ug/L	0.2614	20.10	-5.188
B_2089_A		43.06	ug/L	0.3951	0.9175	39.30
Ba4554_R		31.52	ug/L	2.574	8.165	875.3
Be3130_R		0.1007	ug/L	0.02448	24.30	0.8442
Ca3158_R	W	80,790	ug/L	6,009	7.438	42,530
Cd2265_A		-0.1287	ug/L	0.05703	44.33	-0.5611
Co2286_A		0.1166	ug/L	0.2271	194.7	3.785
Cr2677_A		0.3294	ug/L	0.06149	18.67	8.476
Cu3273_A		2.742	ug/L	0.09277	3.383	87.71
Fe2599_R		-11.75	ug/L	3.232	27.52	6.101
K_7664_R		992.3	ug/L	49.84	5.022	456.9
Li6707_R		10.08	ug/L	1.013	10.05	91.35
Mg2025_A		19,560	ug/L	10.77	0.05503	3,151
Mn2576_R		-0.8654	ug/L	0.7602	87.85	-0.2503
Mo2020_A		0.2681	ug/L	0.1339	49.95	0.7250
Na5895_R		14,730	ug/L	1,048	7.116	17,630
Ni2316_A		0.7668	ug/L	0.2074	27.05	0.7211
Pb2203_A		1.355	ug/L	0.2482	18.32	-0.7806
Sb2068_A		0.5990	ug/L	0.3516	58.70	-0.06169
Se1960_A		1.231	ug/L	1.695	137.7	0.8997
Si2516_R		12,720	ug/L	824.7	6.481	2,261
Sn1899_A		0.9727	ug/L	0.2732	28.08	1.251
Sr4215_R		116.5	ug/L	8.313	7.133	3,828
Ti3349_A		-0.1497	ug/L	0.1025	68.47	-37.55
Tl1908_A		1.820	ug/L	0.3406	18.72	0.1635
V_2924_A		-0.06520	ug/L	0.04397	67.45	-11.05
Zn2062_A		1.599	ug/L	0.1468	9.182	3.967
Y_3600_R		9,175.6	Cts/S	644.59	7.0251	9,175.6
Y_2243_A		9,360.9	Cts/S	7.2999	0.077983	9,360.9
Y_3600_A		357,800	Cts/S	1,519.1	0.42457	357,800

SI1907-004

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:59:59PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2881	ug/L	0.1815	63.02	-2.663
Al3961_R		-14.49	ug/L	6.346	43.79	-0.1136
As1891_A		-0.6184	ug/L	0.07607	12.30	-0.8899
Au2427_A		-0.4828	ug/L	0.2054	42.54	-1.688
B_2089_A		3.344	ug/L	0.5251	15.70	3.897
Ba4554_R		0.4592	ug/L	0.03434	7.477	46.81
Be3130_R		0.1263	ug/L	0.07306	57.86	2.006
Ca3158_R		-22.45	ug/L	0.7612	3.391	9.636
Cd2265_A		-0.05736	ug/L	0.008018	13.98	0.5864
Co2286_A		0.08339	ug/L	0.1164	139.5	3.798
Cr2677_A		-0.03976	ug/L	0.1439	362.1	1.694
Cu3273_A		0.4673	ug/L	0.03875	8.292	41.83
Fe2599_R		-15.09	ug/L	1.144	7.583	4.403
K_7664_R		-13.11	ug/L	11.51	87.77	-9.810
Li6707_R		0.2814	ug/L	0.2156	76.60	18.92
Mg2025_A	F	-126.6	ug/L	0.6429	0.5079	-2.079
Mn2576_R		-0.7087	ug/L	0.4643	65.52	0.4063
Mo2020_A		0.1915	ug/L	0.2407	125.7	0.6295

SI1907-004

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 4:59:59PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		64.26	ug/L	11.03	17.16	202.0
Ni2316_A		0.2748	ug/L	0.2103	76.55	-0.5732
Pb2203_A		0.9030	ug/L	0.4892	54.18	-1.315
Sb2068_A		1.420	ug/L	1.559	109.8	0.2351
Se1960_A		0.5616	ug/L	3.594	640.0	0.8237
Si2516_R		9.949	ug/L	7.893	79.33	5.031
Sn1899_A		0.7649	ug/L	0.01882	2.461	1.216
Sr4215_R		0.2777	ug/L	0.1186	42.72	-0.2756
Ti3349_A		0.4802	ug/L	0.05665	11.80	-7.150
Tl1908_A		0.6447	ug/L	0.3888	60.31	-0.2676
V_2924_A		-0.04382	ug/L	0.03687	84.14	-10.95
Zn2062_A		0.7184	ug/L	0.2327	32.39	1.700
Y_3600_R		9,849.0	Cts/S	79.180	0.80394	9,849.0
Y_2243_A		9,732.8	Cts/S	9.9267	0.10199	9,732.8
Y_3600_A		374,060	Cts/S	7,918.9	2.1170	374,060

CCV

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:04:46PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		505.7	ug/L	0.5649	0.1117	18,530
Al3961_R		12,220	ug/L	91.61	0.7496	4,799
As1891_A		487.9	ug/L	0.9515	0.1950	136.8
Au2427_A		502.9	ug/L	19.19	3.817	2,229
B_2089_A		490.9	ug/L	0.1118	0.02277	460.2
Ba4554_R		491.3	ug/L	4.905	0.9984	14,040
Be3130_R		489.4	ug/L	3.127	0.6390	20,740
Ca3158_R		12,140	ug/L	166.0	1.367	6,824
Cd2265_A		506.8	ug/L	0.03801	0.007500	8,160
Co2286_A		497.8	ug/L	0.6297	0.1265	2,109
Cr2677_A		513.0	ug/L	1.354	0.2639	9,627
Cu3273_A		496.5	ug/L	0.5238	0.1055	10,500
Fe2599_R		11,890	ug/L	90.09	0.7575	7,815
K_7664_R		12,150	ug/L	155.2	1.277	5,990
Li6707_R		496.4	ug/L	7.703	1.552	3,997
Mg2025_A		12,730	ug/L	23.90	0.1877	2,105
Mn2576_R		495.3	ug/L	4.968	1.003	1,826
Mo2020_A		516.8	ug/L	4.440	0.8591	818.9
Na5895_R		12,310	ug/L	149.8	1.217	15,700
Ni2316_A		505.3	ug/L	0.4746	0.09392	1,323
Pb2203_A		511.3	ug/L	0.1423	0.02782	555.5
Sb2068_A		497.2	ug/L	0.05575	0.01121	175.5
Se1960_A		483.2	ug/L	0.1476	0.03055	79.75
Si2516_R		12,250	ug/L	129.9	1.060	2,318
Sn1899_A		505.8	ug/L	0.8324	0.1646	201.2
Sr4215_R		498.0	ug/L	5.180	1.040	17,450
Ti3349_A		504.4	ug/L	0.3238	0.06420	24,730
Tl1908_A		491.5	ug/L	2.561	0.5211	175.9
V_2924_A		504.6	ug/L	1.536	0.3045	12,350
Zn2062_A		482.7	ug/L	0.1823	0.03777	1,295
Y_3600_R		9,744.6	Cts/S	52.772	0.54155	9,744.6
Y_2243_A		9,492.8	Cts/S	10.133	0.10674	9,492.8
Y_3600_A		359,930	Cts/S	504.63	0.14020	359,930

CCB

Method Name: K6010-2011 Method Revision: 1,724

CCB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:09:23PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3471	ug/L	0.01529	4.406	21.68
Al3961_R		-27.66	ug/L	3.534	12.78	-5.307
As1891_A		-0.5525	ug/L	0.6176	111.8	-0.8587
Au2427_A		2.612	ug/L	0.04617	1.767	12.20
B_2089_A		0.7677	ug/L	0.08938	11.64	1.530
Ba4554_R		0.2486	ug/L	0.3055	122.9	40.82
Be3130_R		0.2214	ug/L	0.06647	30.02	6.105
Ca3158_R		-40.94	ug/L	2.412	5.890	-0.8352
Cd2265_A		0.08116	ug/L	0.01470	18.11	2.837
Co2286_A		0.09236	ug/L	0.003443	3.727	3.792
Cr2677_A		0.2008	ug/L	0.1066	53.11	6.323
Cu3273_A		0.3069	ug/L	0.2580	84.05	38.13
Fe2599_R		-11.37	ug/L	0.9684	8.520	6.889
K_7664_R		-14.63	ug/L	5.122	35.01	-10.56
Li6707_R		0.4047	ug/L	1.463	361.4	19.98
Mg2025_A	F	-126.7	ug/L	1.122	0.8857	-2.066
Mn2576_R		-0.7957	ug/L	0.7235	90.92	0.09375
Mo2020_A		2.055	ug/L	0.5214	25.37	3.610
Na5895_R		27.78	ug/L	6.997	25.18	155.6
Ni2316_A		0.1552	ug/L	0.02037	13.13	-0.8795
Pb2203_A		0.6640	ug/L	0.2363	35.59	-1.562
Sb2068_A		1.341	ug/L	0.9593	71.53	0.2043
Se1960_A		3.548	ug/L	2.678	75.47	1.306
Si2516_R		4.527	ug/L	3.290	72.67	4.000
Sn1899_A		0.4048	ug/L	0.4242	104.8	1.056
Sr4215_R		0.3758	ug/L	0.3221	85.71	3.241
Ti3349_A		0.8048	ug/L	0.005791	0.7195	9.413
Tl1908_A		2.089	ug/L	0.7010	33.56	0.2649
V_2924_A		0.3312	ug/L	0.03429	10.36	-1.604
Zn2062_A		0.2529	ug/L	0.02339	9.247	0.4121
Y_3600_R		9,867.1	Cts/S	28.292	0.28673	9,867.1
Y_2243_A		9,608.9	Cts/S	19.243	0.20026	9,608.9
Y_3600_A		372,350	Cts/S	603.54	0.16209	372,350

SI1907-005

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:14:10PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1573	ug/L	0.05146	32.71	2.188
Al3961_R		7.631	ug/L	2.944	38.57	17.43
As1891_A		0.6231	ug/L	0.2667	42.81	-0.4962
Au2427_A		0.5845	ug/L	0.3804	65.08	2.813
B_2089_A		25.94	ug/L	0.06365	0.2454	23.31
Ba4554_R		11.13	ug/L	0.2965	2.665	347.5
Be3130_R		0.1283	ug/L	0.007074	5.515	2.073
Ca3158_R	W	62,620	ug/L	505.2	0.8068	34,810
Cd2265_A		-0.03933	ug/L	0.01257	31.96	0.8309
Co2286_A		0.3455	ug/L	0.03094	8.954	4.609
Cr2677_A		0.4760	ug/L	0.1034	21.73	10.83
Cu3273_A		2.620	ug/L	0.9621	36.72	82.05
Fe2599_R		-11.11	ug/L	0.2768	2.492	6.911
K_7664_R		1,838	ug/L	22.60	1.229	895.5
Li6707_R		814.8	ug/L	8.876	1.089	6,494
Mg2025_A	W	47,370	ug/L	10.30	0.02174	7,391
Mn2576_R		16.82	ug/L	0.8058	4.790	64.38
Mo2020_A		0.5900	ug/L	0.02494	4.228	1.194

SI1907-005

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:14:10PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	111,200	ug/L	989.1	0.8892	139,700
Ni2316_A		1.292	ug/L	0.07825	6.057	2.021
Pb2203_A		0.4513	ug/L	0.02971	6.583	-1.706
Sb2068_A		-0.6376	ug/L	0.4619	72.45	-0.4798
Se1960_A		2.285	ug/L	0.5576	24.40	1.041
Si2516_R		8,324	ug/L	73.91	0.8879	1,562
Sn1899_A		0.4198	ug/L	0.2857	68.05	1.006
Sr4215_R		112.3	ug/L	1.303	1.160	3,894
Ti3349_A		0.2396	ug/L	0.1837	76.69	-17.90
Tl1908_A		2.641	ug/L	0.7313	27.69	0.4310
V_2924_A		-0.1064	ug/L	0.08621	81.03	-11.80
Zn2062_A		4.376	ug/L	0.06653	1.520	11.01
Y_3600_R		9,660.3	Cts/S	149.29	1.5454	9,660.3
Y_2243_A		9,100.1	Cts/S	5.1829	0.056954	9,100.1
Y_3600_A		344,650	Cts/S	776.92	0.22542	344,650

SI1907-007

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:18:57PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.09345	ug/L	0.2294	245.5	4.475
Al3961_R		-1.881	ug/L	20.91	1,112	10.16
As1891_A		-0.4205	ug/L	0.2026	48.17	-0.8121
Au2427_A		0.3100	ug/L	0.4919	158.6	1.788
B_2089_A		5.350	ug/L	0.1087	2.032	5.625
Ba4554_R		44.61	ug/L	0.1240	0.2779	1,291
Be3130_R		-0.03470	ug/L	0.001925	5.548	-4.766
Ca3158_R	W	37,520	ug/L	80.69	0.2151	20,810
Cd2265_A		-0.05135	ug/L	0.01155	22.50	0.6883
Co2286_A		0.3737	ug/L	0.1872	50.09	4.923
Cr2677_A		0.3552	ug/L	0.1839	51.77	9.102
Cu3273_A		3.043	ug/L	0.02133	0.7009	95.11
Fe2599_R		-1.503	ug/L	0.06898	4.590	13.13
K_7664_R		1,113	ug/L	32.06	2.881	539.5
Li6707_R		1.571	ug/L	0.6277	39.95	28.73
Mg2025_A		10,550	ug/L	24.30	0.2304	1,731
Mn2576_R		9.231	ug/L	0.2185	2.367	36.57
Mo2020_A		0.4462	ug/L	0.3849	86.27	1.017
Na5895_R		4,286	ug/L	0.06430	0.001500	5,482
Ni2316_A		1.318	ug/L	0.08375	6.352	2.175
Pb2203_A		0.3536	ug/L	0.3077	87.01	-1.884
Sb2068_A		0.6429	ug/L	1.494	232.4	-0.04886
Se1960_A		1.876	ug/L	2.780	148.1	1.018
Si2516_R		3,149	ug/L	6.594	0.2094	591.3
Sn1899_A		1.431	ug/L	0.2244	15.68	1.449
Sr4215_R		458.6	ug/L	0.5028	0.1096	15,890
Ti3349_A		0.1052	ug/L	0.03753	35.70	-25.41
Tl1908_A		0.9159	ug/L	0.2583	28.21	-0.1704
V_2924_A		0.03713	ug/L	0.1888	508.4	-8.706
Zn2062_A		3.364	ug/L	0.0008950	0.02661	8.761
Y_3600_R		9,636.4	Cts/S	50.073	0.51962	9,636.4
Y_2243_A		9,488.3	Cts/S	3.5551	0.037468	9,488.3
Y_3600_A		361,960	Cts/S	4,244.4	1.1726	361,960

SI1907-008

Method Name: K6010-2011 Method Revision: 1,724

SI1907-008

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:23:45PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2838	ug/L	0.1999	70.42	-2.363
Al3961_R		-9.278	ug/L	22.00	237.1	7.220
As1891_A		1.154	ug/L	0.8902	77.12	-0.3674
Au2427_A		-0.6683	ug/L	0.08326	12.46	-2.463
B_2089_A		6.760	ug/L	0.1630	2.412	6.890
Ba4554_R		58.62	ug/L	0.9311	1.588	1,692
Be3130_R		0.01833	ug/L	0.04542	247.8	-2.543
Ca3158_R	W	37,030	ug/L	478.6	1.292	20,620
Cd2265_A		-0.1112	ug/L	0.02121	19.08	-0.2895
Co2286_A		0.1432	ug/L	0.1252	87.43	3.944
Cr2677_A		0.2096	ug/L	0.2100	100.2	6.287
Cu3273_A		1.821	ug/L	0.1703	9.349	68.89
Fe2599_R		-12.88	ug/L	2.607	20.25	5.770
K_7664_R		125.1	ug/L	9.080	7.258	58.04
Li6707_R		-0.2436	ug/L	0.1676	68.82	14.41
Mg2025_A		12,580	ug/L	23.35	0.1857	2,057
Mn2576_R		-0.5128	ug/L	0.1445	28.17	1.122
Mo2020_A		0.2397	ug/L	0.07239	30.20	0.6888
Na5895_R		6,236	ug/L	80.91	1.297	7,953
Ni2316_A		1.391	ug/L	0.04143	2.979	2.364
Pb2203_A		0.3434	ug/L	1.205	350.9	-1.893
Sb2068_A		1.297	ug/L	1.320	101.7	0.1865
Se1960_A		0.5026	ug/L	2.335	464.5	0.7924
Si2516_R		2,903	ug/L	65.85	2.268	547.4
Sn1899_A		0.1270	ug/L	1.526	1,202	0.9323
Sr4215_R		182.9	ug/L	2.376	1.299	6,356
Ti3349_A		-0.09645	ug/L	0.1636	169.7	-35.21
Tl1908_A		0.2459	ug/L	2.313	940.5	-0.4049
V_2924_A		0.09551	ug/L	0.03463	36.26	-7.133
Zn2062_A		3.712	ug/L	0.1140	3.071	9.683
Y_3600_R		9,672.3	Cts/S	15.215	0.15730	9,672.3
Y_2243_A		9,476.5	Cts/S	12.293	0.12972	9,476.5
Y_3600_A		360,340	Cts/S	216.45	0.060069	360,340

SI1907-009

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:28:32PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5849	ug/L	0.09374	16.03	27.43
Al3961_R		21.53	ug/L	6.781	31.50	44.11
As1891_A		0.9977	ug/L	0.6883	68.99	-0.3849
Au2427_A		50.52	ug/L	0.3887	0.7693	137.2
B_2089_A		145.5	ug/L	0.6985	0.4800	123.6
Ba4554_R		12.99	ug/L	0.2909	2.240	396.8
Be3130_R		0.07950	ug/L	0.005973	7.514	0.005735
Ca3158_R	W	214,300	ug/L	2,201	1.027	118,100
Cd2265_A		-0.05842	ug/L	0.03646	62.41	0.5508
Co2286_A		7.031	ug/L	0.01902	0.2705	30.72
Cr2677_A		2.836	ug/L	0.2182	7.696	70.05
Cu3273_A		4.668	ug/L	0.03528	0.7557	121.1
Fe2599_R		24.27	ug/L	2.571	10.59	29.66
K_7664_R		5,942	ug/L	95.14	1.601	2,877
Li6707_R		163.9	ug/L	1.824	1.113	1,308
Mg2025_A	F	223,600	ug/L	7.367	0.003295	33,810
Mn2576_R	W	9,146	ug/L	121.6	1.330	33,090
Mo2020_A		-0.5295	ug/L	0.1385	26.16	-0.3979

SI1907-009

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:28:32PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	101,700	ug/L	1,046	1.029	126,700
Ni2316_A		19.87	ug/L	0.2154	1.084	47.28
Pb2203_A		1.506	ug/L	0.7965	52.88	-0.5795
Sb2068_A		1.439	ug/L	1.636	113.6	0.2199
Se1960_A		0.5247	ug/L	1.844	351.4	1.416
Si2516_R		6,400	ug/L	58.09	0.9077	1,192
Sn1899_A		0.6048	ug/L	0.2133	35.26	1.045
Sr4215_R	W	1,446	ug/L	21.91	1.515	49,840
Ti3349_A		0.8060	ug/L	0.2909	36.09	8.538
Tl1908_A		9.801	ug/L	0.1267	1.293	-3.916
V_2924_A		0.3145	ug/L	0.05358	17.04	-70.19
Zn2062_A		18.63	ug/L	0.1409	0.7564	46.32
Y_3600_R		9,579.4	Cts/S	106.66	1.1134	9,579.4
Y_2243_A		8,833.6	Cts/S	8.7671	0.099247	8,833.6
Y_3600_A		338,110	Cts/S	2,107.4	0.62330	338,110

SI1907-010

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:33:11PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.06049	ug/L	0.1823	301.4	-117.4
Al3961_R		1.700	ug/L	7.855	462.1	15.50
As1891_A		1.498	ug/L	1.442	96.29	-0.6373
Au2427_A		7.381	ug/L	0.1879	2.545	25.77
B_2089_A		66.88	ug/L	0.1160	0.1735	60.19
Ba4554_R		41.26	ug/L	0.2938	0.7122	1,185
Be3130_R		0.1835	ug/L	0.08824	48.10	4.350
Ca3158_R	W	66,550	ug/L	631.6	0.9490	36,550
Cd2265_A		-0.1259	ug/L	0.04522	35.90	12.07
Co2286_A		16.13	ug/L	0.1817	1.127	69.83
Cr2677_A		0.7275	ug/L	0.03074	4.226	19.73
Cu3273_A		2.340	ug/L	0.1414	6.042	77.64
Fe2599_R		8,136	ug/L	121.9	1.498	5,242
K_7664_R		1,917	ug/L	46.89	2.445	922.9
Li6707_R		181.2	ug/L	4.509	2.489	1,439
Mg2025_A		24,010	ug/L	29.79	0.1241	3,837
Mn2576_R	W	1,378	ug/L	16.24	1.178	4,970
Mo2020_A		-0.3308	ug/L	0.1388	41.94	-0.1946
Na5895_R	W	35,820	ug/L	386.6	1.079	44,530
Ni2316_A		20.70	ug/L	0.2360	1.140	50.66
Pb2203_A		0.6515	ug/L	0.7104	109.0	-1.296
Sb2068_A		2.670	ug/L	1.516	56.78	0.8142
Se1960_A		1.628	ug/L	3.258	200.1	1.093
Si2516_R		14,990	ug/L	250.8	1.673	2,777
Sn1899_A		0.1655	ug/L	1.108	669.4	0.9297
Sr4215_R		219.0	ug/L	3.108	1.419	7,513
Ti3349_A		-0.1347	ug/L	0.01082	8.031	-36.60
Tl1908_A		1.769	ug/L	0.8861	50.09	-0.9143
V_2924_A		0.2210	ug/L	0.1354	61.26	-11.79
Zn2062_A		14.34	ug/L	0.1565	1.091	37.46
Y_3600_R		9,545.5	Cts/S	7.4559	0.078109	9,545.5
Y_2243_A		9,298.0	Cts/S	14.715	0.15826	9,298.0
Y_3600_A		355,310	Cts/S	3,301.2	0.92911	355,310

SI1907-011

Method Name: K6010-2011 Method Revision: 1,724

SI1907-011

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:37:55PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1834	ug/L	0.03766	20.53	-8.438
Al3961_R		34.97	ug/L	7.315	20.91	28.48
As1891_A		1.501	ug/L	0.3451	22.99	-0.2924
Au2427_A		0.4132	ug/L	0.007079	1.713	1.725
B_2089_A		64.91	ug/L	0.1123	0.1729	58.38
Ba4554_R		28.02	ug/L	0.2269	0.8098	831.0
Be3130_R		0.1287	ug/L	0.06440	50.05	2.074
Ca3158_R	W	64,160	ug/L	652.4	1.017	35,910
Cd2265_A		-0.03050	ug/L	0.01044	34.24	1.929
Co2286_A		4.541	ug/L	0.1688	3.718	22.02
Cr2677_A		0.8189	ug/L	0.3780	46.16	17.81
Cu3273_A		16.30	ug/L	0.1460	0.8960	368.7
Fe2599_R		612.2	ug/L	3.347	0.5468	415.1
K_7664_R		885.7	ug/L	64.67	7.302	432.9
Li6707_R		55.58	ug/L	0.07473	0.1345	461.3
Mg2025_A		23,070	ug/L	32.26	0.1398	3,683
Mn2576_R		109.0	ug/L	0.7699	0.7065	403.3
Mo2020_A		0.1993	ug/L	0.04602	23.10	0.6137
Na5895_R	W	46,110	ug/L	650.6	1.411	58,380
Ni2316_A		18.00	ug/L	0.1246	0.6920	44.84
Pb2203_A		0.6232	ug/L	0.4687	75.21	-1.538
Sb2068_A		1.426	ug/L	0.4984	34.95	0.2274
Se1960_A		0.1206	ug/L	1.360	1,128	0.7260
Si2516_R		14,290	ug/L	148.5	1.039	2,697
Sn1899_A		1.799	ug/L	0.6431	35.75	1.561
Sr4215_R		72.58	ug/L	0.9480	1.306	2,531
Ti3349_A		0.5932	ug/L	0.2204	37.15	-1.263
Tl1908_A		1.937	ug/L	1.537	79.37	0.1205
V_2924_A		0.1455	ug/L	0.1423	97.79	-6.443
Zn2062_A		32.66	ug/L	0.07457	0.2283	85.58
Y_3600_R		9,727.0	Cts/S	130.00	1.3365	9,727.0
Y_2243_A		9,286.1	Cts/S	1.7186	0.018507	9,286.1
Y_3600_A		354,690	Cts/S	5,576.3	1.5722	354,690

SI1907-012

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:42:42PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2157	ug/L	0.2149	99.63	0.1750
Al3961_R		13.51	ug/L	15.17	112.3	40.70
As1891_A		0.4738	ug/L	0.8965	189.2	-0.5237
Au2427_A		-1.618	ug/L	0.4236	26.18	-6.350
B_2089_A		39.46	ug/L	0.3352	0.8494	34.23
Ba4554_R		11.78	ug/L	0.04570	0.3878	362.4
Be3130_R		0.05819	ug/L	0.06321	108.6	-0.8817
Ca3158_R	W	212,500	ug/L	2,681	1.262	116,900
Cd2265_A		-0.06082	ug/L	0.03074	50.54	0.4819
Co2286_A		0.2250	ug/L	0.1227	54.54	4.029
Cr2677_A		0.6048	ug/L	0.04556	7.533	12.97
Cu3273_A		4.572	ug/L	0.2536	5.546	119.9
Fe2599_R		-15.01	ug/L	7.787	51.86	4.330
K_7664_R		3,060	ug/L	29.33	0.9583	1,478
Li6707_R		59.80	ug/L	1.056	1.765	486.7
Mg2025_A	W	111,000	ug/L	9.191	0.008282	16,880
Mn2576_R		12.99	ug/L	0.3084	2.374	49.86
Mo2020_A		-0.07533	ug/L	0.1005	133.4	0.1793

SI1907-012

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:42:42PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	96,820	ug/L	836.8	0.8644	120,400
Ni2316_A		2.117	ug/L	0.3575	16.88	3.998
Pb2203_A		0.3338	ug/L	0.1848	55.36	-1.786
Sb2068_A		2.250	ug/L	1.445	64.24	0.4919
Se1960_A		1.104	ug/L	2.426	219.7	0.8361
Si2516_R		5,441	ug/L	21.05	0.3870	1,011
Sn1899_A		0.6029	ug/L	0.5985	99.26	1.050
Sr4215_R		492.3	ug/L	3.259	0.6619	16,930
Ti3349_A		0.7729	ug/L	0.07552	9.770	7.025
Tl1908_A		1.263	ug/L	1.431	113.3	-0.04361
V_2924_A		-0.1852	ug/L	0.08799	47.50	-13.37
Zn2062_A		6.776	ug/L	0.03628	0.5354	16.78
Y_3600_R		9,561.9	Cts/S	9.8102	0.10260	9,561.9
Y_2243_A		8,884.6	Cts/S	21.329	0.24007	8,884.6
Y_3600_A		340,290	Cts/S	223.77	0.065758	340,290

SI1907-014

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:47:28PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.6271	ug/L	0.2741	43.71	-245.1
Al3961_R		-11.21	ug/L	0.4491	4.006	11.65
As1891_A		0.3223	ug/L	0.5641	175.0	-1.393
Au2427_A		11.91	ug/L	0.2886	2.424	46.00
B_2089_A		85.00	ug/L	0.05472	0.06437	75.86
Ba4554_R		13.68	ug/L	0.1239	0.9055	422.2
Be3130_R		0.2471	ug/L	0.06162	24.93	7.110
Ca3158_R	W	72,850	ug/L	613.6	0.8422	40,740
Cd2265_A		-0.1119	ug/L	0.02505	22.38	26.98
Co2286_A		22.22	ug/L	0.1361	0.6123	94.41
Cr2677_A		0.5828	ug/L	0.3182	54.59	19.36
Cu3273_A		0.8012	ug/L	0.07475	9.329	43.93
Fe2599_R		17,750	ug/L	194.3	1.094	11,630
K_7664_R		2,474	ug/L	6.051	0.2446	1,214
Li6707_R		132.7	ug/L	1.196	0.9018	1,078
Mg2025_A	W	40,940	ug/L	53.84	0.1315	6,494
Mn2576_R	W	1,935	ug/L	21.25	1.098	7,108
Mo2020_A		-0.5529	ug/L	0.4081	73.81	-0.5299
Na5895_R	W	65,800	ug/L	623.7	0.9480	83,190
Ni2316_A		45.71	ug/L	0.1698	0.3714	112.8
Pb2203_A		1.097	ug/L	0.2568	23.41	-0.5408
Sb2068_A		-0.4648	ug/L	0.4500	96.81	-0.1003
Se1960_A		0.6866	ug/L	1.291	188.0	1.013
Si2516_R		18,790	ug/L	122.2	0.6503	3,543
Sn1899_A		0.6828	ug/L	0.1322	19.36	1.123
Sr4215_R		334.8	ug/L	3.591	1.073	11,700
Ti3349_A		-0.04725	ug/L	0.03799	80.40	-32.10
Tl1908_A		3.079	ug/L	0.7752	25.18	-0.8676
V_2924_A		0.05596	ug/L	0.1250	223.4	-16.43
Zn2062_A		35.83	ug/L	0.005035	0.01405	93.49
Y_3600_R		9,719.9	Cts/S	91.498	0.94135	9,719.9
Y_2243_A		9,244.9	Cts/S	0.061512	0.00066500	9,244.9
Y_3600_A		352,120	Cts/S	3,858.4	1.0958	352,120

SI1907-014A

Method Name: K6010-2011 Method Revision: 1,724

SI1907-014A

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:52:13PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		406.1	ug/L	67.97	16.74	14,320
Al3961_R		6,628	ug/L	352.1	5.312	2,580
As1891_A		260.2	ug/L	29.56	11.36	69.85
Au2427_A		13.31	ug/L	0.3077	2.312	50.42
B_2089_A		369.7	ug/L	28.15	7.615	333.7
Ba4554_R		613.0	ug/L	32.63	5.322	17,280
Be3130_R		611.7	ug/L	29.94	4.894	25,590
Ca3158_R	W	77,420	ug/L	628.6	0.8119	42,820
Cd2265_A		262.7	ug/L	30.40	11.58	4,137
Co2286_A		275.2	ug/L	29.87	10.85	1,135
Cr2677_A		397.1	ug/L	67.34	16.96	7,286
Cu3273_A		397.7	ug/L	70.37	17.69	8,222
Fe2599_R		23,230	ug/L	88.75	0.3821	15,050
K_7664_R		15,240	ug/L	595.3	3.906	7,411
Li6707_R		786.5	ug/L	30.93	3.933	6,238
Mg2025_A	W	42,860	ug/L	183.3	0.4277	6,792
Mn2576_R	W	2,503	ug/L	4.090	0.1634	9,090
Mo2020_A		264.5	ug/L	32.61	12.33	407.4
Na5895_R	W	71,090	ug/L	173.6	0.2442	88,890
Ni2316_A		303.0	ug/L	30.05	9.916	768.2
Pb2203_A		264.9	ug/L	28.65	10.82	279.0
Sb2068_A		261.8	ug/L	29.73	11.36	91.11
Se1960_A		279.6	ug/L	32.19	11.51	45.36
Si2516_R		19,590	ug/L	161.1	0.8222	3,655
Sn1899_A		1.729	ug/L	0.8084	46.76	1.523
Sr4215_R		940.4	ug/L	31.15	3.313	32,520
Ti3349_A		389.6	ug/L	67.02	17.20	18,640
Tl1908_A		300.4	ug/L	26.27	8.743	102.2
V_2924_A		406.9	ug/L	70.08	17.22	9,742
Zn2062_A		292.4	ug/L	30.19	10.32	762.0
Y_3600_R		9,614.4	Cts/S	16.435	0.17095	9,614.4
Y_2243_A		9,224.5	Cts/S	9.4318	0.10225	9,224.5
Y_3600_A		351,390	Cts/S	2,176.4	0.61938	351,390

SI1907-014L

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:56:52PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2871	ug/L	0.7561	263.3	-44.48
Al3961_R		-116.7	ug/L	3.201	2.744	-1.731
As1891_A		2.097	ug/L	0.2962	14.12	-0.7247
Au2427_A		9.122	ug/L	1.929	21.15	7.550
B_2089_A		84.40	ug/L	2.521	2.987	16.21
Ba4554_R		11.68	ug/L	0.5374	4.600	100.8
Be3130_R		0.1312	ug/L	0.02046	15.59	-2.255
Ca3158_R		63,710	ug/L	733.1	1.151	7,228
Cd2265_A		-0.1748	ug/L	0.1743	99.72	5.890
Co2286_A		22.29	ug/L	0.9547	4.284	22.26
Cr2677_A		1.127	ug/L	0.6492	57.60	7.891
Cu3273_A		1.981	ug/L	1.488	75.11	39.18
Fe2599_R		15,540	ug/L	98.88	0.6364	2,072
K_7664_R		2,214	ug/L	11.34	0.5123	217.1
Li6707_R		115.1	ug/L	5.363	4.661	202.9
Mg2025_A		39,990	ug/L	1,514	3.785	1,326
Mn2576_R		1,708	ug/L	17.87	1.046	1,272
Mo2020_A		5.018	ug/L	1.447	28.84	1.916

SI1907-014L

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 5:56:52PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		57,000	ug/L	601.6	1.056	14,680
Ni2316_A		45.45	ug/L	2.253	4.957	22.21
Pb2203_A		0.6357	ug/L	0.2933	46.14	-2.053
Sb2068_A		4.941	ug/L	4.990	101.0	0.1352
Se1960_A		10.61	ug/L	12.63	119.0	1.103
Si2516_R		17,610	ug/L	196.9	1.118	674.5
Sn1899_A		3.710	ug/L	2.656	71.59	1.185
Sr4215_R		293.1	ug/L	1.293	0.4411	2,064
Ti3349_A		0.6260	ug/L	0.5155	82.35	-24.81
Tl1908_A		7.261	ug/L	1.571	21.63	-0.2373
V_2924_A		0.7559	ug/L	0.1132	14.98	-7.589
Zn2062_A		37.22	ug/L	1.721	4.624	19.85
Y_3600_R		9,834.7	Cts/S	49.664	0.50499	9,834.7
Y_2243_A		9,552.3	Cts/S	3.3096	0.034647	9,552.3
Y_3600_A		367,920	Cts/S	506.01	0.13753	367,920

CCV

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:01:38PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		500.3	ug/L	0.2266	0.04529	18,680
Al3961_R	W	13,290	ug/L	885.0	6.660	4,961
As1891_A		489.6	ug/L	1.251	0.2556	138.2
Au2427_A		505.9	ug/L	20.12	3.977	2,257
B_2089_A		489.7	ug/L	0.08648	0.01766	462.2
Ba4554_R	W	535.8	ug/L	35.75	6.672	14,570
Be3130_R	W	531.0	ug/L	35.47	6.679	21,400
Ca3158_R	W	13,260	ug/L	839.8	6.331	7,091
Cd2265_A		505.0	ug/L	0.2739	0.05424	8,187
Co2286_A		496.3	ug/L	0.2557	0.05152	2,116
Cr2677_A		510.1	ug/L	0.3098	0.06073	9,764
Cu3273_A		492.2	ug/L	0.5650	0.1148	10,620
Fe2599_R		12,920	ug/L	835.3	6.464	8,075
K_7664_R		13,140	ug/L	773.3	5.886	6,159
Li6707_R	W	546.9	ug/L	33.23	6.076	4,187
Mg2025_A		12,710	ug/L	1.025	0.008066	2,115
Mn2576_R	W	537.6	ug/L	35.60	6.622	1,885
Mo2020_A		519.0	ug/L	2.997	0.5773	827.9
Na5895_R	W	13,410	ug/L	857.4	6.395	16,250
Ni2316_A		505.4	ug/L	0.8817	0.1745	1,332
Pb2203_A		510.9	ug/L	1.229	0.2405	558.6
Sb2068_A		499.6	ug/L	2.827	0.5659	177.6
Se1960_A		485.8	ug/L	0.2232	0.04593	80.72
Si2516_R	W	13,310	ug/L	832.6	6.253	2,396
Sn1899_A		503.5	ug/L	1.971	0.3914	201.6
Sr4215_R	W	543.4	ug/L	36.46	6.710	18,110
Ti3349_A		497.3	ug/L	0.9050	0.1820	24,870
Tl1908_A		490.6	ug/L	0.4018	0.08191	176.7
V_2924_A		497.7	ug/L	0.1616	0.03246	12,430
Zn2062_A		481.3	ug/L	0.5542	0.1151	1,300
Y_3600_R		9,285.5	Cts/S	537.09	5.7842	9,285.5
Y_2243_A		9,556.1	Cts/S	4.7376	0.049577	9,556.1
Y_3600_A		367,130	Cts/S	301.78	0.082200	367,130

CCB

Method Name: K6010-2011 Method Revision: 1,724

CCB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:06:15PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4140	ug/L	0.04146	10.01	24.35
Al3961_R		-30.01	ug/L	8.323	27.74	-6.278
As1891_A		1.919	ug/L	0.3135	16.34	-0.1537
Au2427_A		2.929	ug/L	0.01257	0.4292	13.68
B_2089_A		1.601	ug/L	0.1843	11.51	2.306
Ba4554_R		0.3291	ug/L	0.02153	6.544	43.26
Be3130_R		0.2198	ug/L	0.03614	16.44	6.057
Ca3158_R		-49.04	ug/L	1.986	4.050	-5.455
Cd2265_A		0.1654	ug/L	0.01724	10.42	4.223
Co2286_A		0.02533	ug/L	0.2307	911.1	3.523
Cr2677_A		-0.01714	ug/L	0.03084	179.9	2.109
Cu3273_A		0.3118	ug/L	0.4431	142.1	38.30
Fe2599_R		-12.08	ug/L	0.05132	0.4249	6.432
K_7664_R		-36.50	ug/L	2.360	6.465	-21.53
Li6707_R		2.269	ug/L	0.4840	21.33	35.23
Mg2025_A	F	-128.0	ug/L	0.6513	0.5087	-2.295
Mn2576_R		-0.6914	ug/L	0.3923	56.74	0.4688
Mo2020_A		2.071	ug/L	0.8279	39.99	3.650
Na5895_R		29.54	ug/L	9.141	30.95	158.2
Ni2316_A		0.3586	ug/L	0.1328	37.03	-0.3409
Pb2203_A		0.05338	ug/L	0.05611	105.1	-2.247
Sb2068_A		1.142	ug/L	0.6016	52.67	0.1288
Se1960_A		1.433	ug/L	1.128	78.75	0.9609
Si2516_R		32.01	ug/L	1.424	4.449	9.281
Sn1899_A		1.347	ug/L	0.9285	68.92	1.440
Sr4215_R		0.07117	ug/L	0.2310	324.6	-7.676
Ti3349_A		0.9256	ug/L	0.03637	3.930	15.61
Tl1908_A		1.955	ug/L	0.8926	45.66	0.2165
V_2924_A		0.3227	ug/L	0.1524	47.22	-1.832
Zn2062_A		0.1744	ug/L	0.01025	5.876	0.2000
Y_3600_R		9,894.6	Cts/S	151.47	1.5308	9,894.6
Y_2243_A		9,647.9	Cts/S	17.264	0.17894	9,647.9
Y_3600_A		373,770	Cts/S	5,392.0	1.4426	373,770

SI1907-014P

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:11:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.84	ug/L	1.012	1.916	1,633
Al3961_R		2,101	ug/L	45.94	2.187	823.8
As1891_A		102.8	ug/L	0.4118	0.4006	26.86
Au2427_A		15.54	ug/L	0.2398	1.543	58.20
B_2089_A		576.2	ug/L	0.9260	0.1607	513.8
Ba4554_R	W	2,094	ug/L	29.92	1.429	58,590
Be3130_R		52.91	ug/L	1.259	2.379	2,184
Ca3158_R	W	75,980	ug/L	1,196	1.575	41,770
Cd2265_A		251.9	ug/L	0.2044	0.08114	3,980
Co2286_A		533.2	ug/L	0.7578	0.1421	2,204
Cr2677_A		210.4	ug/L	2.230	1.060	3,903
Cu3273_A		256.9	ug/L	5.946	2.315	5,370
Fe2599_R		19,080	ug/L	402.1	2.108	12,290
K_7664_R		12,610	ug/L	135.4	1.074	6,095
Li6707_R		662.2	ug/L	7.535	1.138	5,223
Mg2025_A	W	44,950	ug/L	135.9	0.3023	7,159
Mn2576_R	W	2,470	ug/L	54.06	2.188	8,915
Mo2020_A		103.3	ug/L	0.2354	0.2279	159.9

SI1907-014P

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:11:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	74,580	ug/L	796.5	1.068	92,680
Ni2316_A		559.8	ug/L	0.1187	0.02121	1,429
Pb2203_A		99.90	ug/L	0.2403	0.2405	104.8
Sb2068_A		100.9	ug/L	1.111	1.102	33.44
Se1960_A		103.5	ug/L	4.586	4.431	17.45
Si2516_R		24,330	ug/L	553.5	2.275	4,508
Sn1899_A		497.7	ug/L	1.269	0.2551	193.2
Sr4215_R		848.7	ug/L	15.42	1.816	29,170
Ti3349_A		499.2	ug/L	8.263	1.655	24,120
Tl1908_A		113.4	ug/L	1.897	1.672	36.21
V_2924_A		525.0	ug/L	9.842	1.875	12,760
Zn2062_A		532.6	ug/L	1.878	0.3527	1,396
Y_3600_R		9,556.7	Cts/S	241.07	2.5225	9,556.7
Y_2243_A		9,264.6	Cts/S	4.1952	0.045282	9,264.6
Y_3600_A		355,070	Cts/S	5,953.5	1.6767	355,070

SI1907-014S

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:15:43PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		54.70	ug/L	0.4050	0.7404	1,684
Al3961_R		2,133	ug/L	23.71	1.111	839.7
As1891_A		105.6	ug/L	2.024	1.917	27.55
Au2427_A		15.88	ug/L	0.1867	1.176	59.20
B_2089_A		594.5	ug/L	0.07271	0.01223	528.6
Ba4554_R	W	2,119	ug/L	19.39	0.9151	59,510
Be3130_R		53.95	ug/L	0.1285	0.2382	2,235
Ca3158_R	W	77,680	ug/L	255.0	0.3283	42,860
Cd2265_A		262.1	ug/L	0.5740	0.2190	4,128
Co2286_A		552.7	ug/L	0.2311	0.04181	2,278
Cr2677_A		220.7	ug/L	0.9515	0.4312	4,065
Cu3273_A		267.3	ug/L	1.520	0.5689	5,548
Fe2599_R		19,360	ug/L	23.18	0.1197	12,510
K_7664_R		12,850	ug/L	124.6	0.9689	6,235
Li6707_R		668.4	ug/L	7.982	1.194	5,292
Mg2025_A	W	46,960	ug/L	70.54	0.1502	7,457
Mn2576_R	W	2,524	ug/L	13.12	0.5198	9,144
Mo2020_A		108.3	ug/L	0.7006	0.6470	167.1
Na5895_R	W	75,780	ug/L	802.6	1.059	94,520
Ni2316_A		584.8	ug/L	0.5562	0.09510	1,489
Pb2203_A		104.1	ug/L	0.6835	0.6563	109.0
Sb2068_A		105.7	ug/L	2.139	2.023	34.95
Se1960_A		107.8	ug/L	1.230	1.141	18.08
Si2516_R		24,830	ug/L	32.79	0.1321	4,619
Sn1899_A		520.9	ug/L	1.305	0.2506	201.6
Sr4215_R		861.5	ug/L	3.224	0.3742	29,720
Ti3349_A		520.3	ug/L	4.295	0.8254	24,970
Tl1908_A		116.0	ug/L	1.399	1.206	36.88
V_2924_A		547.5	ug/L	2.670	0.4877	13,220
Zn2062_A		553.6	ug/L	0.5089	0.09193	1,447
Y_3600_R		9,590.6	Cts/S	134.26	1.3999	9,590.6
Y_2243_A		9,238.1	Cts/S	9.0209	0.097649	9,238.1
Y_3600_A		352,600	Cts/S	1,065.8	0.30226	352,600

SI1907-014R

Method Name: K6010-2011 Method Revision: 1,724

SI1907-014R

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:20:21PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3797	ug/L	0.05287	13.93	-255.0
Al3961_R		-11.46	ug/L	0.006622	0.05780	11.55
As1891_A		-0.1767	ug/L	0.09837	55.68	-1.536
Au2427_A		11.98	ug/L	0.4064	3.392	46.30
B_2089_A		86.10	ug/L	0.3912	0.4543	76.90
Ba4554_R		14.70	ug/L	0.1519	1.033	445.1
Be3130_R		0.1867	ug/L	0.02182	11.69	4.487
Ca3158_R	W	73,850	ug/L	1,731	2.344	40,740
Cd2265_A		-0.03440	ug/L	0.1080	313.9	28.37
Co2286_A		22.42	ug/L	0.2634	1.175	95.25
Cr2677_A		0.6982	ug/L	0.1320	18.90	21.42
Cu3273_A		1.643	ug/L	0.4831	29.40	61.09
Fe2599_R		17,860	ug/L	508.7	2.848	11,540
K_7664_R		2,520	ug/L	128.3	5.090	1,219
Li6707_R		135.0	ug/L	1.637	1.213	1,081
Mg2025_A	W	41,850	ug/L	194.9	0.4658	6,640
Mn2576_R	W	1,949	ug/L	41.31	2.120	7,060
Mo2020_A		0.5145	ug/L	0.1306	25.39	1.118
Na5895_R	W	66,920	ug/L	1,534	2.292	83,470
Ni2316_A		46.49	ug/L	0.06421	0.1381	114.8
Pb2203_A		1.249	ug/L	1.581	126.6	-0.3776
Sb2068_A		0.8803	ug/L	0.3308	37.58	0.3632
Se1960_A		-2.098	ug/L	0.1253	5.971	0.5723
Si2516_R		23,390	ug/L	607.5	2.597	4,351
Sn1899_A		1.662	ug/L	0.08810	5.300	1.502
Sr4215_R		338.0	ug/L	8.497	2.514	11,650
Ti3349_A		0.4497	ug/L	0.07044	15.66	-8.175
Tl1908_A		1.958	ug/L	0.2449	12.51	-1.276
V_2924_A		0.4085	ug/L	0.09411	23.04	-8.117
Zn2062_A		39.39	ug/L	0.07355	0.1867	102.8
Y_3600_R		9,590.1	Cts/S	82.579	0.86109	9,590.1
Y_2243_A		9,249.7	Cts/S	14.093	0.15236	9,249.7
Y_3600_A		351,040	Cts/S	152.58	0.043465	351,040

SI1907-015

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:25:06PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.08352	ug/L	0.1865	223.3	2.925
Al3961_R		-12.29	ug/L	6.544	53.23	1.948
As1891_A		0.6844	ug/L	0.7484	109.4	-0.5137
Au2427_A		2.088	ug/L	0.4399	21.07	6.238
B_2089_A		164.7	ug/L	0.2612	0.1586	152.3
Ba4554_R		33.30	ug/L	0.3451	1.036	990.3
Be3130_R		0.1368	ug/L	0.07041	51.48	2.491
Ca3158_R		8,241	ug/L	29.24	0.3548	4,675
Cd2265_A		0.2161	ug/L	0.03000	13.88	5.230
Co2286_A		5.494	ug/L	0.03755	0.6835	26.90
Cr2677_A		-0.08785	ug/L	0.03217	36.62	1.665
Cu3273_A		2.589	ug/L	0.3997	15.44	86.88
Fe2599_R		123.5	ug/L	2.177	1.762	96.01
K_7664_R		903.2	ug/L	4.804	0.5319	445.5
Li6707_R		9.185	ug/L	0.06862	0.7471	90.79
Mg2025_A		3,927	ug/L	1.793	0.04565	665.5
Mn2576_R		435.6	ug/L	3.164	0.7265	1,618
Mo2020_A		0.5580	ug/L	0.05492	9.842	1.216

SI1907-015

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:25:06PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		15,860	ug/L	76.07	0.4798	20,340
Ni2316_A		19.29	ug/L	0.1597	0.8277	49.98
Pb2203_A		2.123	ug/L	0.5136	24.19	0.06154
Sb2068_A		-0.7282	ug/L	0.1579	21.68	-0.5497
Se1960_A		-0.9771	ug/L	1.989	203.6	0.5949
Si2516_R		15,660	ug/L	16.72	0.1068	2,984
Sn1899_A		0.3656	ug/L	0.1127	30.82	1.042
Sr4215_R		25.67	ug/L	0.06679	0.2602	896.7
Ti3349_A		0.3058	ug/L	0.03269	10.69	-15.78
Tl1908_A		1.072	ug/L	0.5488	51.21	-0.4561
V_2924_A		0.1628	ug/L	0.2383	146.4	-9.106
Zn2062_A		38.42	ug/L	0.1905	0.4959	104.4
Y_3600_R		9,817.6	Cts/S	156.94	1.5986	9,817.6
Y_2243_A		9,624.5	Cts/S	6.8819	0.071503	9,624.5
Y_3600_A		367,830	Cts/S	1,984.9	0.53963	367,830

SI1907-019

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:29:52PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2513	ug/L	0.04221	16.80	-1.450
Al3961_R		-1.922	ug/L	0.3454	17.97	24.02
As1891_A		0.4715	ug/L	1.099	233.2	-0.5349
Au2427_A		0.08063	ug/L	0.1201	149.0	0.8125
B_2089_A		24.94	ug/L	0.2778	1.114	22.27
Ba4554_R		5.578	ug/L	0.02826	0.5067	185.9
Be3130_R		0.06021	ug/L	0.04852	80.58	-0.7718
Ca3158_R	W	139,000	ug/L	891.3	0.6414	75,280
Cd2265_A		-0.08260	ug/L	0.04821	58.36	0.1942
Co2286_A		0.1530	ug/L	0.1355	88.58	3.806
Cr2677_A		0.5432	ug/L	0.2445	45.02	12.12
Cu3273_A		3.112	ug/L	0.07618	2.448	92.80
Fe2599_R		8.121	ug/L	1.679	20.68	18.93
K_7664_R		1,795	ug/L	22.26	1.241	852.2
Li6707_R		35.81	ug/L	0.8476	2.367	293.5
Mg2025_A	W	99,940	ug/L	221.3	0.2214	15,470
Mn2576_R		0.3367	ug/L	0.4420	131.3	4.119
Mo2020_A		0.02001	ug/L	0.3408	1,703	0.3250
Na5895_R	W	43,180	ug/L	277.7	0.6430	52,940
Ni2316_A		0.6090	ug/L	0.03503	5.752	0.2986
Pb2203_A		1.681	ug/L	0.09326	5.546	-0.4111
Sb2068_A		2.780	ug/L	0.8323	29.94	0.6750
Se1960_A		2.965	ug/L	0.8113	27.36	1.139
Si2516_R		12,330	ug/L	9.023	0.07318	2,254
Sn1899_A		1.129	ug/L	1.045	92.51	1.266
Sr4215_R		239.1	ug/L	1.615	0.6756	8,093
Ti3349_A		0.4901	ug/L	0.2322	47.37	-6.225
Tl1908_A		1.545	ug/L	0.3187	20.63	0.06139
V_2924_A		0.09978	ug/L	0.09906	99.28	-6.763
Zn2062_A		27.36	ug/L	0.1002	0.3662	69.70
Y_3600_R		9,418.5	Cts/S	58.529	0.62143	9,418.5
Y_2243_A		9,036.2	Cts/S	23.473	0.25976	9,036.2
Y_3600_A		347,770	Cts/S	924.58	0.26586	347,770

SI1907-020

Method Name: K6010-2011 Method Revision: 1,724

SI1907-020

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:34:41PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1014	ug/L	0.02526	24.90	4.250
Al3961_R		-1.848	ug/L	13.41	725.6	24.61
As1891_A		1.093	ug/L	1.022	93.48	-0.3674
Au2427_A		-1.003	ug/L	0.009284	0.9257	-3.775
B_2089_A		24.67	ug/L	0.3300	1.338	22.07
Ba4554_R		3.899	ug/L	0.2527	6.482	142.4
Be3130_R		0.08696	ug/L	0.1051	120.9	0.3168
Ca3158_R	W	139,400	ug/L	2,017	1.447	77,070
Cd2265_A		-0.1713	ug/L	0.01208	7.052	-1.199
Co2286_A		0.1703	ug/L	0.3235	189.9	3.884
Cr2677_A		0.7430	ug/L	0.06248	8.410	15.72
Cu3273_A		2.352	ug/L	0.08659	3.681	77.28
Fe2599_R		-14.35	ug/L	1.692	11.79	4.781
K_7664_R		1,854	ug/L	64.37	3.472	898.3
Li6707_R		36.47	ug/L	0.8203	2.250	304.7
Mg2025_A	W	98,700	ug/L	178.6	0.1809	15,300
Mn2576_R		0.7898	ug/L	0.2116	26.79	5.840
Mo2020_A		0.04510	ug/L	0.07423	164.6	0.3644
Na5895_R	W	44,220	ug/L	510.2	1.154	55,320
Ni2316_A		0.3259	ug/L	0.3062	93.95	-0.4048
Pb2203_A		0.6353	ug/L	0.9906	155.9	-1.505
Sb2068_A		1.520	ug/L	0.2716	17.87	0.2554
Se1960_A		1.362	ug/L	2.564	188.3	0.8909
Si2516_R		12,080	ug/L	177.7	1.471	2,253
Sn1899_A		0.3516	ug/L	0.9130	259.7	0.9747
Sr4215_R		239.0	ug/L	3.111	1.302	8,257
Ti3349_A		0.4817	ug/L	0.1089	22.62	-6.588
Tl1908_A		2.230	ug/L	0.5906	26.49	0.2990
V_2924_A		-0.3014	ug/L	0.2385	79.13	-16.40
Zn2062_A		3.230	ug/L	0.03554	1.100	8.014
Y_3600_R		9,610.8	Cts/S	32.850	0.34181	9,610.8
Y_2243_A		9,052.1	Cts/S	15.585	0.17217	9,052.1
Y_3600_A		347,620	Cts/S	2,390.6	0.68773	347,620

SI1907-018

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:39:29PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.07522	ug/L	0.08720	115.9	5.400
Al3961_R		-11.67	ug/L	2.530	21.68	10.81
As1891_A		0.3021	ug/L	0.7931	262.5	-0.6049
Au2427_A		-1.224	ug/L	0.1914	15.64	-4.900
B_2089_A		13.54	ug/L	0.1013	0.7479	12.98
Ba4554_R		34.45	ug/L	0.2386	0.6927	1,016
Be3130_R		-0.01668	ug/L	0.1020	611.3	-4.057
Ca3158_R	W	68,090	ug/L	608.9	0.8943	38,170
Cd2265_A		-0.09310	ug/L	0.008521	9.153	-0.003518
Co2286_A		0.05673	ug/L	0.05681	100.1	3.567
Cr2677_A		0.6027	ug/L	0.1038	17.22	13.64
Cu3273_A		1.698	ug/L	0.03354	1.975	66.15
Fe2599_R		-15.93	ug/L	0.3094	1.942	3.811
K_7664_R		707.1	ug/L	16.67	2.358	345.3
Li6707_R		16.38	ug/L	1.147	7.005	147.8
Mg2025_A		21,070	ug/L	7.758	0.03682	3,421
Mn2576_R		-0.7016	ug/L	0.6953	99.10	0.4396
Mo2020_A		0.08283	ug/L	0.3703	447.0	0.4393

SI1907-018

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:39:29PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		13,620	ug/L	175.9	1.292	17,350
Ni2316_A		0.3312	ug/L	0.1436	43.36	-0.4088
Pb2203_A		0.1958	ug/L	0.4504	230.0	-2.046
Sb2068_A		1.114	ug/L	0.4630	41.58	0.1198
Se1960_A		-2.378	ug/L	1.316	55.32	0.3212
Si2516_R		10,050	ug/L	112.1	1.116	1,902
Sn1899_A		1.174	ug/L	0.8568	72.96	1.341
Sr4215_R		181.4	ug/L	1.307	0.7206	6,348
Ti3349_A		-0.06737	ug/L	0.1447	214.7	-33.73
Tl1908_A		1.062	ug/L	0.9058	85.27	-0.1089
V_2924_A		-0.002771	ug/L	0.07042	2,541	-9.562
Zn2062_A		2.182	ug/L	0.1091	5.000	5.559
Y_3600_R		9,742.7	Cts/S	36.784	0.37756	9,742.7
Y_2243_A		9,441.5	Cts/S	0.49268	0.0052180	9,441.5
Y_3600_A		359,610	Cts/S	11.206	0.0031160	359,610

SI1907-018A

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:44:16PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		517.8	ug/L	1.675	0.3234	19,410
Al3961_R		10,780	ug/L	160.3	1.488	4,246
As1891_A		523.1	ug/L	1.771	0.3387	146.3
Au2427_A		3.309	ug/L	0.8630	26.08	13.67
B_2089_A		553.0	ug/L	1.106	0.2000	515.1
Ba4554_R		551.5	ug/L	6.910	1.253	15,780
Be3130_R		535.7	ug/L	6.183	1.154	22,730
Ca3158_R	W	71,840	ug/L	728.8	1.015	40,320
Cd2265_A		559.0	ug/L	0.8630	0.1544	8,943
Co2286_A		532.4	ug/L	0.3278	0.06156	2,244
Cr2677_A		554.6	ug/L	1.232	0.2221	10,580
Cu3273_A		523.3	ug/L	0.06512	0.01245	11,260
Fe2599_R		5,324	ug/L	54.19	1.018	3,510
K_7664_R		11,170	ug/L	162.8	1.458	5,509
Li6707_R		577.3	ug/L	7.252	1.256	4,651
Mg2025_A	W	26,370	ug/L	18.59	0.07048	4,300
Mn2576_R		539.3	ug/L	5.381	0.9978	1,990
Mo2020_A		561.6	ug/L	4.387	0.7812	885.4
Na5895_R		19,020	ug/L	253.9	1.335	24,210
Ni2316_A		551.1	ug/L	0.7955	0.1444	1,437
Pb2203_A		547.2	ug/L	0.8393	0.1534	591.7
Sb2068_A		536.7	ug/L	1.051	0.1959	190.1
Se1960_A		523.3	ug/L	2.937	0.5612	85.83
Si2516_R		10,200	ug/L	161.9	1.587	1,933
Sn1899_A		1.107	ug/L	0.8382	75.71	1.315
Sr4215_R		709.8	ug/L	7.766	1.094	24,910
Ti3349_A		520.4	ug/L	0.7418	0.1426	25,950
Tl1908_A		533.5	ug/L	1.027	0.1926	190.0
V_2924_A		538.2	ug/L	0.1851	0.03440	13,400
Zn2062_A		538.3	ug/L	0.3626	0.06735	1,437
Y_3600_R		9,755.3	Cts/S	32.863	0.33688	9,755.3
Y_2243_A		9,445.2	Cts/S	11.938	0.12639	9,445.2
Y_3600_A		366,120	Cts/S	443.31	0.12108	366,120

SI1907-018L

Method Name: K6010-2011 Method Revision: 1,724

SI1907-018L

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:48:55PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7687	ug/L	0.2466	32.08	14.16
Al3961_R		-65.44	ug/L	47.97	73.30	2.554
As1891_A		4.766	ug/L	1.963	41.19	-0.4299
Au2427_A		-3.666	ug/L	0.2394	6.529	-2.800
B_2089_A		18.48	ug/L	0.7995	4.326	4.252
Ba4554_R		36.77	ug/L	1.532	4.165	249.2
Be3130_R		3.238	ug/L	0.1015	3.134	24.72
Ca3158_R		69,410	ug/L	745.1	1.073	8,001
Cd2265_A		0.04593	ug/L	0.2347	510.9	1.674
Co2286_A		0.5604	ug/L	0.3251	58.01	3.886
Cr2677_A		1.618	ug/L	0.7458	46.09	8.656
Cu3273_A		6.425	ug/L	3.432	53.42	59.04
Fe2599_R		-51.35	ug/L	0.1549	0.3016	7.716
K_7664_R		828.4	ug/L	86.99	10.50	80.51
Li6707_R		18.25	ug/L	4.246	23.26	46.94
Mg2025_A		21,180	ug/L	57.78	0.2728	717.3
Mn2576_R		0.2445	ug/L	1.327	542.6	3.281
Mo2020_A		13.49	ug/L	3.920	29.05	4.656
Na5895_R		13,880	ug/L	143.1	1.031	3,725
Ni2316_A		2.868	ug/L	0.7222	25.19	0.2330
Pb2203_A		4.345	ug/L	2.884	66.37	-1.342
Sb2068_A		4.711	ug/L	16.06	341.0	0.05942
Se1960_A		10.66	ug/L	4.334	40.66	1.076
Si2516_R		10,140	ug/L	85.41	0.8420	396.3
Sn1899_A		3.205	ug/L	1.677	52.33	1.155
Sr4215_R		187.9	ug/L	1.284	0.6835	1,341
Ti3349_A		2.969	ug/L	0.3853	12.98	-1.238
Tl1908_A		-0.4163	ug/L	2.274	546.3	-0.5354
V_2924_A		1.897	ug/L	0.4435	23.38	-0.4918
Zn2062_A		4.374	ug/L	0.0003870	0.008849	2.110
Y_3600_R		9,995.3	Cts/S	45.870	0.45891	9,995.3
Y_2243_A		9,639.9	Cts/S	2.7821	0.028860	9,639.9
Y_3600_A		369,810	Cts/S	1,379.6	0.37305	369,810

SI1907-018P

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:53:42PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.33	ug/L	0.1874	0.3581	1,910
Al3961_R		2,004	ug/L	36.53	1.823	805.0
As1891_A		103.6	ug/L	0.4504	0.4346	28.35
Au2427_A		4.601	ug/L	0.06857	1.490	16.98
B_2089_A		512.1	ug/L	1.475	0.2880	464.2
Ba4554_R	W	2,036	ug/L	24.18	1.188	58,380
Be3130_R		50.68	ug/L	0.3945	0.7784	2,143
Ca3158_R	W	66,650	ug/L	1,273	1.910	37,550
Cd2265_A		262.5	ug/L	0.9135	0.3480	4,181
Co2286_A		503.6	ug/L	1.511	0.3000	2,114
Cr2677_A		217.3	ug/L	0.5238	0.2410	4,052
Cu3273_A		255.4	ug/L	0.3777	0.1479	5,378
Fe2599_R		940.4	ug/L	9.733	1.035	634.3
K_7664_R		10,680	ug/L	106.1	0.9929	5,290
Li6707_R		542.2	ug/L	6.490	1.197	4,387
Mg2025_A	W	25,100	ug/L	89.55	0.3568	4,073
Mn2576_R		509.4	ug/L	11.32	2.223	1,887
Mo2020_A		108.4	ug/L	0.4165	0.3844	170.3

SI1907-018P

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:53:42PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		20,510	ug/L	304.2	1.483	26,210
Ni2316_A		519.3	ug/L	2.696	0.5191	1,348
Pb2203_A		104.6	ug/L	0.2096	0.2003	111.0
Sb2068_A		103.0	ug/L	1.229	1.194	34.30
Se1960_A		104.1	ug/L	3.207	3.082	17.59
Si2516_R		10,580	ug/L	183.4	1.733	2,013
Sn1899_A		517.7	ug/L	2.273	0.4390	204.0
Sr4215_R		680.8	ug/L	7.089	1.041	23,980
Ti3349_A		511.2	ug/L	0.8562	0.1675	24,860
Tl1908_A		113.4	ug/L	0.6245	0.5508	38.25
V_2924_A		522.8	ug/L	0.4518	0.08641	12,800
Zn2062_A		491.0	ug/L	1.790	0.3645	1,306
Y_3600_R		9,795.0	Cts/S	124.06	1.2666	9,795.0
Y_2243_A		9,406.0	Cts/S	29.008	0.30840	9,406.0
Y_3600_A		357,400	Cts/S	995.58	0.27856	357,400

CCV

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 6:58:23PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		504.2	ug/L	2.157	0.4278	18,720
Al3961_R		12,290	ug/L	121.2	0.9858	4,805
As1891_A		487.9	ug/L	1.411	0.2892	138.2
Au2427_A		504.3	ug/L	18.63	3.695	2,257
B_2089_A		483.5	ug/L	0.6380	0.1320	458.3
Ba4554_R		501.0	ug/L	3.450	0.6887	14,260
Be3130_R		491.7	ug/L	3.040	0.6182	20,750
Ca3158_R		12,570	ug/L	51.58	0.4104	7,034
Cd2265_A		514.2	ug/L	0.5666	0.1102	8,361
Co2286_A		492.1	ug/L	0.1094	0.02224	2,106
Cr2677_A		525.2	ug/L	2.865	0.5456	9,990
Cu3273_A		488.1	ug/L	3.472	0.7113	10,470
Fe2599_R		11,900	ug/L	78.86	0.6625	7,789
K_7664_R		12,280	ug/L	20.61	0.1679	6,025
Li6707_R		517.2	ug/L	0.6495	0.1256	4,146
Mg2025_A		12,790	ug/L	18.38	0.1437	2,136
Mn2576_R		508.4	ug/L	0.7340	0.1444	1,866
Mo2020_A	W	529.5	ug/L	2.342	0.4424	847.3
Na5895_R		12,660	ug/L	33.44	0.2642	16,070
Ni2316_A		509.1	ug/L	0.2997	0.05886	1,347
Pb2203_A		519.9	ug/L	2.026	0.3897	570.5
Sb2068_A		495.9	ug/L	1.178	0.2376	176.8
Se1960_A		475.7	ug/L	2.397	0.5038	79.31
Si2516_R		12,520	ug/L	4.441	0.03549	2,358
Sn1899_A		511.6	ug/L	1.638	0.3203	205.5
Sr4215_R		509.8	ug/L	3.960	0.7767	17,790
Ti3349_A		500.9	ug/L	4.981	0.9945	24,890
Tl1908_A		483.9	ug/L	0.8735	0.1805	174.8
V_2924_A		500.1	ug/L	3.088	0.6175	12,410
Zn2062_A		479.8	ug/L	0.3961	0.08256	1,300
Y_3600_R		9,703.3	Cts/S	134.93	1.3905	9,703.3
Y_2243_A		9,587.4	Cts/S	11.554	0.12052	9,587.4
Y_3600_A		364,860	Cts/S	2,426.1	0.66493	364,860

CCB

Method Name: K6010-2011 Method Revision: 1,724

CCB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:02:59PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2843	ug/L	0.4268	150.1	19.15
Al3961_R		-18.38	ug/L	0.3007	1.636	-1.602
As1891_A		0.5149	ug/L	0.7481	145.3	-0.5574
Au2427_A		2.889	ug/L	0.3792	13.13	13.53
B_2089_A		1.070	ug/L	0.1869	17.46	1.833
Ba4554_R		0.4508	ug/L	0.3083	68.39	46.09
Be3130_R		0.3290	ug/L	0.03457	10.51	10.59
Ca3158_R		-44.17	ug/L	5.130	11.61	-2.639
Cd2265_A		0.2422	ug/L	0.02151	8.880	5.497
Co2286_A		0.07742	ug/L	0.009475	12.24	3.753
Cr2677_A		0.2644	ug/L	0.008731	3.302	7.526
Cu3273_A		0.6156	ug/L	0.2934	47.65	44.64
Fe2599_R		-6.911	ug/L	0.1885	2.727	9.730
K_7664_R		-19.62	ug/L	11.10	56.56	-12.89
Li6707_R		0.9387	ug/L	1.414	150.6	24.02
Mg2025_A	F	-125.3	ug/L	0.04605	0.03674	-1.850
Mn2576_R		-0.4967	ug/L	0.8169	164.5	1.188
Mo2020_A		2.532	ug/L	0.6164	24.34	4.401
Na5895_R		18.99	ug/L	3.032	15.96	142.6
Ni2316_A		0.2603	ug/L	0.04579	17.60	-0.6037
Pb2203_A		1.345	ug/L	0.6327	47.04	-0.8145
Sb2068_A		0.8673	ug/L	0.2342	27.01	0.03135
Se1960_A		-0.2007	ug/L	0.8799	438.4	0.6911
Si2516_R		18.67	ug/L	16.42	87.95	6.625
Sn1899_A		1.088	ug/L	1.046	96.09	1.338
Sr4215_R		0.2774	ug/L	0.3197	115.3	-0.2784
Ti3349_A		0.9609	ug/L	0.1261	13.12	17.26
Tl1908_A		2.923	ug/L	1.298	44.40	0.5738
V_2924_A		0.3954	ug/L	0.2248	56.85	-0.05543
Zn2062_A		0.3204	ug/L	0.03371	10.52	0.5990
Y_3600_R		9,749.6	Cts/S	16.967	0.17402	9,749.6
Y_2243_A		9,667.7	Cts/S	3.5775	0.037005	9,667.7
Y_3600_A		370,670	Cts/S	1,983.4	0.53510	370,670

SI1907-018S

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:07:47PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.15	ug/L	0.7604	1.458	1,919
Al3961_R		2,263	ug/L	140.9	6.227	856.0
As1891_A		104.6	ug/L	0.2607	0.2492	28.70
Au2427_A		5.585	ug/L	0.01200	0.2148	20.95
B_2089_A		518.2	ug/L	0.7440	0.1436	471.1
Ba4554_R	W	2,255	ug/L	131.8	5.845	60,980
Be3130_R		56.83	ug/L	3.691	6.496	2,267
Ca3158_R	W	73,150	ug/L	4,981	6.810	38,840
Cd2265_A		266.8	ug/L	0.6863	0.2572	4,261
Co2286_A		515.1	ug/L	1.449	0.2813	2,168
Cr2677_A		219.4	ug/L	0.09213	0.04199	4,127
Cu3273_A		259.6	ug/L	0.5674	0.2186	5,515
Fe2599_R		1,053	ug/L	80.65	7.658	667.6
K_7664_R		11,730	ug/L	647.8	5.521	5,479
Li6707_R		596.2	ug/L	32.75	5.494	4,546
Mg2025_A	W	25,360	ug/L	94.32	0.3719	4,129
Mn2576_R		566.7	ug/L	42.78	7.549	1,977
Mo2020_A		110.2	ug/L	0.8603	0.7809	173.6

SI1907-018S

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:07:47PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		22,460	ug/L	1,295	5.768	27,040
Ni2316_A		529.7	ug/L	0.6975	0.1317	1,380
Pb2203_A		107.0	ug/L	0.4751	0.4441	113.8
Sb2068_A		106.9	ug/L	1.681	1.572	35.76
Se1960_A		103.1	ug/L	3.405	3.302	17.49
Si2516_R		11,710	ug/L	740.7	6.326	2,098
Sn1899_A		526.7	ug/L	4.090	0.7766	208.1
Sr4215_R		753.2	ug/L	46.61	6.189	25,010
Ti3349_A		518.8	ug/L	3.751	0.7231	25,460
Tl1908_A		117.5	ug/L	0.2861	0.2435	39.78
V_2924_A		530.1	ug/L	2.981	0.5623	13,100
Zn2062_A		502.6	ug/L	0.6038	0.1201	1,341
Y_3600_R		9,251.8	Cts/S	665.13	7.1892	9,251.8
Y_2243_A		9,433.3	Cts/S	27.932	0.29609	9,433.3
Y_3600_A		360,630	Cts/S	1,298.1	0.35995	360,630

3050 MDL 1

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:12:28PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.842	ug/L	0.1273	6.912	78.23
Al3961_R		38.22	ug/L	8.210	21.48	21.13
As1891_A		6.590	ug/L	1.440	21.85	1.191
Au2427_A		0.05778	ug/L	0.6253	1,082	0.7500
B_2089_A		11.36	ug/L	0.3860	3.398	11.36
Ba4554_R		1.788	ug/L	0.06543	3.660	86.48
Be3130_R		0.2713	ug/L	0.02406	8.866	8.298
Ca3158_R		11.14	ug/L	10.89	97.77	29.14
Cd2265_A		0.2799	ug/L	0.02302	8.223	6.160
Co2286_A		1.223	ug/L	0.05945	4.859	8.723
Cr2677_A		2.604	ug/L	0.05998	2.303	52.80
Cu3273_A		3.738	ug/L	0.3243	8.676	112.6
Fe2599_R		12.35	ug/L	0.5645	4.572	22.96
K_7664_R		219.0	ug/L	39.42	18.00	107.5
Li6707_R		20.71	ug/L	0.9266	4.474	187.5
Mg2025_A	F	-103.3	ug/L	0.04270	0.04134	1.839
Mn2576_R		2.768	ug/L	0.2869	10.36	13.56
Mo2020_A		2.110	ug/L	0.2477	11.74	3.731
Na5895_R		146.9	ug/L	17.17	11.69	312.5
Ni2316_A		1.405	ug/L	0.1635	11.63	2.457
Pb2203_A		5.065	ug/L	0.1514	2.989	3.332
Sb2068_A		1.778	ug/L	0.6692	37.63	0.2776
Se1960_A		9.016	ug/L	0.4412	4.893	2.231
Si2516_R		108.1	ug/L	17.40	16.10	24.16
Sn1899_A		28.12	ug/L	0.7810	2.778	12.27
Sr4215_R		1.366	ug/L	0.2450	17.93	38.95
Ti3349_A		3.007	ug/L	0.2331	7.750	120.7
Tl1908_A		4.201	ug/L	1.737	41.34	1.043
V_2924_A		1.281	ug/L	0.1224	9.558	22.40
Zn2062_A		5.229	ug/L	0.1438	2.750	14.06
Y_3600_R		10,007	Cts/S	47.898	0.47863	10,007
Y_2243_A		9,694.4	Cts/S	3.1021	0.031999	9,694.4
Y_3600_A		371,170	Cts/S	177.95	0.047944	371,170

3050 MDL 2

Method Name: K6010-2011 Method Revision: 1,724

3050 MDL 2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:17:15PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.824	ug/L	0.3919	21.48	77.54
Al3961_R		29.38	ug/L	12.58	42.83	17.49
As1891_A		5.172	ug/L	0.2217	4.287	0.7824
Au2427_A		0.2708	ug/L	0.6995	258.3	1.713
B_2089_A		10.74	ug/L	0.3446	3.209	10.78
Ba4554_R		1.283	ug/L	0.3351	26.12	71.21
Be3130_R		0.2867	ug/L	0.02551	8.896	8.920
Ca3158_R		10.82	ug/L	1.248	11.53	28.78
Cd2265_A		0.1819	ug/L	0.01172	6.442	4.555
Co2286_A		1.074	ug/L	0.2328	21.67	8.080
Cr2677_A		2.584	ug/L	0.1521	5.886	52.34
Cu3273_A		3.462	ug/L	0.02989	0.8632	106.5
Fe2599_R		11.95	ug/L	0.1246	1.043	22.57
K_7664_R		194.2	ug/L	5.486	2.824	94.53
Li6707_R		22.17	ug/L	2.261	10.20	198.3
Mg2025_A	F	-107.3	ug/L	1.374	1.281	1.171
Mn2576_R		2.947	ug/L	0.02748	0.9325	14.16
Mo2020_A		1.521	ug/L	0.1092	7.184	2.779
Na5895_R		123.0	ug/L	0.3960	0.3221	279.9
Ni2316_A		1.417	ug/L	0.1017	7.181	2.489
Pb2203_A		4.911	ug/L	0.3649	7.431	3.164
Sb2068_A		2.757	ug/L	0.3061	11.10	0.6328
Se1960_A		10.28	ug/L	2.749	26.74	2.444
Si2516_R		122.2	ug/L	12.79	10.46	26.72
Sn1899_A		28.38	ug/L	0.1018	0.3588	12.39
Sr4215_R		1.255	ug/L	0.09123	7.267	34.77
Ti3349_A		2.605	ug/L	0.06999	2.687	100.2
Tl1908_A		2.704	ug/L	0.9096	33.63	0.4899
V_2924_A		1.124	ug/L	0.1341	11.93	18.43
Zn2062_A		5.150	ug/L	0.006802	0.1321	13.86
Y_3600_R		9,951.4	Cts/S	144.88	1.4559	9,951.4
Y_2243_A		9,701.1	Cts/S	4.2404	0.043710	9,701.1
Y_3600_A		370,650	Cts/S	3,753.3	1.0126	370,650

3050 MDL 3

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:22:04PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.952	ug/L	0.1722	8.822	81.76
Al3961_R		44.20	ug/L	14.48	32.76	23.24
As1891_A		5.912	ug/L	0.9835	16.64	0.9935
Au2427_A		-0.03733	ug/L	0.08218	220.1	0.3125
B_2089_A		10.10	ug/L	0.07555	0.7478	10.16
Ba4554_R		1.048	ug/L	0.2103	20.07	63.99
Be3130_R		0.2270	ug/L	0.03191	14.05	6.310
Ca3158_R		-7.754	ug/L	1.936	24.97	18.03
Cd2265_A		0.1841	ug/L	0.008759	4.758	4.584
Co2286_A		0.9289	ug/L	0.02654	2.857	7.435
Cr2677_A		2.466	ug/L	0.1552	6.294	49.71
Cu3273_A		3.894	ug/L	0.8816	22.64	115.2
Fe2599_R		14.34	ug/L	0.7375	5.141	24.01
K_7664_R		219.6	ug/L	0.2963	0.1349	106.6
Li6707_R		19.95	ug/L	0.9351	4.688	179.0
Mg2025_A	F	-109.3	ug/L	1.775	1.624	0.8228
Mn2576_R		3.651	ug/L	0.1601	4.386	16.69
Mo2020_A		1.392	ug/L	0.01558	1.119	2.564

3050 MDL 3

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:22:04PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		127.3	ug/L	8.446	6.634	283.6
Ni2316_A		1.316	ug/L	0.1635	12.43	2.211
Pb2203_A		4.721	ug/L	0.7031	14.89	2.943
Sb2068_A		2.206	ug/L	1.403	63.60	0.4371
Se1960_A		11.37	ug/L	0.2272	1.998	2.619
Si2516_R		105.6	ug/L	4.645	4.398	23.38
Sn1899_A		26.80	ug/L	1.220	4.554	11.72
Sr4215_R		1.205	ug/L	0.1738	14.42	32.72
Ti3349_A		2.396	ug/L	0.1434	5.986	89.08
Tl1908_A		3.729	ug/L	1.102	29.54	0.8671
V_2924_A		1.181	ug/L	0.1078	9.127	19.80
Zn2062_A		4.957	ug/L	0.05860	1.182	13.29
Y_3600_R		9,884.4	Cts/S	39.915	0.40382	9,884.4
Y_2243_A		9,677.3	Cts/S	15.194	0.15701	9,677.3
Y_3600_A		368,110	Cts/S	3,164.3	0.85960	368,110

3050 MDL 4

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:26:52PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.769	ug/L	0.09690	5.477	75.38
Al3961_R		29.67	ug/L	4.182	14.10	17.51
As1891_A		5.331	ug/L	1.474	27.65	0.8274
Au2427_A		0.3503	ug/L	0.4106	117.2	2.063
B_2089_A		10.53	ug/L	0.1425	1.353	10.57
Ba4554_R		0.8090	ug/L	0.3108	38.42	57.29
Be3130_R		0.2769	ug/L	0.08091	29.22	8.472
Ca3158_R		-29.02	ug/L	1.532	5.277	5.966
Cd2265_A		0.1574	ug/L	0.02068	13.13	4.147
Co2286_A		1.143	ug/L	0.2277	19.93	8.366
Cr2677_A		2.613	ug/L	0.1719	6.576	52.90
Cu3273_A		3.637	ug/L	0.2567	7.059	110.3
Fe2599_R		10.99	ug/L	3.022	27.49	21.88
K_7664_R		189.9	ug/L	14.11	7.428	92.13
Li6707_R		20.65	ug/L	0.1363	0.6600	185.4
Mg2025_A	F	-108.0	ug/L	2.763	2.557	1.046
Mn2576_R		3.564	ug/L	0.5057	14.19	16.44
Mo2020_A		1.440	ug/L	0.1229	8.537	2.645
Na5895_R		124.5	ug/L	2.737	2.198	281.2
Ni2316_A		1.515	ug/L	0.2989	19.73	2.748
Pb2203_A		5.346	ug/L	0.02218	0.4149	3.647
Sb2068_A		3.262	ug/L	0.1268	3.887	0.8183
Se1960_A		10.63	ug/L	0.3289	3.093	2.499
Si2516_R		101.9	ug/L	11.55	11.34	22.75
Sn1899_A		27.42	ug/L	1.383	5.043	11.98
Sr4215_R		1.246	ug/L	0.08185	6.571	34.32
Ti3349_A		2.469	ug/L	0.07678	3.109	93.39
Tl1908_A		3.798	ug/L	1.183	31.14	0.8935
V_2924_A		1.274	ug/L	0.1967	15.44	22.28
Zn2062_A		5.053	ug/L	0.1420	2.810	13.57
Y_3600_R		9,925.4	Cts/S	82.997	0.83621	9,925.4
Y_2243_A		9,690.3	Cts/S	5.2732	0.054417	9,690.3
Y_3600_A		370,620	Cts/S	381.84	0.10303	370,620

3050 MDL 5

Method Name: K6010-2011 Method Revision: 1,724

3050 MDL 5

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:31:39PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.839	ug/L	0.02461	1.338	78.48
Al3961_R		30.63	ug/L	7.269	23.73	17.81
As1891_A		5.790	ug/L	0.9969	17.22	0.9611
Au2427_A		0.5003	ug/L	0.5778	115.5	2.750
B_2089_A		10.35	ug/L	0.1852	1.789	10.42
Ba4554_R		1.213	ug/L	0.1825	15.05	68.79
Be3130_R		0.3380	ug/L	0.07869	23.28	11.06
Ca3158_R		-12.18	ug/L	2.498	20.50	15.50
Cd2265_A		0.1498	ug/L	0.03013	20.11	4.030
Co2286_A		1.259	ug/L	0.02233	1.773	8.881
Cr2677_A		2.569	ug/L	0.1329	5.174	52.35
Cu3273_A		3.665	ug/L	0.02830	0.7719	111.5
Fe2599_R		11.67	ug/L	2.803	24.02	22.21
K_7664_R		217.1	ug/L	12.78	5.887	105.3
Li6707_R		20.66	ug/L	0.3885	1.881	184.7
Mg2025_A	F	-105.2	ug/L	1.158	1.101	1.521
Mn2576_R		2.902	ug/L	0.6643	22.89	13.88
Mo2020_A		1.108	ug/L	0.1002	9.046	2.112
Na5895_R		138.7	ug/L	4.804	3.463	298.3
Ni2316_A		1.369	ug/L	0.008184	0.5979	2.360
Pb2203_A		5.495	ug/L	0.8528	15.52	3.819
Sb2068_A		2.717	ug/L	1.223	45.00	0.6180
Se1960_A		8.318	ug/L	2.278	27.38	2.117
Si2516_R		92.60	ug/L	22.34	24.13	20.91
Sn1899_A		28.59	ug/L	0.7389	2.584	12.48
Sr4215_R		1.389	ug/L	0.1268	9.133	39.28
Ti3349_A		2.278	ug/L	0.07399	3.248	84.18
Tl1908_A		3.752	ug/L	0.9399	25.05	0.8785
V_2924_A		1.250	ug/L	0.02194	1.755	21.85
Zn2062_A		4.916	ug/L	0.09526	1.938	13.22
Y_3600_R		9,883.0	Cts/S	128.86	1.3038	9,883.0
Y_2243_A		9,706.3	Cts/S	7.7556	0.079903	9,706.3
Y_3600_A		372,770	Cts/S	3,190.5	0.85589	372,770

3050 MDL 6

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:36:27PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.723	ug/L	0.2933	17.02	73.65
Al3961_R		45.04	ug/L	5.284	11.73	24.05
As1891_A		5.299	ug/L	0.7008	13.23	0.8173
Au2427_A		-0.3125	ug/L	0.5392	172.6	-0.9250
B_2089_A		10.01	ug/L	0.1992	1.991	10.07
Ba4554_R		1.120	ug/L	0.02475	2.209	67.52
Be3130_R		0.3270	ug/L	0.06968	21.31	10.81
Ca3158_R		-8.299	ug/L	1.073	12.93	18.09
Cd2265_A		0.1764	ug/L	0.05701	32.32	4.460
Co2286_A		1.127	ug/L	0.1147	10.18	8.295
Cr2677_A		2.655	ug/L	0.2594	9.769	53.79
Cu3273_A		3.323	ug/L	0.4790	14.42	103.6
Fe2599_R		13.88	ug/L	6.255	45.05	24.18
K_7664_R		217.8	ug/L	23.25	10.67	107.8
Li6707_R		20.40	ug/L	0.9684	4.746	186.7
Mg2025_A	F	-107.1	ug/L	3.613	3.372	1.191
Mn2576_R		3.194	ug/L	0.2176	6.812	15.31
Mo2020_A		1.147	ug/L	0.3674	32.02	2.171

3050 MDL 6

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:36:27PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		142.2	ug/L	3.172	2.231	309.3
Ni2316_A		1.494	ug/L	0.1375	9.207	2.688
Pb2203_A		5.034	ug/L	0.3217	6.390	3.294
Sb2068_A		3.721	ug/L	0.2841	7.635	0.9811
Se1960_A		12.04	ug/L	0.03740	0.3107	2.732
Si2516_R		104.4	ug/L	11.31	10.84	23.63
Sn1899_A		28.53	ug/L	0.1798	0.6302	12.43
Sr4215_R		1.346	ug/L	0.05584	4.150	38.52
Ti3349_A		2.465	ug/L	0.05621	2.280	93.34
Tl1908_A		2.693	ug/L	0.6664	24.75	0.4843
V_2924_A		1.164	ug/L	0.08237	7.077	19.58
Zn2062_A		5.093	ug/L	0.009222	0.1811	13.67
Y_3600_R		10,097	Cts/S	152.65	1.5118	10,097
Y_2243_A		9,684.0	Cts/S	4.4272	0.045716	9,684.0
Y_3600_A		371,360	Cts/S	4,417.1	1.1894	371,360

3050 MDL 7

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:41:16PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.763	ug/L	0.07561	4.288	75.89
Al3961_R		40.77	ug/L	12.46	30.56	21.83
As1891_A		5.900	ug/L	0.1902	3.224	0.9910
Au2427_A		-0.8090	ug/L	0.5754	71.13	-3.163
B_2089_A		10.11	ug/L	0.3868	3.825	10.18
Ba4554_R		0.9491	ug/L	0.02801	2.951	61.08
Be3130_R		0.2362	ug/L	0.001229	0.5200	6.693
Ca3158_R		-16.77	ug/L	5.983	35.67	12.89
Cd2265_A		0.1656	ug/L	0.02080	12.56	4.279
Co2286_A		1.067	ug/L	0.08362	7.837	8.038
Cr2677_A		2.557	ug/L	0.2542	9.943	52.30
Cu3273_A		3.259	ug/L	0.3464	10.63	103.1
Fe2599_R		9.895	ug/L	0.4581	4.630	21.02
K_7664_R		219.4	ug/L	23.69	10.80	106.3
Li6707_R		19.17	ug/L	0.5450	2.843	172.4
Mg2025_A	F	-112.0	ug/L	2.593	2.315	0.3853
Mn2576_R		2.264	ug/L	0.02240	0.9890	11.50
Mo2020_A		1.149	ug/L	0.01087	0.9466	2.174
Na5895_R		130.4	ug/L	10.02	7.680	287.3
Ni2316_A		1.463	ug/L	0.1619	11.07	2.608
Pb2203_A		4.427	ug/L	0.7569	17.10	2.618
Sb2068_A		3.202	ug/L	0.4784	14.94	0.7957
Se1960_A		10.34	ug/L	1.336	12.93	2.449
Si2516_R		100.0	ug/L	3.414	3.413	22.28
Sn1899_A		27.53	ug/L	0.04744	0.1723	12.03
Sr4215_R		1.352	ug/L	0.09454	6.991	37.92
Ti3349_A		2.466	ug/L	0.05677	2.302	94.10
Tl1908_A		3.660	ug/L	1.055	28.81	0.8429
V_2924_A		1.360	ug/L	0.001259	0.09256	24.76
Zn2062_A		7.424	ug/L	0.04448	0.5992	20.07
Y_3600_R		9,873.3	Cts/S	4.1944	0.042482	9,873.3
Y_2243_A		9,688.4	Cts/S	1.0724	0.011069	9,688.4
Y_3600_A		374,180	Cts/S	248.38	0.066380	374,180

3050 MDL 8

Method Name: K6010-2011 Method Revision: 1,724

3050 MDL 8

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:46:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.977	ug/L	0.09783	4.948	83.23
Al3961_R		37.01	ug/L	1.568	4.236	20.16
As1891_A		5.710	ug/L	0.5657	9.907	0.9337
Au2427_A		-0.04924	ug/L	0.1133	230.1	0.2625
B_2089_A		10.25	ug/L	0.4720	4.604	10.28
Ba4554_R		1.215	ug/L	0.02711	2.231	68.15
Be3130_R		0.3139	ug/L	0.06123	19.50	9.926
Ca3158_R		10.17	ug/L	9.770	96.09	27.98
Cd2265_A		0.2125	ug/L	0.01486	6.993	5.042
Co2286_A		1.104	ug/L	0.1716	15.55	8.175
Cr2677_A		2.693	ug/L	0.09667	3.590	54.41
Cu3273_A		3.492	ug/L	0.4877	13.97	107.1
Fe2599_R		14.29	ug/L	2.785	19.49	23.75
K_7664_R		231.1	ug/L	21.81	9.439	111.1
Li6707_R		20.66	ug/L	0.6454	3.123	182.9
Mg2025_A	F	-105.7	ug/L	3.608	3.413	1.427
Mn2576_R		3.252	ug/L	0.3873	11.91	15.06
Mo2020_A		1.239	ug/L	0.1609	12.98	2.315
Na5895_R		125.3	ug/L	7.835	6.255	278.2
Ni2316_A		1.490	ug/L	0.2000	13.42	2.674
Pb2203_A		4.313	ug/L	0.6111	14.17	2.485
Sb2068_A		2.113	ug/L	1.757	83.13	0.3980
Se1960_A		8.102	ug/L	1.935	23.88	2.072
Si2516_R		114.2	ug/L	7.400	6.481	24.78
Sn1899_A		28.19	ug/L	0.08598	0.3050	12.26
Sr4215_R		1.427	ug/L	0.05194	3.640	40.22
Ti3349_A		2.376	ug/L	0.05902	2.484	88.64
Tl1908_A		2.168	ug/L	0.1333	6.145	0.2896
V_2924_A		1.221	ug/L	0.02353	1.927	20.94
Zn2062_A		5.196	ug/L	0.1587	3.054	13.93
Y_3600_R		9,787.1	Cts/S	161.12	1.6462	9,787.1
Y_2243_A		9,664.6	Cts/S	15.829	0.16379	9,664.6
Y_3600_A		370,470	Cts/S	367.98	0.099328	370,470

3050 MDL 9

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:50:54PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.867	ug/L	0.06328	3.389	79.81
Al3961_R		47.37	ug/L	1.506	3.179	24.54
As1891_A		6.310	ug/L	0.2711	4.297	1.112
Au2427_A		-0.6219	ug/L	0.5465	87.88	-2.325
B_2089_A		10.39	ug/L	0.3006	2.895	10.46
Ba4554_R		1.455	ug/L	0.1199	8.239	75.97
Be3130_R		0.2893	ug/L	0.1166	40.32	9.028
Ca3158_R		7.772	ug/L	0.1546	1.989	26.91
Cd2265_A		0.1984	ug/L	0.01188	5.985	4.839
Co2286_A		1.199	ug/L	0.05788	4.829	8.634
Cr2677_A		2.591	ug/L	0.05987	2.311	52.96
Cu3273_A		3.439	ug/L	0.6812	19.81	107.0
Fe2599_R		13.64	ug/L	4.530	33.22	23.57
K_7664_R		220.6	ug/L	5.468	2.479	107.3
Li6707_R		21.05	ug/L	0.1349	0.6407	188.4
Mg2025_A	F	-107.8	ug/L	0.05991	0.05560	1.098
Mn2576_R		2.505	ug/L	0.1543	6.158	12.44
Mo2020_A		1.056	ug/L	0.1119	10.60	2.031

3050 MDL 9

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:50:54PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		135.9	ug/L	3.963	2.916	295.3
Ni2316_A		1.480	ug/L	0.007285	0.4923	2.661
Pb2203_A		4.819	ug/L	1.323	27.46	3.065
Sb2068_A		2.114	ug/L	0.008861	0.4191	0.4015
Se1960_A		9.923	ug/L	0.2673	2.693	2.388
Si2516_R		105.7	ug/L	16.39	15.50	23.47
Sn1899_A		28.06	ug/L	0.1812	0.6457	12.28
Sr4215_R		1.408	ug/L	0.1728	12.28	39.99
Ti3349_A		2.522	ug/L	0.04827	1.914	96.94
Tl1908_A		2.770	ug/L	0.1621	5.850	0.5159
V_2924_A		1.076	ug/L	0.1244	11.56	17.49
Zn2062_A		5.575	ug/L	0.04323	0.7755	15.05
Y_3600_R		9,907.2	Cts/S	107.84	1.0885	9,907.2
Y_2243_A		9,719.9	Cts/S	1.1548	0.011881	9,719.9
Y_3600_A		374,160	Cts/S	921.37	0.24625	374,160

CCV

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 7:55:42PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		497.2	ug/L	0.6997	0.1407	18,600
Al3961_R		12,250	ug/L	149.6	1.220	4,811
As1891_A		488.0	ug/L	0.7981	0.1635	138.1
Au2427_A		498.9	ug/L	20.18	4.045	2,231
B_2089_A		485.8	ug/L	2.077	0.4275	459.9
Ba4554_R		491.3	ug/L	5.569	1.133	14,050
Be3130_R		486.6	ug/L	4.525	0.9299	20,620
Ca3158_R		12,270	ug/L	150.4	1.226	6,897
Cd2265_A		509.8	ug/L	0.8024	0.1574	8,283
Co2286_A		494.0	ug/L	0.9814	0.1987	2,112
Cr2677_A		513.2	ug/L	0.3882	0.07565	9,834
Cu3273_A		483.0	ug/L	1.937	0.4010	10,440
Fe2599_R	W	11,790	ug/L	213.5	1.811	7,746
K_7664_R		12,130	ug/L	141.5	1.167	5,978
Li6707_R		504.2	ug/L	2.806	0.5565	4,060
Mg2025_A		12,760	ug/L	3.653	0.02862	2,129
Mn2576_R		498.8	ug/L	6.405	1.284	1,839
Mo2020_A		523.9	ug/L	3.638	0.6945	837.8
Na5895_R		12,380	ug/L	133.1	1.075	15,790
Ni2316_A		507.7	ug/L	1.063	0.2094	1,342
Pb2203_A		516.2	ug/L	2.496	0.4834	566.0
Sb2068_A		499.1	ug/L	1.564	0.3134	177.8
Se1960_A		477.4	ug/L	3.343	0.7004	79.52
Si2516_R		12,340	ug/L	151.1	1.225	2,335
Sn1899_A		508.0	ug/L	1.490	0.2933	203.9
Sr4215_R		500.7	ug/L	4.110	0.8208	17,550
Ti3349_A		496.6	ug/L	1.339	0.2696	24,860
Tl1908_A		484.0	ug/L	0.1440	0.02975	174.8
V_2924_A		497.8	ug/L	0.5849	0.1175	12,440
Zn2062_A		479.3	ug/L	1.389	0.2898	1,298
Y_3600_R		9,744.3	Cts/S	16.927	0.17371	9,744.3
Y_2243_A		9,580.0	Cts/S	14.051	0.14668	9,580.0
Y_3600_A		367,530	Cts/S	562.43	0.15303	367,530

CCB

Method Name: K6010-2011 Method Revision: 1,724

CCB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:00:18PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4188	ug/L	0.009076	2.167	24.08
Al3961_R		-6.193	ug/L	18.82	303.9	3.176
As1891_A		0.5106	ug/L	0.9137	178.9	-0.5573
Au2427_A		2.572	ug/L	0.2965	11.53	12.06
B_2089_A		0.7866	ug/L	0.1634	20.77	1.558
Ba4554_R		0.3186	ug/L	0.2039	64.00	40.42
Be3130_R		0.3107	ug/L	0.05520	17.76	9.398
Ca3158_R		-46.23	ug/L	1.990	4.304	-3.634
Cd2265_A		0.3428	ug/L	0.1025	29.90	7.125
Co2286_A		0.06321	ug/L	0.01823	28.84	3.683
Cr2677_A		0.3051	ug/L	0.07935	26.01	8.259
Cu3273_A		0.8968	ug/L	0.3477	38.77	50.43
Fe2599_R		-8.422	ug/L	3.927	46.63	8.264
K_7664_R		-0.7481	ug/L	16.86	2,254	-3.597
Li6707_R		-0.6275	ug/L	0.8772	139.8	10.75
Mg2025_A	F	-122.2	ug/L	2.721	2.227	-1.331
Mn2576_R		-0.1693	ug/L	0.3825	225.9	2.250
Mo2020_A		2.197	ug/L	0.4187	19.06	3.852
Na5895_R		18.73	ug/L	7.023	37.49	135.3
Ni2316_A		0.5393	ug/L	0.003509	0.6507	0.1407
Pb2203_A		1.369	ug/L	0.1763	12.88	-0.7878
Sb2068_A		1.402	ug/L	0.1205	8.595	0.2259
Se1960_A		1.599	ug/L	1.114	69.66	0.9884
Si2516_R		21.52	ug/L	9.818	45.63	6.781
Sn1899_A		0.6171	ug/L	0.1645	26.65	1.146
Sr4215_R		0.3026	ug/L	0.01568	5.183	0.5994
Ti3349_A		0.8332	ug/L	0.1004	12.05	10.76
Tl1908_A		0.7208	ug/L	0.6178	85.72	-0.2397
V_2924_A		0.4797	ug/L	0.3054	63.67	2.182
Zn2062_A		0.3140	ug/L	0.005469	1.742	0.5799
Y_3600_R		9,282.6	Cts/S	420.32	4.5280	9,282.6
Y_2243_A		9,646.6	Cts/S	6.8791	0.071312	9,646.6
Y_3600_A		367,810	Cts/S	4,603.7	1.2516	367,810

3050 MDL 10

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:05:07PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.800	ug/L	0.1314	7.302	76.24
Al3961_R		47.41	ug/L	0.8898	1.877	24.24
As1891_A		6.477	ug/L	0.5288	8.165	1.152
Au2427_A		0.2439	ug/L	0.1235	50.65	1.588
B_2089_A		10.45	ug/L	0.1295	1.240	10.45
Ba4554_R		1.043	ug/L	0.1433	13.74	63.23
Be3130_R		0.2984	ug/L	0.07208	24.16	9.250
Ca3158_R		-18.01	ug/L	2.320	12.88	12.06
Cd2265_A		0.1671	ug/L	0.002250	1.346	4.294
Co2286_A		1.154	ug/L	0.1666	14.45	8.378
Cr2677_A		2.591	ug/L	0.1666	6.429	52.27
Cu3273_A		3.618	ug/L	0.09733	2.690	109.5
Fe2599_R		15.43	ug/L	2.998	19.43	24.49
K_7664_R		199.4	ug/L	54.83	27.50	95.62
Li6707_R		19.50	ug/L	0.2332	1.196	173.5
Mg2025_A	F	-106.0	ug/L	1.025	0.9675	1.387
Mn2576_R		2.449	ug/L	0.6622	27.04	12.06
Mo2020_A		1.627	ug/L	0.2596	15.96	2.934

3050 MDL 10

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:05:07PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		126.6	ug/L	0.4912	0.3881	279.8
Ni2316_A		1.470	ug/L	0.1127	7.665	2.616
Pb2203_A		4.930	ug/L	0.1047	2.125	3.165
Sb2068_A		3.184	ug/L	0.1044	3.279	0.7836
Se1960_A		11.67	ug/L	0.01247	0.1068	2.661
Si2516_R		111.0	ug/L	3.804	3.427	24.16
Sn1899_A		28.32	ug/L	0.4730	1.670	12.29
Sr4215_R		1.053	ug/L	0.07515	7.137	27.01
Ti3349_A		2.792	ug/L	0.05038	1.804	109.3
Tl1908_A		3.274	ug/L	0.6252	19.10	0.6968
V_2924_A		1.307	ug/L	0.1123	8.594	23.02
Zn2062_A		4.871	ug/L	0.06874	1.411	13.01
Y_3600_R		9,782.6	Cts/S	119.78	1.2244	9,782.6
Y_2243_A		9,646.8	Cts/S	0.93472	0.0096890	9,646.8
Y_3600_A		369,370	Cts/S	4,101.7	1.1104	369,370

PBWID02ICW2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:09:55PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04477	ug/L	0.03726	83.23	6.888
Al3961_R		-27.71	ug/L	13.52	48.81	-5.395
As1891_A		-0.7843	ug/L	0.1742	22.21	-0.9448
Au2427_A		-0.5016	ug/L	0.4823	96.15	-1.788
B_2089_A		0.3764	ug/L	0.3233	85.88	1.145
Ba4554_R		-0.1331	ug/L	0.02551	19.17	29.98
Be3130_R		0.08940	ug/L	0.03088	34.54	0.4432
Ca3158_R		-57.66	ug/L	4.995	8.663	-10.38
Cd2265_A		-0.05932	ug/L	0.003978	6.706	0.5533
Co2286_A		-0.1515	ug/L	0.02179	14.38	2.802
Cr2677_A		-0.001746	ug/L	0.1275	7,302	2.448
Cu3273_A		0.7176	ug/L	0.2192	30.54	47.79
Fe2599_R		-18.34	ug/L	4.486	24.46	2.281
K_7664_R		19.79	ug/L	16.65	84.14	6.645
Li6707_R		-0.9966	ug/L	0.3623	36.35	8.651
Mg2025_A	F	-126.0	ug/L	4.032	3.201	-1.995
Mn2576_R		-0.9625	ug/L	0.4602	47.81	-0.5313
Mo2020_A		0.2600	ug/L	0.1043	40.14	0.7461
Na5895_R		25.82	ug/L	3.805	14.74	154.1
Ni2316_A		0.1603	ug/L	0.005827	3.635	-0.8867
Pb2203_A		0.6094	ug/L	0.03378	5.542	-1.655
Sb2068_A		0.6966	ug/L	1.059	152.0	-0.02787
Se1960_A		-2.116	ug/L	1.513	71.53	0.3774
Si2516_R		11.23	ug/L	2.884	25.68	5.313
Sn1899_A		0.5461	ug/L	0.6377	116.8	1.136
Sr4215_R		0.1150	ug/L	0.02890	25.13	-6.074
Ti3349_A		0.3553	ug/L	0.03637	10.23	-13.68
Tl1908_A		0.3843	ug/L	0.2252	58.60	-0.3680
V_2924_A		0.2136	ug/L	0.06020	28.18	-4.373
Zn2062_A		0.2423	ug/L	0.07983	32.95	0.3913
Y_3600_R		9,931.5	Cts/S	46.026	0.46344	9,931.5
Y_2243_A		9,805.3	Cts/S	20.122	0.20521	9,805.3
Y_3600_A		378,130	Cts/S	5,035.6	1.3317	378,130

LCSWID02ICW2

Method Name: K6010-2011 Method Revision: 1,724

LCSWID02ICW2

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:14:42PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.75	ug/L	0.1358	0.2676	1,932
Al3961_R		1,971	ug/L	31.35	1.591	791.0
As1891_A		102.5	ug/L	0.9934	0.9694	28.74
Au2427_A		4.414	ug/L	0.8763	19.85	16.57
B_2089_A		497.1	ug/L	1.305	0.2625	462.2
Ba4554_R		1,996	ug/L	20.56	1.030	57,860
Be3130_R		50.29	ug/L	0.8027	1.596	2,149
Ca3158_R		2,493	ug/L	41.17	1.651	1,441
Cd2265_A		266.6	ug/L	0.03832	0.01438	4,355
Co2286_A		511.0	ug/L	0.8393	0.1642	2,200
Cr2677_A		209.7	ug/L	0.07652	0.03650	4,077
Cu3273_A		249.5	ug/L	0.2173	0.08710	5,479
Fe2599_R		938.1	ug/L	17.85	1.903	639.4
K_7664_R		9,970	ug/L	122.9	1.233	4,989
Li6707_R		526.5	ug/L	4.002	0.7602	4,304
Mg2025_A		5,208	ug/L	6.445	0.1238	895.8
Mn2576_R		509.3	ug/L	9.133	1.793	1,906
Mo2020_A		107.0	ug/L	0.9634	0.8999	172.5
Na5895_R		7,866	ug/L	80.01	1.017	10,230
Ni2316_A		523.0	ug/L	0.5217	0.09975	1,393
Pb2203_A		107.5	ug/L	0.3367	0.3132	117.0
Sb2068_A		103.9	ug/L	1.029	0.9901	35.48
Se1960_A		103.1	ug/L	1.410	1.368	17.87
Si2516_R		1,011	ug/L	22.40	2.216	197.3
Sn1899_A		522.5	ug/L	1.513	0.2895	211.2
Sr4215_R		515.8	ug/L	6.247	1.211	18,360
Ti3349_A		506.0	ug/L	2.420	0.4782	25,660
Tl1908_A	W	119.1	ug/L	0.6224	0.5226	41.39
V_2924_A		508.6	ug/L	1.438	0.2828	12,990
Zn2062_A		492.4	ug/L	0.4324	0.08783	1,343
Y_3600_R		9,895.9	Cts/S	67.301	0.68009	9,895.9
Y_2243_A		9,647.3	Cts/S	3.1020	0.032154	9,647.3
Y_3600_A		372,740	Cts/S	151.91	0.040754	372,740

SI2008-001

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:19:23PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5113	ug/L	0.05412	10.58	26.59
Al3961_R		58.00	ug/L	4.164	7.180	30.45
As1891_A		0.7138	ug/L	0.4022	56.35	-0.4986
Au2427_A		-0.1995	ug/L	0.08914	44.67	-0.3625
B_2089_A		20.54	ug/L	0.3184	1.550	19.65
Ba4554_R		33.19	ug/L	0.01834	0.05526	991.4
Be3130_R		0.1038	ug/L	0.1144	110.2	1.001
Ca3158_R		12,530	ug/L	162.5	1.297	7,127
Cd2265_A		22.69	ug/L	0.007555	0.03330	370.3
Co2286_A		0.1665	ug/L	0.06777	40.70	4.116
Cr2677_A		9.352	ug/L	0.08965	0.9586	181.3
Cu3273_A		0.7550	ug/L	0.07456	9.875	47.23
Fe2599_R		48.22	ug/L	2.958	6.135	46.43
K_7664_R		1,835	ug/L	90.29	4.920	912.0
Li6707_R		0.6166	ug/L	1.309	212.3	21.70
Mg2025_A		2,236	ug/L	1.206	0.05394	386.1
Mn2576_R		-0.2720	ug/L	1.109	407.5	2.053
Mo2020_A		0.7352	ug/L	0.1869	25.42	1.493

SI2008-001

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:19:23PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		24,980	ug/L	406.9	1.629	32,100
Ni2316_A		0.8518	ug/L	0.1730	20.31	0.9566
Pb2203_A		0.3752	ug/L	0.05342	14.24	-1.896
Sb2068_A		1.286	ug/L	0.3375	26.26	0.2048
Se1960_A		1.451	ug/L	1.134	78.16	0.9597
Si2516_R		3,361	ug/L	24.24	0.7213	645.3
Sn1899_A		1.407	ug/L	0.2994	21.27	1.457
Sr4215_R		80.06	ug/L	0.9129	1.140	2,830
Ti3349_A		1.908	ug/L	0.1820	9.541	64.44
Tl1908_A		1.230	ug/L	1.246	101.3	-0.05215
V_2924_A		0.5970	ug/L	0.1298	21.74	4.433
Zn2062_A		25.75	ug/L	0.1204	0.4677	69.66
Y_3600_R		9,858.5	Cts/S	51.317	0.52053	9,858.5
Y_2243_A		9,601.2	Cts/S	0.59346	0.0061810	9,601.2
Y_3600_A		367,090	Cts/S	474.52	0.12926	367,090

SI2008-002

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:24:08PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.09293	ug/L	0.01550	16.68	8.475
Al3961_R		228.2	ug/L	19.01	8.332	102.9
As1891_A		2.171	ug/L	0.8328	38.36	-0.08499
Au2427_A		-0.6866	ug/L	0.1418	20.65	-2.575
B_2089_A		19.30	ug/L	0.4417	2.288	17.63
Ba4554_R		27.94	ug/L	0.5208	1.864	821.5
Be3130_R		0.1763	ug/L	0.0004270	0.2420	3.947
Ca3158_R	W	63,190	ug/L	594.2	0.9404	35,060
Cd2265_A		0.06126	ug/L	0.05863	95.70	2.661
Co2286_A		0.5420	ug/L	0.1209	22.31	5.485
Cr2677_A		1.791	ug/L	0.03953	2.207	35.00
Cu3273_A		1.872	ug/L	0.08240	4.401	67.88
Fe2599_R		163.8	ug/L	6.068	3.705	120.4
K_7664_R		3,214	ug/L	82.31	2.561	1,565
Li6707_R		4.353	ug/L	1.360	31.25	50.91
Mg2025_A		19,620	ug/L	12.69	0.06467	3,089
Mn2576_R		26.47	ug/L	0.4160	1.571	99.40
Mo2020_A		0.3143	ug/L	0.0007320	0.2331	0.7796
Na5895_R	W	136,500	ug/L	1,343	0.9841	171,100
Ni2316_A		2.493	ug/L	0.2572	10.32	5.043
Pb2203_A		1.121	ug/L	0.7745	69.07	-1.034
Sb2068_A		0.8153	ug/L	0.1882	23.08	0.01726
Se1960_A		-1.165	ug/L	1.847	158.6	0.5061
Si2516_R		2,494	ug/L	39.03	1.565	469.3
Sn1899_A		0.1988	ug/L	1.410	709.2	0.9272
Sr4215_R		424.7	ug/L	4.529	1.067	14,730
Ti3349_A		4.880	ug/L	0.4754	9.742	202.9
Tl1908_A		1.521	ug/L	0.3512	23.09	0.03093
V_2924_A		0.6800	ug/L	0.08410	12.37	6.942
Zn2062_A		46.38	ug/L	0.05151	0.1111	119.9
Y_3600_R		9,644.3	Cts/S	108.86	1.1287	9,644.3
Y_2243_A		9,152.7	Cts/S	9.9545	0.10876	9,152.7
Y_3600_A		349,710	Cts/S	364.75	0.10430	349,710

SI2008-003

Method Name: K6010-2011 Method Revision: 1,724

SI2008-003

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:28:55PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.9143	ug/L	0.3965	43.36	-447.5
Al3961_R		3,293	ug/L	32.52	0.9875	1,328
As1891_A		23.64	ug/L	1.002	4.237	4.655
Au2427_A		11.75	ug/L	0.4569	3.888	54.72
B_2089_A		45.23	ug/L	0.3182	0.7035	42.36
Ba4554_R		62.25	ug/L	0.5554	0.8922	1,852
Be3130_R		0.4160	ug/L	0.1499	36.02	12.41
Ca3158_R		15,590	ug/L	159.3	1.022	8,968
Cd2265_A		0.09258	ug/L	0.01005	10.86	50.79
Co2286_A		16.88	ug/L	0.2653	1.572	76.03
Cr2677_A		5.001	ug/L	0.2878	5.755	107.8
Cu3273_A		14.79	ug/L	0.3180	2.150	350.1
Fe2599_R	W	29,830	ug/L	280.1	0.9388	20,050
K_7664_R		2,313	ug/L	51.77	2.238	1,165
Li6707_R		2.280	ug/L	1.057	46.34	35.56
Mg2025_A		2,438	ug/L	0.9191	0.03771	420.1
Mn2576_R	W	1,879	ug/L	18.72	0.9964	7,084
Mo2020_A		0.7365	ug/L	0.1684	22.86	1.515
Na5895_R		14,120	ug/L	174.4	1.235	18,420
Ni2316_A		3.383	ug/L	0.03033	0.8967	2.951
Pb2203_A		4.549	ug/L	0.2172	4.774	3.138
Sb2068_A		-0.1957	ug/L	0.4313	220.4	0.2650
Se1960_A		-0.8455	ug/L	0.6045	71.49	0.8510
Si2516_R		7,521	ug/L	84.76	1.127	1,457
Sn1899_A		1.425	ug/L	0.4546	31.91	1.466
Sr4215_R		125.3	ug/L	0.5168	0.4124	4,489
Ti3349_A		71.78	ug/L	0.3136	0.4369	3,609
Tl1908_A		1.900	ug/L	0.9366	49.29	-1.329
V_2924_A		7.128	ug/L	0.02004	0.2812	170.0
Zn2062_A		31.14	ug/L	0.01285	0.04128	84.44
Y_3600_R		9,977.7	Cts/S	67.870	0.68022	9,977.7
Y_2243_A		9,613.7	Cts/S	3.1859	0.033140	9,613.7
Y_3600_A		372,390	Cts/S	1,250.4	0.33578	372,390

SI2008-004

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:33:41PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.08452	ug/L	0.2001	236.8	0.3000
Al3961_R		674.5	ug/L	4.813	0.7135	269.8
As1891_A		0.3847	ug/L	1.178	306.3	-0.6048
Au2427_A		0.3422	ug/L	0.3806	111.2	1.363
B_2089_A		32.55	ug/L	0.4678	1.437	30.73
Ba4554_R		46.33	ug/L	0.9094	1.963	1,342
Be3130_R		0.3896	ug/L	0.1350	34.65	12.83
Ca3158_R		17,690	ug/L	65.39	0.3696	9,846
Cd2265_A		0.2328	ug/L	0.01697	7.290	5.774
Co2286_A		1.437	ug/L	0.06369	4.431	9.631
Cr2677_A		0.7534	ug/L	0.1008	13.38	17.08
Cu3273_A		2.977	ug/L	0.06165	2.071	95.23
Fe2599_R		280.1	ug/L	13.25	4.729	196.2
K_7664_R		1,723	ug/L	35.63	2.068	838.5
Li6707_R		3.164	ug/L	1.603	50.66	41.45
Mg2025_A		4,557	ug/L	18.97	0.4163	769.3
Mn2576_R		99.13	ug/L	0.3351	0.3381	364.5
Mo2020_A		0.1974	ug/L	0.1350	68.40	0.6330

SI2008-004

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:33:41PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		10,780	ug/L	28.09	0.2607	13,630
Ni2316_A		7.512	ug/L	0.2141	2.850	18.64
Pb2203_A		1.750	ug/L	0.02462	1.407	-0.4483
Sb2068_A		-0.02478	ug/L	0.03474	140.2	-0.2998
Se1960_A		0.1556	ug/L	1.810	1,163	0.7585
Si2516_R		3,393	ug/L	7.373	0.2173	638.2
Sn1899_A		0.4768	ug/L	0.4528	94.97	1.087
Sr4215_R		101.4	ug/L	0.6761	0.6666	3,514
Ti3349_A		7.560	ug/L	0.1024	1.354	347.5
Tl1908_A		1.829	ug/L	0.6690	36.58	0.08569
V_2924_A		1.346	ug/L	0.1175	8.726	23.78
Zn2062_A		141.6	ug/L	0.7176	0.5069	385.5
Y_3600_R		9,656.4	Cts/S	28.013	0.29010	9,656.4
Y_2243_A		9,627.6	Cts/S	12.229	0.12702	9,627.6
Y_3600_A		367,630	Cts/S	1,018.7	0.27710	367,630

SI2008-007

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:38:27PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1079	ug/L	0.1198	111.0	12.13
Al3961_R		11.46	ug/L	17.91	156.3	11.92
As1891_A		0.7028	ug/L	2.104	299.4	-0.4973
Au2427_A		-0.2633	ug/L	0.06531	24.80	-0.6750
B_2089_A		19.21	ug/L	0.1903	0.9909	18.30
Ba4554_R		30.48	ug/L	0.2313	0.7587	901.6
Be3130_R		0.1023	ug/L	0.1002	97.97	0.9740
Ca3158_R		12,830	ug/L	149.1	1.162	7,205
Cd2265_A		11.88	ug/L	0.04197	0.3532	193.5
Co2286_A		0.1331	ug/L	0.02464	18.52	3.934
Cr2677_A		10.20	ug/L	0.001523	0.01493	196.7
Cu3273_A		0.9778	ug/L	0.3971	40.61	51.84
Fe2599_R		-0.1804	ug/L	1.851	1,026	14.12
K_7664_R		1,719	ug/L	32.31	1.880	843.5
Li6707_R		1.149	ug/L	0.6374	55.49	25.64
Mg2025_A		2,360	ug/L	1.664	0.07053	404.1
Mn2576_R		-0.008284	ug/L	0.7635	9,217	2.991
Mo2020_A		-0.01630	ug/L	0.1724	1,058	0.2880
Na5895_R		22,650	ug/L	150.0	0.6623	28,760
Ni2316_A		0.4788	ug/L	0.3235	67.56	-0.02710
Pb2203_A		0.7666	ug/L	0.08557	11.16	-1.450
Sb2068_A		0.3840	ug/L	0.4532	118.0	-0.1137
Se1960_A		-0.4694	ug/L	0.5738	122.2	0.6385
Si2516_R		3,137	ug/L	112.8	3.595	595.0
Sn1899_A		0.2886	ug/L	0.2155	74.67	1.003
Sr4215_R		82.20	ug/L	0.9609	1.169	2,869
Ti3349_A		0.3283	ug/L	0.07711	23.49	-14.54
Tl1908_A		0.3370	ug/L	0.03818	11.33	-0.3768
V_2924_A		0.4161	ug/L	0.1276	30.67	-0.1538
Zn2062_A		31.77	ug/L	0.05982	0.1883	85.55
Y_3600_R		9,734.0	Cts/S	50.728	0.52114	9,734.0
Y_2243_A		9,548.3	Cts/S	6.0773	0.063647	9,548.3
Y_3600_A		365,580	Cts/S	1,917.5	0.52451	365,580

CCV

Method Name: K6010-2011 Method Revision: 1,724

CCV

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:43:12PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		507.8	ug/L	5.163	1.017	18,640
Al3961_R		11,920	ug/L	35.84	0.3007	4,616
As1891_A		482.9	ug/L	2.447	0.5068	134.7
Au2427_A		502.6	ug/L	22.60	4.497	2,215
B_2089_A		479.0	ug/L	0.06960	0.01453	447.6
Ba4554_R		491.7	ug/L	6.451	1.312	13,860
Be3130_R		480.4	ug/L	0.8377	0.1744	20,080
Ca3158_R		12,490	ug/L	243.1	1.947	6,923
Cd2265_A		524.8	ug/L	1.012	0.1928	8,403
Co2286_A		488.0	ug/L	0.1352	0.02771	2,056
Cr2677_A	W	536.1	ug/L	5.481	1.022	10,070
Cu3273_A		482.5	ug/L	7.668	1.589	10,220
Fe2599_R	W	11,580	ug/L	80.48	0.6953	7,501
K_7664_R		11,870	ug/L	188.2	1.586	5,767
Li6707_R		516.4	ug/L	6.036	1.169	4,100
Mg2025_A		13,020	ug/L	22.61	0.1737	2,139
Mn2576_R		507.3	ug/L	2.796	0.5511	1,844
Mo2020_A	W	540.2	ug/L	4.656	0.8620	851.4
Na5895_R		12,540	ug/L	295.6	2.357	15,770
Ni2316_A		515.1	ug/L	1.485	0.2883	1,342
Pb2203_A	W	528.6	ug/L	0.5295	0.1002	571.4
Sb2068_A		495.5	ug/L	0.04055	0.008184	174.0
Se1960_A	W	465.0	ug/L	0.7279	0.1565	76.36
Si2516_R		12,350	ug/L	182.4	1.477	2,304
Sn1899_A		517.6	ug/L	0.3686	0.07122	204.7
Sr4215_R		502.8	ug/L	4.239	0.8431	17,370
Ti3349_A		499.9	ug/L	6.341	1.268	24,540
Tl1908_A		476.1	ug/L	2.611	0.5484	169.4
V_2924_A		498.0	ug/L	6.702	1.346	12,200
Zn2062_A		476.5	ug/L	0.08648	0.01815	1,272
Y_3600_R		9,609.1	Cts/S	94.104	0.97931	9,609.1
Y_2243_A		9,442.4	Cts/S	26.603	0.28174	9,442.4
Y_3600_A		360,490	Cts/S	4,336.7	1.2030	360,490

CCB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:47:50PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3749	ug/L	0.1585	42.29	22.51
Al3961_R		-2.961	ug/L	9.350	315.7	4.313
As1891_A		1.286	ug/L	0.4220	32.82	-0.3324
Au2427_A		3.103	ug/L	0.2597	8.367	14.34
B_2089_A		0.8582	ug/L	0.3835	44.69	1.604
Ba4554_R		0.3770	ug/L	0.2117	56.14	43.22
Be3130_R		0.4187	ug/L	0.07896	18.86	14.09
Ca3158_R		-51.55	ug/L	1.785	3.462	-6.639
Cd2265_A		0.2426	ug/L	0.04016	16.56	5.441
Co2286_A		0.2436	ug/L	0.1425	58.50	4.420
Cr2677_A		0.2717	ug/L	0.08648	31.83	7.631
Cu3273_A		1.022	ug/L	0.3216	31.47	53.29
Fe2599_R		-8.490	ug/L	1.291	15.20	8.523
K_7664_R		-40.83	ug/L	1.122	2.747	-22.92
Li6707_R		0.3824	ug/L	1.412	369.3	19.30
Mg2025_A	F	-128.5	ug/L	0.4732	0.3682	-2.345
Mn2576_R		-1.028	ug/L	0.8399	81.73	-0.7813
Mo2020_A		1.995	ug/L	0.4430	22.21	3.496

CCB

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:47:50PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		42.38	ug/L	5.434	12.82	168.9
Ni2316_A		0.2252	ug/L	0.1278	56.74	-0.6907
Pb2203_A		0.9809	ug/L	0.6012	61.29	-1.209
Sb2068_A		0.7763	ug/L	0.05447	7.018	-0.0009075
Se1960_A		1.409	ug/L	0.9564	67.87	0.9485
Si2516_R		12.95	ug/L	1.541	11.90	5.438
Sn1899_A		0.9773	ug/L	0.1594	16.31	1.280
Sr4215_R		0.3095	ug/L	0.006860	2.217	0.8438
Ti3349_A		1.087	ug/L	0.07219	6.641	23.51
Tl1908_A		0.7915	ug/L	0.5211	65.84	-0.2110
V_2924_A		0.4755	ug/L	0.01106	2.325	2.083
Zn2062_A		0.4068	ug/L	0.02405	5.913	0.8263
Y_3600_R		9,566.9	Cts/S	193.06	2.0180	9,566.9
Y_2243_A		9,563.7	Cts/S	1.5706	0.016422	9,563.7
Y_3600_A		369,190	Cts/S	2,134.2	0.57807	369,190

PQL

Method Name: K6010-2011 Method Revision: 1,724
Analyst Name: GEJ
Acquire Date: 4/2/2015 8:52:36PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.79	ug/L	0.008063	0.07471	413.4
Al3961_R		276.6	ug/L	16.57	5.990	109.5
As1891_A		8.387	ug/L	0.9383	11.19	1.706
Au2427_A		98.97	ug/L	3.518	3.555	446.0
B_2089_A		46.04	ug/L	0.3168	0.6881	43.57
Ba4554_R		5.295	ug/L	0.2349	4.435	177.0
Be3130_R		4.978	ug/L	0.1200	2.411	199.3
Ca3158_R	F	50.82	ug/L	6.777	13.33	48.59
Cd2265_A		5.187	ug/L	0.004084	0.07873	86.41
Co2286_A		9.709	ug/L	0.1293	1.332	45.23
Cr2677_A		10.53	ug/L	0.1342	1.275	203.5
Cu3273_A		25.39	ug/L	0.06755	0.2661	576.3
Fe2599_R		82.05	ug/L	0.9112	1.111	65.45
K_7664_R		938.9	ug/L	22.12	2.356	442.2
Li6707_R		108.2	ug/L	3.080	2.846	849.8
Mg2025_A	F	-25.74	ug/L	0.2030	0.7886	14.97
Mn2576_R		4.517	ug/L	0.6713	14.86	18.84
Mo2020_A		11.20	ug/L	0.1610	1.438	18.35
Na5895_R		1,101	ug/L	16.29	1.480	1,454
Ni2316_A		10.69	ug/L	0.05840	0.5461	27.24
Pb2203_A	W	6.499	ug/L	0.4636	7.133	4.880
Sb2068_A		7.613	ug/L	0.2684	3.525	2.133
Se1960_A		10.32	ug/L	0.2562	2.483	2.439
Si2516_R		215.2	ug/L	6.045	2.809	42.06
Sn1899_A		106.6	ug/L	0.9710	0.9105	43.84
Sr4215_R		11.24	ug/L	0.3402	3.026	369.2
Ti3349_A		15.07	ug/L	0.1503	0.9977	721.9
Tl1908_A		14.85	ug/L	0.7812	5.260	4.940
V_2924_A		9.822	ug/L	0.3183	3.241	235.3
Zn2062_A		18.96	ug/L	0.02340	0.1234	51.51
Y_3600_R		9,369.6	Cts/S	323.23	3.4498	9,369.6
Y_2243_A		9,655.0	Cts/S	13.731	0.14222	9,655.0
Y_3600_A		366,590	Cts/S	2,146.7	0.58560	366,590

ICSA

Method Name: K6010-2011 Method Revision: 1,724

KATAHDIN ANALYTICAL SERVICES
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST:** GES **ANALYSIS DATE:** 04·03·15

FILE NAME: I1D03A **METHOD: ICP**

- ☐ 200.7
- ☑ 6010C
- ☑ DoD
- ☐ _____

REVIEWED
Em 04-10-15
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initals) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep. Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW15408	03·25·15	03·25·16	0 ug/L
Standard 1	MW15403	03·23·15	06·23·15	Varies by Element
ICV	MW15401	03·23·15	04·30·15	Varies by Element
PQL	MW15374	03·06·15	05·01·15	Varies by Element
LRS1	MW15405	03·24·15	05·26·15	Varies by Element
LRS2	MW15409	03·25·15	06·25·15	Varies by Element
ICSA	MW15422	04·01·15	07·01·15	Varies by Element
ICSAB	MW15368	03·05·15	05·01·15	Varies by Element
CCV	MW15423	04·01·15	07·01·15	Varies by Element
Internal Standard	MW15416	03·30·15	06·30·15	5.0 mg/L Yttrium

Additional Comments and Notes:

GES 04·06·15

0000761

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IID03A	4/3/2015	12:49	GEJ
Std 1	1.000	IID03A	4/3/2015	12:54	GEJ
ICV	1.000	IID03A	4/3/2015	12:59	GEJ
ICB	1.000	IID03A	4/3/2015	13:03	GEJ
PQL	1.000	IID03A	4/3/2015	13:08	GEJ
LRS1	1.000	IID03A	4/3/2015	13:15	GEJ
LRS2	1.000	IID03A	4/3/2015	13:20	GEJ
ICSA	1.000	IID03A	4/3/2015	13:28	GEJ
ICSAB	1.000	IID03A	4/3/2015	13:33	GEJ
CCV	1.000	IID03A	4/3/2015	13:37	GEJ
CCB	1.000	IID03A	4/3/2015	13:42	GEJ
LCSWID02ICW2	1.000	IID03A	4/3/2015	13:47	GEJ
PBWID02ICW2	1.000	IID03A	4/3/2015	13:51	GEJ
SI2008-001	1.000	IID03A	4/3/2015	13:56	GEJ
SI2008-001A	1.000	IID03A	4/3/2015	14:01	GEJ
SI2008-001L	5.000	IID03A	4/3/2015	14:06	GEJ
SI2008-001P	1.000	IID03A	4/3/2015	14:11	GEJ
SI2008-001S	1.000	IID03A	4/3/2015	14:16	GEJ
LCSWID02ICW2	1.000	IID03A	4/3/2015	14:20	GEJ
PBWID02ICW2	1.000	IID03A	4/3/2015	14:25	GEJ
SI2008-001	1.000	IID03A	4/3/2015	14:30	GEJ
CCV	1.000	IID03A	4/3/2015	14:35	GEJ
CCB	1.000	IID03A	4/3/2015	14:39	GEJ
SI2008-001A	1.000	IID03A	4/3/2015	14:44	GEJ
SI2001-001	1.000	IID03A	4/3/2015	14:49	GEJ
SI2001-002	1.000	IID03A	4/3/2015	14:53	GEJ
SI2001-003	1.000	IID03A	4/3/2015	14:58	GEJ
SI2001-004	1.000	IID03A	4/3/2015	15:03	GEJ
SI2001-005	1.000	IID03A	4/3/2015	15:08	GEJ
SI2001-007	1.000	IID03A	4/3/2015	15:12	GEJ
SI2008-001L	5.000	IID03A	4/3/2015	15:17	GEJ
SI2008-002	1.000	IID03A	4/3/2015	15:22	GEJ
SI2008-003	1.000	IID03A	4/3/2015	15:27	GEJ
CCV	1.000	IID03A	4/3/2015	15:31	GEJ
CCB	1.000	IID03A	4/3/2015	15:36	GEJ
SI2008-004	1.000	IID03A	4/3/2015	15:41	GEJ
LCSOID01ICS1	1.000	IID03A	4/3/2015	15:46	GEJ
LC2OID01ICS1	1.000	IID03A	4/3/2015	15:50	GEJ
PBSID01ICS1	1.000	IID03A	4/3/2015	15:55	GEJ
SI2008-007	1.000	IID03A	4/3/2015	16:00	GEJ
SI2006-023	1.000	IID03A	4/3/2015	16:05	GEJ
LC2OID01ICS1	1.000	IID03A	4/3/2015	16:09	GEJ
SI1907-018	1.000	IID03A	4/3/2015	16:14	GEJ
SI1907-018A	1.000	IID03A	4/3/2015	16:19	GEJ

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SI1907-018L	5.000	IID03A	4/3/2015	16:24	GEJ
CCV	1.000	IID03A	4/3/2015	16:28	GEJ
CCB	1.000	IID03A	4/3/2015	16:33	GEJ
SI1907-018P	1.000	IID03A	4/3/2015	16:38	GEJ
SI1907-018S	1.000	IID03A	4/3/2015	16:42	GEJ
SI1968-008	1.000	IID03A	4/3/2015	16:47	GEJ
SI1968-007	1.000	IID03A	4/3/2015	16:52	GEJ
SI1968-006	1.000	IID03A	4/3/2015	16:56	GEJ
SI1968-005	1.000	IID03A	4/3/2015	17:01	GEJ
SI1968-004	1.000	IID03A	4/3/2015	17:06	GEJ
SI1968-003	1.000	IID03A	4/3/2015	17:10	GEJ
SI1968-002	1.000	IID03A	4/3/2015	17:15	GEJ
SI1968-001	1.000	IID03A	4/3/2015	17:20	GEJ
CCV	1.000	IID03A	4/3/2015	17:25	GEJ
CCB	1.000	IID03A	4/3/2015	17:29	GEJ
SI1946-001	1.000	IID03A	4/3/2015	17:34	GEJ
SI1946-002	1.000	IID03A	4/3/2015	17:39	GEJ
SI1946-003	1.000	IID03A	4/3/2015	17:43	GEJ
SI1946-004	1.000	IID03A	4/3/2015	17:48	GEJ
SI1946-005	1.000	IID03A	4/3/2015	17:53	GEJ
SI1946-006	1.000	IID03A	4/3/2015	17:57	GEJ
SI1946-007	1.000	IID03A	4/3/2015	18:02	GEJ
SI1946-007A	1.000	IID03A	4/3/2015	18:07	GEJ
SI1946-007L	5.000	IID03A	4/3/2015	18:11	GEJ
SI1946-007P	1.000	IID03A	4/3/2015	18:16	GEJ
CCV	1.000	IID03A	4/3/2015	18:21	GEJ
CCB	1.000	IID03A	4/3/2015	18:25	GEJ
SI1946-007S	1.000	IID03A	4/3/2015	18:30	GEJ
SI1946-009	1.000	IID03A	4/3/2015	18:35	GEJ
SI1946-010	1.000	IID03A	4/3/2015	18:39	GEJ
SI1946-011	1.000	IID03A	4/3/2015	18:44	GEJ
SI1907-003	1.000	IID03A	4/3/2015	18:49	GEJ
SI1907-0~~16~~15	1.000	IID03A	4/3/2015	18:54	GEJ
SI1907-005	1.000	IID03A	4/3/2015	18:58	GEJ
SI1907-007	1.000	IID03A	4/3/2015	19:03	GEJ
SI1907-008	1.000	IID03A	4/3/2015	19:08	GEJ
SI1907-009	1.000	IID03A	4/3/2015	19:13	GEJ
CCV	1.000	IID03A	4/3/2015	19:17	GEJ
CCB	1.000	IID03A	4/3/2015	19:22	GEJ
SI1907-010	1.000	IID03A	4/3/2015	19:27	GEJ
SI1907-011	1.000	IID03A	4/3/2015	19:31	GEJ
SI1907-012	1.000	IID03A	4/3/2015	19:36	GEJ
SI1907-014	1.000	IID03A	4/3/2015	19:41	GEJ
SI1907-014A	1.000	IID03A	4/3/2015	19:46	GEJ
SI1907-014L	5.000	IID03A	4/3/2015	19:50	GEJ
SI1907-014P	1.000	IID03A	4/3/2015	19:55	GEJ
SI1907-014S	1.000	IID03A	4/3/2015	20:00	GEJ

Intensity Report

Author:

Published: 4/6/2015 10:21:47AM

Notes:

Blank

Method Name: K6010-2011 Method Revision: 1,726

Analyst Name: GEJ

Acquire Date: 4/3/2015 12:49:58PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.00001300	Cts/S	0.000006000	43.93	4.488
Al3961_R		-0.0001300	Cts/S	0.0001250	95.63	-1.190
As1891_A		-0.00004500	Cts/S	0.00002500	55.82	-0.4224
Au2427_A		0.0002910	Cts/S	0.00004800	16.44	2.750
B_2089_A		0.00006100	Cts/S	0.00004200	68.41	0.5775
Ba4554_R		0.004464	Cts/S	0.00009300	2.074	40.59
Be3130_R		-0.0004800	Cts/S	0.00001400	2.979	-4.361
Ca3158_R		-0.001132	Cts/S	0.0001400	12.32	-10.29
Cd2265_A		0.00002600	Cts/S	0.00004500	173.3	0.2458
Co2286_A		0.0003340	Cts/S	0.00005600	16.81	3.162
Cr2677_A		0.000006000	Cts/S	0.00001800	298.3	2.048
Cu3273_A		0.00009000	Cts/S	0.00002300	25.33	31.69
Fe2599_R		0.0001940	Cts/S	0.00004600	23.83	1.761
K_7664_R		-0.0002470	Cts/S	0.0007740	312.7	-2.213
Li6707_R		0.001141	Cts/S	0.00001200	1.045	10.38
Mg2025_A		-0.0002850	Cts/S	0.00001100	3.753	-2.693
Mn2576_R		0.0005130	Cts/S	0.00006900	13.37	4.656
Mo2020_A		0.0001180	Cts/S	0.000004000	3.013	1.111
Na5895_R		0.01121	Cts/S	0.0008710	7.772	102.0
Ni2316_A		-0.00005900	Cts/S	0.000003000	5.696	-0.5561
Pb2203_A		-0.0001800	Cts/S	0.00003000	16.60	-1.698
Sb2068_A		0.000003000	Cts/S	0.00001300	477.4	-0.02499
Se1960_A		0.00007400	Cts/S	0.00003100	41.51	0.6986
Si2516_R		0.0005350	Cts/S	0.0001400	26.19	4.875
Sn1899_A		0.0001060	Cts/S	0.00005900	55.37	1.001
Sr4215_R		-0.0008980	Cts/S	0.0004830	53.84	-8.185
Ti3349_A		-0.00004500	Cts/S	0.000009000	19.35	-15.93
Tl1908_A		-0.0001000	Cts/S	0.00002700	27.47	-0.9405
V_2924_A		-0.00002000	Cts/S	0.00001300	66.59	-6.881
Zn2062_A		-0.00001800	Cts/S	0.00004300	243.2	-0.1680
Y_3600_R		9,091.3	Cts/S	94.977	1.0447	9,091.3
Y_2243_A		9,452.1	Cts/S	26.462	0.27995	9,452.1
Y_3600_A		353,600	Cts/S	3,884.4	1.0985	353,600

Std 1

Method Name: K6010-2011 Method Revision: 1,726

Analyst Name: GEJ

Acquire Date: 4/3/2015 12:54:45PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1058	Cts/S	0.0006920	0.6538	36,170
Al3961_R		1.038	Cts/S	0.02015	1.941	9,114
As1891_A		0.02831	Cts/S	0.000008000	0.02810	261.8
Au2427_A		0.4776	Cts/S	0.02436	5.100	4,415
B_2089_A		0.09620	Cts/S	0.0001390	0.1442	889.5
Ba4554_R		3.015	Cts/S	0.05998	1.989	26,470
Be3130_R		4.388	Cts/S	0.07473	1.703	38,530
Ca3158_R		1.506	Cts/S	0.02925	1.943	13,220
Cd2265_A		1.781	Cts/S	0.003765	0.2114	16,470
Co2286_A		0.4263	Cts/S	0.0002130	0.04999	3,942
Cr2677_A		0.05688	Cts/S	0.0004210	0.7405	19,440
Cu3273_A		0.05561	Cts/S	0.0003510	0.6306	19,000
Fe2599_R		1.778	Cts/S	0.03010	1.693	15,610

Std 1

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 12:54:45PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
K_7664_R		1.337	Cts/S	0.02221	1.661	11,740
Li6707_R		0.9029	Cts/S	0.01374	1.522	7,928
Mg2025_A		0.4459	Cts/S	0.0004360	0.09787	4,123
Mn2576_R		0.4055	Cts/S	0.007058	1.741	3,560
Mo2020_A		0.1794	Cts/S	0.001596	0.8894	1,659
Na5895_R		3.424	Cts/S	0.05581	1.630	30,060
Ni2316_A		0.2786	Cts/S	0.00002300	0.008300	2,576
Pb2203_A		0.1207	Cts/S	0.00001900	0.01577	1,116
Sb2068_A		0.03676	Cts/S	0.00006000	0.1635	339.9
Se1960_A		0.01702	Cts/S	0.00002700	0.1567	157.4
Si2516_R		0.5087	Cts/S	0.005991	1.178	4,467
Sn1899_A		0.04328	Cts/S	0.0002060	0.4749	400.1
Sr4215_R		3.815	Cts/S	0.07156	1.876	33,490
Ti3349_A		0.1410	Cts/S	0.001632	1.157	48,180
Tl1908_A		0.03785	Cts/S	0.0001240	0.3268	349.9
V_2924_A		0.06980	Cts/S	0.0007100	1.017	23,850
Zn2062_A		0.2625	Cts/S	0.0002070	0.07873	2,428
Y_3600_R		8,781.5	Cts/S	226.26	2.5766	8,781.5
Y_2243_A		9,246.3	Cts/S	31.945	0.34549	9,246.3
Y_3600_A		341,750	Cts/S	1,687.6	0.49379	341,750

ICV

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 12:59:18PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		405.8	ug/L	3.354	0.8265	14,830
Al3961_R		9,995	ug/L	109.1	1.092	3,755
As1891_A		396.7	ug/L	1.896	0.4778	105.0
Au2427_A		408.2	ug/L	22.01	5.392	1,829
B_2089_A		408.9	ug/L	0.8144	0.1992	369.1
Ba4554_R		392.8	ug/L	6.313	1.607	10,740
Be3130_R		395.2	ug/L	5.757	1.457	15,690
Ca3158_R		10,030	ug/L	197.7	1.972	5,457
Cd2265_A		408.1	ug/L	0.1378	0.03378	6,811
Co2286_A		413.7	ug/L	1.174	0.2838	1,654
Cr2677_A		413.1	ug/L	2.088	0.5053	8,116
Cu3273_A		407.4	ug/L	2.604	0.6393	7,840
Fe2599_R		10,060	ug/L	147.8	1.469	6,476
K_7664_R		13,610	ug/L	256.6	1.885	6,587
Li6707_R		392.8	ug/L	7.341	1.869	3,216
Mg2025_A		10,440	ug/L	15.90	0.1522	1,744
Mn2576_R		396.3	ug/L	8.813	2.224	1,457
Mo2020_A		412.2	ug/L	1.204	0.2920	693.7
Na5895_R		10,100	ug/L	191.1	1.892	12,580
Ni2316_A		413.3	ug/L	1.729	0.4183	1,079
Pb2203_A		413.7	ug/L	0.1069	0.02585	467.2
Sb2068_A		401.8	ug/L	0.4686	0.1166	138.4
Se1960_A		405.0	ug/L	0.5831	0.1440	65.00
Si2516_R		9,806	ug/L	160.5	1.637	1,809
Sn1899_A		413.7	ug/L	1.794	0.4338	168.4
Sr4215_R		396.6	ug/L	5.431	1.369	13,690
Ti3349_A		405.5	ug/L	4.226	1.042	19,730
Tl1908_A		420.8	ug/L	1.128	0.2681	148.7
V_2924_A		414.2	ug/L	2.415	0.5830	9,978
Zn2062_A		411.5	ug/L	0.7270	0.1767	1,012
Y_3600_R		9,048.9	Cts/S	65.419	0.72295	9,048.9

ICV

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 12:59:18PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Y_2243_A		9,372.1	Cts/S	9.7101	0.10361	9,372.1
Y_3600_A		345,320	Cts/S	941.48	0.27264	345,320

ICB

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:03:55PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1992	ug/L	0.02189	10.99	11.69
Al3961_R		-6.363	ug/L	2.051	32.23	-3.438
As1891_A		0.6949	ug/L	0.1173	16.87	-0.2349
Au2427_A		2.952	ug/L	0.5126	17.36	16.08
B_2089_A		0.9162	ug/L	0.7179	78.36	1.449
Ba4554_R		0.2416	ug/L	0.1286	53.22	45.64
Be3130_R		0.3469	ug/L	0.04590	13.23	9.159
Ca3158_R		6.312	ug/L	1.902	30.14	-6.611
Cd2265_A		0.09779	ug/L	0.05351	54.72	1.905
Co2286_A		0.06031	ug/L	0.07521	124.7	3.411
Cr2677_A		0.02532	ug/L	0.09813	387.5	2.539
Cu3273_A		0.5044	ug/L	0.3021	59.89	40.81
Fe2599_R		10.30	ug/L	0.3176	3.084	8.148
K_7664_R		-16.83	ug/L	67.03	398.4	-10.11
Li6707_R		-0.7684	ug/L	0.3054	39.75	3.943
Mg2025_A		1.793	ug/L	2.394	133.5	-2.382
Mn2576_R		-1.134	ug/L	0.2360	20.81	0.4688
Mo2020_A		2.410	ug/L	0.3529	14.64	5.198
Na5895_R		16.05	ug/L	9.769	60.88	117.8
Ni2316_A		0.1362	ug/L	0.05860	43.02	-0.1930
Pb2203_A		0.9031	ug/L	0.3539	39.18	-0.6634
Sb2068_A		-0.3983	ug/L	0.7828	196.6	-0.1684
Se1960_A		2.087	ug/L	1.230	58.92	1.033
Si2516_R		1.080	ug/L	9.120	844.7	4.906
Sn1899_A		0.9395	ug/L	0.5950	63.33	1.385
Sr4215_R		0.1497	ug/L	0.1370	91.47	-2.866
Ti3349_A		0.5738	ug/L	0.04648	8.100	12.55
Tl1908_A		2.718	ug/L	1.051	38.66	0.04589
V_2924_A		-0.08507	ug/L	0.1634	192.1	-9.193
Zn2062_A		0.07943	ug/L	0.02382	29.99	0.02987
Y_3600_R		8,792.6	Cts/S	11.089	0.12611	8,792.6
Y_2243_A		9,457.9	Cts/S	6.0257	0.063711	9,457.9
Y_3600_A		346,720	Cts/S	293.84	0.084746	346,720

PQL

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:08:43PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.15	ug/L	0.1645	1.620	379.9
Al3961_R		316.4	ug/L	45.13	14.27	108.6
As1891_A		8.501	ug/L	0.9225	10.85	1.865
Au2427_A		99.11	ug/L	5.326	5.374	450.0
B_2089_A		50.39	ug/L	0.6392	1.268	45.40
Ba4554_R		5.299	ug/L	0.5660	10.68	170.8
Be3130_R		5.301	ug/L	0.4739	8.940	190.3
Ca3158_R		109.8	ug/L	6.145	5.594	46.12
Cd2265_A		5.015	ug/L	0.01116	0.2225	84.78
Co2286_A		10.12	ug/L	0.1681	1.661	44.03

PQL

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:08:43PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Cr2677_A		10.14	ug/L	0.2750	2.712	203.2
Cu3273_A		25.37	ug/L	0.03189	0.1257	522.7
Fe2599_R		113.4	ug/L	7.106	6.267	69.13
K_7664_R		1,068	ug/L	57.46	5.378	476.6
Li6707_R		107.5	ug/L	8.200	7.625	821.0
Mg2025_A		102.2	ug/L	1.010	0.9883	14.81
Mn2576_R		4.974	ug/L	0.9809	19.72	21.09
Mo2020_A		10.67	ug/L	0.06323	0.5927	19.22
Na5895_R		1,103	ug/L	90.67	8.216	1,354
Ni2316_A		10.28	ug/L	0.3299	3.211	26.56
Pb2203_A		5.039	ug/L	0.1907	3.785	4.039
Sb2068_A		7.746	ug/L	0.3057	3.946	2.360
Se1960_A	F	13.17	ug/L	0.8445	6.411	2.812
Si2516_R		202.2	ug/L	10.67	5.281	38.91
Sn1899_A		104.6	ug/L	0.1656	0.1583	43.76
Sr4215_R		11.02	ug/L	0.9267	8.412	344.1
Ti3349_A		15.17	ug/L	0.07509	0.4949	730.5
Tl1908_A		17.28	ug/L	0.7940	4.594	5.298
V_2924_A		10.11	ug/L	0.02360	0.2334	239.4
Zn2062_A		19.93	ug/L	0.1243	0.6237	49.40
Y_3600_R		8,386.1	Cts/S	496.22	5.9171	8,386.1
Y_2243_A		9,467.0	Cts/S	19.941	0.21064	9,467.0
Y_3600_A		348,810	Cts/S	1,502.5	0.43075	348,810

LRS1

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:15:09PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2,198	ug/L	28.55	1.299	77,500
Al3961_R		70.55	ug/L	9.785	13.87	83.08
As1891_A		21,640	ug/L	40.21	0.1858	5,481
Au2427_A	F	23,800	ug/L	174.6	0.7337	101,000
B_2089_A		21,450	ug/L	46.97	0.2189	17,990
Ba4554_R		19,860	ug/L	17.36	0.08744	526,800
Be3130_R		19,760	ug/L	84.19	0.4261	764,000
Ca3158_R		-8.403	ug/L	8.570	102.0	-4.773
Cd2265_A		19,810	ug/L	25.59	0.1292	313,800
Co2286_A		21,220	ug/L	7.199	0.03392	80,610
Cr2677_A		20,580	ug/L	325.1	1.579	389,300
Cu3273_A		20,730	ug/L	80.63	0.3889	382,900
Fe2599_R		-4.877	ug/L	2.465	50.55	-1.345
K_7664_R		0.8821	ug/L	7.830	887.7	-1.770
Li6707_R		19,910	ug/L	40.65	0.2042	158,200
Mg2025_A		-2,264	ug/L	6.145	0.2714	342.3
Mn2576_R		20,700	ug/L	25.02	0.1208	73,860
Mo2020_A		5,336	ug/L	18.48	0.3462	8,530
Na5895_R		12.88	ug/L	20.11	156.2	114.2
Ni2316_A		20,960	ug/L	24.38	0.1163	52,080
Pb2203_A		21,500	ug/L	21.57	0.1003	23,240
Sb2068_A		21,220	ug/L	33.47	0.1577	6,956
Se1960_A		21,730	ug/L	33.92	0.1561	3,282
Si2516_R		118.9	ug/L	27.55	23.17	38.93
Sn1899_A		20,900	ug/L	25.78	0.1233	8,047
Sr4215_R		20,330	ug/L	25.25	0.1242	683,400
Ti3349_A		20,400	ug/L	141.5	0.6937	956,500
Tl1908_A		21,160	ug/L	46.10	0.2179	7,161

LRS1

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:15:09PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
V_2924_A		20,710	ug/L	50.56	0.2442	483,100
Zn2062_A		20,090	ug/L	18.78	0.09346	47,040
Y_3600_R		8,810.7	Cts/S	24.165	0.27427	8,810.7
Y_2243_A		8,916.6	Cts/S	15.297	0.17155	8,916.6
Y_3600_A		332,710	Cts/S	3,810.9	1.1454	332,710

LRS2

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:20:34PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-4.051	ug/L	0.1859	4.590	-1,308
Al3961_R		503,800	ug/L	11,260	2.236	181,300
As1891_A		8.137	ug/L	2.892	35.54	-4.858
Au2427_A		32.84	ug/L	5.555	16.91	261.2
B_2089_A		13.53	ug/L	2.088	15.43	11.53
Ba4554_R		9.543	ug/L	0.5395	5.653	288.0
Be3130_R		8.845	ug/L	0.3232	3.653	332.1
Ca3158_R		473,500	ug/L	12,420	2.623	247,500
Cd2265_A		3.326	ug/L	1.451	43.63	348.9
Co2286_A		1.848	ug/L	1.132	61.27	7.989
Cr2677_A		4.176	ug/L	1.218	29.16	105.2
Cu3273_A		5.260	ug/L	1.785	33.93	185.8
Fe2599_R		233,400	ug/L	4,304	1.844	144,000
K_7664_R		300,700	ug/L	5,347	1.778	139,500
Li6707_R		28.69	ug/L	0.3669	1.279	234.3
Mg2025_A		199,800	ug/L	282.7	0.1415	30,050
Mn2576_R		15.92	ug/L	0.5548	3.486	66.72
Mo2020_A		11.32	ug/L	2.917	25.76	18.27
Na5895_R		193,900	ug/L	4,610	2.377	229,800
Ni2316_A		4.724	ug/L	0.7787	16.48	-9.838
Pb2203_A		4.708	ug/L	0.9193	19.53	-53.04
Sb2068_A		5.444	ug/L	1.210	22.22	5.987
Se1960_A		13.38	ug/L	3.968	29.65	4.158
Si2516_R		49,910	ug/L	1,109	2.221	8,796
Sn1899_A		11.35	ug/L	2.977	26.23	5.069
Sr4215_R		15.50	ug/L	0.01894	0.1222	505.2
Ti3349_A		26.89	ug/L	1.768	6.575	1,154
Tl1908_A		7.305	ug/L	1.905	26.09	0.9757
V_2924_A		6.839	ug/L	1.268	18.55	217.7
Zn2062_A		4.907	ug/L	0.9109	18.56	10.81
Y_3600_R		8,674.9	Cts/S	31.242	0.36014	8,674.9
Y_2243_A		8,507.7	Cts/S	6.6690	0.078388	8,507.7
Y_3600_A		308,150	Cts/S	3,089.4	1.0026	308,150

ICSA

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:28:30PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-3.789	ug/L	0.1715	4.526	-1,019
Al3961_R		485,600	ug/L	10,200	2.100	174,300
As1891_A		-0.7489	ug/L	0.8915	119.0	-5.150
Au2427_A		2.683	ug/L	1.877	69.97	108.8
B_2089_A		5.466	ug/L	2.074	37.95	4.853
Ba4554_R		0.06773	ug/L	0.2079	307.0	40.36
Be3130_R		0.3349	ug/L	0.1005	30.02	8.517

ICSA

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:28:30PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ca3158_R		448,800	ug/L	8,064	1.797	234,000
Cd2265_A		1.507	ug/L	0.05993	3.976	248.7
Co2286_A		-0.3225	ug/L	0.04470	13.86	0.3399
Cr2677_A		-0.05249	ug/L	0.2878	548.3	23.75
Cu3273_A		-1.139	ug/L	0.2410	21.17	79.45
Fe2599_R		177,000	ug/L	1,846	1.043	108,900
K_7664_R		170.6	ug/L	8.450	4.953	76.84
Li6707_R		12.11	ug/L	2.048	16.91	104.4
Mg2025_A		472,300	ug/L	148.5	0.03144	70,900
Mn2576_R		-2.319	ug/L	0.01977	0.8525	1.248
Mo2020_A		0.1608	ug/L	0.04787	29.77	1.242
Na5895_R		100.1	ug/L	8.468	8.462	215.2
Ni2316_A		0.4187	ug/L	0.09423	22.51	-15.06
Pb2203_A		1.998	ug/L	0.8554	42.82	-54.94
Sb2068_A		-0.4676	ug/L	2.663	569.6	3.344
Se1960_A		6.945	ug/L	4.449	64.06	3.075
Si2516_R		33.05	ug/L	9.658	29.22	4.430
Sn1899_A		5.418	ug/L	1.190	21.96	2.883
Sr4215_R	W	4.791	ug/L	0.03854	0.8044	150.4
Ti3349_A		2.687	ug/L	0.1519	5.652	103.2
Tl1908_A		3.019	ug/L	1.584	52.48	-0.2691
V_2924_A		-0.3043	ug/L	0.05134	16.87	45.64
Zn2062_A		0.3849	ug/L	0.006679	1.735	0.7084
Y_3600_R		8,651.3	Cts/S	83.386	0.96386	8,651.3
Y_2243_A		8,486.7	Cts/S	0.24330	0.0028670	8,486.7
Y_3600_A		309,480	Cts/S	4,441.4	1.4351	309,480

ICSAB

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:33:07PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		201.0	ug/L	2.324	1.156	5,750
Al3961_R		464,200	ug/L	13,630	2.935	168,200
As1891_A		88.24	ug/L	1.312	1.486	16.79
Au2427_A		505.0	ug/L	14.78	2.926	2,133
B_2089_A		478.1	ug/L	1.653	0.3457	390.2
Ba4554_R		454.3	ug/L	15.53	3.419	11,980
Be3130_R		449.8	ug/L	12.94	2.876	17,230
Ca3158_R		426,500	ug/L	15,980	3.747	224,500
Cd2265_A		881.4	ug/L	0.1673	0.01898	13,510
Co2286_A		440.2	ug/L	0.5366	0.1219	1,593
Cr2677_A		457.9	ug/L	7.084	1.547	8,079
Cu3273_A		488.6	ug/L	8.030	1.644	8,486
Fe2599_R		168,700	ug/L	5,432	3.220	104,800
K_7664_R		19,360	ug/L	710.8	3.672	9,041
Li6707_R		505.3	ug/L	17.10	3.383	3,989
Mg2025_A		452,700	ug/L	340.2	0.07515	67,980
Mn2576_R		427.8	ug/L	14.92	3.488	1,522
Mo2020_A		463.9	ug/L	2.628	0.5665	706.9
Na5895_R		19,440	ug/L	632.2	3.251	23,280
Ni2316_A		865.5	ug/L	1.099	0.1270	2,032
Pb2203_A		44.17	ug/L	0.8070	1.827	-9.335
Sb2068_A		571.9	ug/L	1.073	0.1875	181.6
Se1960_A		51.89	ug/L	2.779	5.355	9.488
Si2516_R	F	222.8	ug/L	16.43	7.373	39.29
Sn1899_A		456.8	ug/L	1.712	0.3747	168.3

ICSAB

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:33:07PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Sr4215_R		470.5	ug/L	15.51	3.297	15,670
Ti3349_A		472.6	ug/L	5.518	1.167	20,610
Tl1908_A		88.21	ug/L	1.272	1.441	25.85
V_2924_A		468.2	ug/L	6.660	1.422	10,160
Zn2062_A		869.3	ug/L	1.031	0.1185	1,938
Y_3600_R		8,733.9	Cts/S	89.020	1.0193	8,733.9
Y_2243_A		8,486.5	Cts/S	2.5950	0.030578	8,486.5
Y_3600_A		309,380	Cts/S	4,020.7	1.2996	309,380

CCV

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:37:38PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		502.7	ug/L	2.766	0.5503	18,210
Al3961_R		12,130	ug/L	47.17	0.3889	4,483
As1891_A		493.9	ug/L	3.459	0.7002	130.6
Au2427_A		503.2	ug/L	22.06	4.384	2,249
B_2089_A		499.8	ug/L	0.1393	0.02788	450.2
Ba4554_R		484.3	ug/L	7.090	1.464	13,020
Be3130_R		486.2	ug/L	3.405	0.7004	18,990
Ca3158_R		12,270	ug/L	120.2	0.9795	6,571
Cd2265_A		497.9	ug/L	0.1902	0.03820	8,295
Co2286_A		501.4	ug/L	0.1633	0.03256	2,001
Cr2677_A		508.4	ug/L	1.916	0.3769	9,896
Cu3273_A		503.8	ug/L	3.400	0.6748	9,601
Fe2599_R		12,190	ug/L	137.9	1.131	7,720
K_7664_R		12,170	ug/L	170.9	1.405	5,791
Li6707_R		483.9	ug/L	4.337	0.8961	3,895
Mg2025_A		12,490	ug/L	6.215	0.04977	2,082
Mn2576_R		482.8	ug/L	3.418	0.7081	1,745
Mo2020_A		503.2	ug/L	1.918	0.3811	845.0
Na5895_R		12,140	ug/L	164.1	1.352	14,850
Ni2316_A		503.7	ug/L	0.1374	0.02727	1,312
Pb2203_A		503.7	ug/L	2.480	0.4924	568.1
Sb2068_A		495.0	ug/L	1.474	0.2978	170.2
Se1960_A		494.9	ug/L	3.130	0.6324	79.15
Si2516_R		12,120	ug/L	153.9	1.270	2,197
Sn1899_A		501.6	ug/L	2.533	0.5050	203.6
Sr4215_R		483.5	ug/L	5.321	1.100	16,410
Ti3349_A		505.8	ug/L	2.570	0.5082	24,390
Tl1908_A		502.0	ug/L	0.9725	0.1937	177.3
V_2924_A		504.2	ug/L	3.897	0.7728	12,040
Zn2062_A		499.4	ug/L	0.8884	0.1779	1,226
Y_3600_R		8,900.8	Cts/S	5.5552	0.062413	8,900.8
Y_2243_A		9,354.9	Cts/S	9.8397	0.10518	9,354.9
Y_3600_A		342,190	Cts/S	2,695.4	0.78769	342,190

CCB

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:42:15PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1828	ug/L	0.2691	147.2	11.06
Al3961_R		0.5889	ug/L	7.446	1,265	-0.9261
As1891_A		0.2050	ug/L	1.009	491.9	-0.3662
Au2427_A		4.489	ug/L	1.377	30.67	23.01

CCB

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:42:15PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
B_2089_A		4.869	ug/L	0.1213	2.491	4.944
Ba4554_R		0.4870	ug/L	0.3736	76.71	52.26
Be3130_R		0.2799	ug/L	0.06380	22.80	6.608
Ca3158_R		3.226	ug/L	2.051	63.57	-8.267
Cd2265_A		0.1418	ug/L	0.07283	51.37	2.645
Co2286_A		0.2194	ug/L	0.03414	15.56	4.055
Cr2677_A		0.2332	ug/L	0.06661	28.57	6.632
Cu3273_A		1.193	ug/L	0.06333	5.310	54.04
Fe2599_R		9.760	ug/L	0.4858	4.978	7.835
K_7664_R		59.67	ug/L	2.064	3.459	25.99
Li6707_R		1.055	ug/L	1.023	96.96	18.52
Mg2025_A		6.360	ug/L	5.805	91.26	-1.612
Mn2576_R		-0.9610	ug/L	0.1812	18.85	1.094
Mo2020_A		2.465	ug/L	0.2735	11.10	5.294
Na5895_R		32.02	ug/L	8.199	25.60	137.4
Ni2316_A		0.3641	ug/L	0.07266	19.96	0.4076
Pb2203_A		0.5720	ug/L	0.8727	152.6	-1.045
Sb2068_A		0.5127	ug/L	0.4546	88.68	0.1516
Se1960_A		0.5564	ug/L	0.8339	149.9	0.7887
Si2516_R		-11.84	ug/L	9.324	78.74	2.594
Sn1899_A		0.5322	ug/L	0.2343	44.02	1.219
Sr4215_R		-0.002828	ug/L	0.1316	4,651	-8.048
Ti3349_A		0.7826	ug/L	0.08150	10.41	22.74
Tl1908_A		2.417	ug/L	0.05759	2.383	-0.06409
V_2924_A		0.04973	ug/L	0.2761	555.2	-5.915
Zn2062_A		0.1054	ug/L	0.1120	106.3	0.09409
Y_3600_R		8,823.6	Cts/S	126.17	1.4300	8,823.6
Y_2243_A		9,461.3	Cts/S	12.208	0.12903	9,461.3
Y_3600_A		346,530	Cts/S	889.02	0.25655	346,530

LCSWID02ICW2

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:47:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	0.1218	ug/L	0.06449	52.95	24.85
Al3961_R	F	-0.1656	ug/L	8.003	4,832	-2.594
As1891_A	F	0.8652	ug/L	0.3563	41.18	-0.5487
Au2427_A		-0.6030	ug/L	0.2347	38.91	0.1125
B_2089_A	F	1.954	ug/L	0.03854	1.972	6.599
Ba4554_R	F	-0.4727	ug/L	0.2597	54.93	55.46
Be3130_R	F	0.01003	ug/L	0.08965	893.7	-7.890
Ca3158_R	F	17.71	ug/L	2.437	13.77	-1.227
Cd2265_A	F	0.02914	ug/L	0.01822	62.50	2.117
Co2286_A	F	-0.3493	ug/L	0.02526	7.231	5.071
Cr2677_A	F	-0.1343	ug/L	0.1079	80.32	-1.975
Cu3273_A	F	3.200	ug/L	0.6430	20.09	260.3
Fe2599_R	F	-1.085	ug/L	2.800	258.0	2.089
K_7664_R	F	1.293	ug/L	3.264	252.4	-3.305
Li6707_R	F	0.2527	ug/L	0.8027	317.7	25.23
Mg2025_A	F	8.079	ug/L	0.9197	11.38	-3.906
Mn2576_R	F	-1.093	ug/L	0.3528	32.27	1.312
Mo2020_A	F	-0.4235	ug/L	0.06225	14.70	1.133
Na5895_R	F	7.218	ug/L	6.023	83.45	223.0
Ni2316_A	F	0.2906	ug/L	0.005179	1.782	0.5993
Pb2203_A	F	0.7442	ug/L	0.03121	4.193	-2.432
Sb2068_A	F	-0.1132	ug/L	0.04900	43.27	-0.1793

LCSWID02ICW2

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:47:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Se1960_A	F	-1.485	ug/L	0.3386	22.79	1.328
Si2516_R	F	-20.38	ug/L	1.445	7.092	2.212
Sn1899_A	F	-0.7513	ug/L	0.06325	8.419	1.998
Sr4215_R	F	0.1037	ug/L	0.1237	119.3	-9.073
Ti3349_A	F	0.2077	ug/L	0.04426	21.31	-15.73
Tl1908_A	F	1.352	ug/L	0.07029	5.200	-1.297
V_2924_A	F	0.1032	ug/L	0.06313	61.19	-11.56
Zn2062_A	F	0.02259	ug/L	0.07902	349.9	-0.3183
Y_3600_R		18,300	Cts/S	480.04	2.6231	18,300
Y_2243_A		27,229	Cts/S	124.58	0.45752	27,229
Y_3600_A		979,070	Cts/S	84,023	8.5819	979,070

PBWID02ICW2

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:51:48PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1252	ug/L	0.04054	32.37	22.65
Al3961_R		-7.367	ug/L	8.951	121.5	-6.828
As1891_A		0.5899	ug/L	0.4082	69.20	-0.7548
Au2427_A		-0.8082	ug/L	0.2566	31.75	-2.538
B_2089_A		1.772	ug/L	0.03073	1.734	6.081
Ba4554_R		-0.5104	ug/L	0.09443	18.50	46.49
Be3130_R		0.005019	ug/L	0.03159	629.4	-7.290
Ca3158_R		16.22	ug/L	1.449	8.930	-2.470
Cd2265_A		0.01535	ug/L	0.01243	80.97	1.433
Co2286_A		-0.3024	ug/L	0.003874	1.281	5.571
Cr2677_A		-0.2305	ug/L	0.1764	76.54	-6.400
Cu3273_A		4.195	ug/L	0.1909	4.550	279.9
Fe2599_R		-1.657	ug/L	0.7355	44.38	1.194
K_7664_R		-23.12	ug/L	14.00	60.55	-23.36
Li6707_R		0.2449	ug/L	1.337	545.8	21.31
Mg2025_A		7.426	ug/L	1.035	13.93	-4.186
Mn2576_R		-1.188	ug/L	0.6467	54.44	0.4368
Mo2020_A		-0.6024	ug/L	0.07838	13.01	0.2591
Na5895_R		-5.542	ug/L	4.381	79.05	165.9
Ni2316_A		0.1179	ug/L	0.1417	120.3	-0.7030
Pb2203_A		1.118	ug/L	0.008079	0.7229	-1.187
Sb2068_A		0.1505	ug/L	0.4949	328.7	0.08348
Se1960_A		-0.8644	ug/L	1.051	121.6	1.606
Si2516_R		-13.14	ug/L	4.505	34.28	4.233
Sn1899_A		-0.7810	ug/L	0.1516	19.42	1.949
Sr4215_R		-0.04991	ug/L	0.05664	113.5	-17.31
Ti3349_A		-0.004770	ug/L	0.07682	1,610	-39.53
Tl1908_A		1.615	ug/L	0.1833	11.35	-1.014
V_2924_A		0.1664	ug/L	0.01928	11.58	-6.438
Zn2062_A		-0.07309	ug/L	0.01487	20.35	-0.9964
Y_3600_R		15,858	Cts/S	482.43	3.0422	15,858
Y_2243_A		27,045	Cts/S	202.41	0.74840	27,045
Y_3600_A		867,020	Cts/S	26,718	3.0816	867,020

SI2008-001

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:56:33PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2348	ug/L	0.02496	10.63	32.40

SI2008-001

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 1:56:33PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Al3961_R		-12.76	ug/L	0.05855	0.4590	-12.01
As1891_A		0.2738	ug/L	0.2014	73.56	-0.9874
Au2427_A		-0.8244	ug/L	0.1925	23.35	-2.675
B_2089_A		1.522	ug/L	0.3061	20.11	5.390
Ba4554_R		-0.5441	ug/L	0.05520	10.15	51.37
Be3130_R		-0.04277	ug/L	0.07337	171.5	-11.97
Ca3158_R		13.47	ug/L	1.251	9.285	-5.876
Cd2265_A		0.04441	ug/L	0.002897	6.522	2.800
Co2286_A		-0.3409	ug/L	0.07936	23.28	5.058
Cr2677_A		-0.2131	ug/L	0.06970	32.71	-5.403
Cu3273_A		4.682	ug/L	0.09738	2.080	300.4
Fe2599_R		-0.7600	ug/L	1.824	240.0	2.620
K_7664_R		-8.951	ug/L	1.601	17.89	-13.18
Li6707_R		0.2945	ug/L	0.05743	19.50	25.65
Mg2025_A		7.589	ug/L	1.125	14.83	-4.060
Mn2576_R		-1.481	ug/L	0.2912	19.67	-1.649
Mo2020_A		-0.5766	ug/L	0.04210	7.302	0.3769
Na5895_R		0.6870	ug/L	4.721	687.2	206.2
Ni2316_A		0.1558	ug/L	0.04348	27.90	-0.4139
Pb2203_A		0.9878	ug/L	0.5924	59.97	-1.578
Sb2068_A		0.3341	ug/L	0.2912	87.15	0.2658
Se1960_A		-0.1751	ug/L	1.586	905.8	1.891
Si2516_R		-24.95	ug/L	4.017	16.10	0.4691
Sn1899_A		-1.041	ug/L	0.1645	15.80	1.627
Sr4215_R		0.03497	ug/L	0.08684	248.3	-13.73
Ti3349_A		-0.01481	ug/L	0.06008	405.7	-40.40
Tl1908_A		1.382	ug/L	0.5562	40.25	-1.238
V_2924_A		0.2348	ug/L	0.04177	17.79	-2.227
Zn2062_A		0.04949	ug/L	0.02593	52.39	-0.1227
Y_3600_R		18,210	Cts/S	1,113.1	6.1126	18,210
Y_2243_A		26,715	Cts/S	368.71	1.3802	26,715
Y_3600_A		858,760	Cts/S	24,282	2.8276	858,760

SI2008-001A

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:01:17PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1176	ug/L	0.1518	129.1	22.79
Al3961_R		-11.38	ug/L	2.674	23.49	-10.69
As1891_A		0.8226	ug/L	0.2737	33.28	-0.5773
Au2427_A		-0.5740	ug/L	0.1940	33.81	0.5000
B_2089_A		0.9705	ug/L	0.1428	14.71	4.057
Ba4554_R		-0.5072	ug/L	0.06694	13.20	52.44
Be3130_R		-0.07557	ug/L	0.03228	42.72	-14.53
Ca3158_R		13.10	ug/L	0.4402	3.361	-6.125
Cd2265_A		0.009252	ug/L	0.009674	104.6	1.143
Co2286_A		-0.3912	ug/L	0.05704	14.58	4.554
Cr2677_A		-0.08510	ug/L	0.02770	32.55	0.9511
Cu3273_A		3.994	ug/L	0.2681	6.713	282.2
Fe2599_R		-1.355	ug/L	0.1990	14.68	1.745
K_7664_R		-30.14	ug/L	7.075	23.48	-33.32
Li6707_R		-0.06453	ug/L	0.4508	698.5	19.49
Mg2025_A		7.267	ug/L	1.427	19.64	-4.274
Mn2576_R		-1.264	ug/L	0.2930	23.18	0.06474
Mo2020_A		-0.6131	ug/L	0.1395	22.76	0.2051
Na5895_R		3.572	ug/L	3.176	88.92	208.7

SI2008-001A

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:01:17PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ni2316_A		0.2703	ug/L	0.03455	12.78	0.4412
Pb2203_A		0.9953	ug/L	0.1564	15.72	-1.588
Sb2068_A		0.2880	ug/L	0.2280	79.14	0.2254
Se1960_A		-1.089	ug/L	0.6098	56.00	1.502
Si2516_R		-15.25	ug/L	3.459	22.69	3.987
Sn1899_A		-0.9421	ug/L	0.4031	42.78	1.762
Sr4215_R		-0.06755	ug/L	0.006550	9.697	-20.58
Ti3349_A		0.09873	ug/L	0.04834	48.96	-28.21
Tl1908_A		1.567	ug/L	0.06219	3.968	-1.066
V_2924_A		0.2310	ug/L	0.04083	17.68	-2.664
Zn2062_A		0.02933	ug/L	0.02034	69.35	-0.2698
Y_3600_R		17,823	Cts/S	904.80	5.0766	17,823
Y_2243_A		27,056	Cts/S	70.770	0.26157	27,056
Y_3600_A		906,090	Cts/S	9,662.7	1.0664	906,090

SI2008-001L

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:06:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.8414	ug/L	0.02105	2.502	29.65
Al3961_R		-42.06	ug/L	9.710	23.09	-8.475
As1891_A		-2.728	ug/L	3.306	121.2	-0.8011
Au2427_A		-0.8705	ug/L	3.430	394.0	1.863
B_2089_A		20.50	ug/L	15.73	76.76	5.363
Ba4554_R		-2.239	ug/L	0.08164	3.646	55.36
Be3130_R		-0.2200	ug/L	0.04843	22.01	-11.98
Ca3158_R		91.63	ug/L	2.435	2.657	-0.5050
Cd2265_A		13.36	ug/L	12.94	96.92	52.61
Co2286_A		-0.3611	ug/L	0.5265	145.8	4.223
Cr2677_A		-0.8176	ug/L	0.4279	52.34	-3.680
Cu3273_A		18.12	ug/L	4.206	23.21	278.3
Fe2599_R		-12.02	ug/L	10.39	86.45	0.3453
K_7664_R		-145.5	ug/L	10.76	7.399	-32.12
Li6707_R		-0.7284	ug/L	4.525	621.1	18.30
Mg2025_A		1,402	ug/L	1,348	96.09	50.65
Mn2576_R		-6.509	ug/L	2.093	32.16	-0.1864
Mo2020_A		0.1114	ug/L	1.399	1,256	1.576
Na5895_R		-5.222	ug/L	67.07	1,284	197.6
Ni2316_A		1.409	ug/L	0.8302	58.94	0.1204
Pb2203_A		2.640	ug/L	3.459	131.0	-1.369
Sb2068_A		-0.9039	ug/L	0.7697	85.15	-0.1159
Se1960_A		-3.805	ug/L	4.038	106.1	0.8324
Si2516_R		-87.73	ug/L	19.24	21.93	3.214
Sn1899_A		0.8477	ug/L	1.992	235.0	1.571
Sr4215_R		0.3169	ug/L	0.1872	59.09	-11.60
Ti3349_A		0.3225	ug/L	1.023	317.1	-32.59
Tl1908_A		7.483	ug/L	0.6653	8.891	-0.5882
V_2924_A		0.6369	ug/L	0.5784	90.82	-9.547
Zn2062_A		18.47	ug/L	17.91	96.98	10.43
Y_3600_R		17,775	Cts/S	866.63	4.8757	17,775
Y_2243_A		14,421	Cts/S	7,048.1	48.873	14,421
Y_3600_A		968,660	Cts/S	151,720	15.663	968,660

SI2008-001P

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ

SI2008-001P

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:11:26PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.27	ug/L	0.01420	0.02770	1,835
Al3961_R		2,163	ug/L	11.17	0.5163	798.2
As1891_A		104.6	ug/L	2.392	2.287	27.16
Au2427_A		5.951	ug/L	0.4112	6.910	25.39
B_2089_A		555.5	ug/L	0.5873	0.1057	484.0
Ba4554_R	W	2,014	ug/L	23.34	1.159	53,870
Be3130_R		52.18	ug/L	0.1159	0.2221	2,016
Ca3158_R		15,590	ug/L	120.0	0.7697	8,328
Cd2265_A		286.5	ug/L	0.03573	0.01247	4,721
Co2286_A		522.5	ug/L	0.2282	0.04367	2,067
Cr2677_A		221.5	ug/L	2.524	1.140	4,262
Cu3273_A		260.5	ug/L	1.094	0.4201	4,919
Fe2599_R		1,110	ug/L	8.175	0.7364	702.6
K_7664_R		12,450	ug/L	92.98	0.7469	5,910
Li6707_R		512.4	ug/L	6.144	1.199	4,112
Mg2025_A		7,550	ug/L	8.122	0.1076	1,253
Mn2576_R		506.9	ug/L	2.178	0.4297	1,826
Mo2020_A		104.6	ug/L	0.4846	0.4631	174.9
Na5895_R	W	33,060	ug/L	372.3	1.126	40,160
Ni2316_A		521.9	ug/L	0.1750	0.03353	1,348
Pb2203_A		104.9	ug/L	0.7282	0.6941	116.1
Sb2068_A		103.9	ug/L	0.7751	0.7458	33.91
Se1960_A		109.7	ug/L	3.939	3.591	17.93
Si2516_R		4,630	ug/L	31.86	0.6881	840.1
Sn1899_A		525.6	ug/L	3.735	0.7105	211.3
Sr4215_R		592.4	ug/L	6.918	1.168	20,050
Ti3349_A		532.0	ug/L	1.680	0.3158	25,340
Tl1908_A		121.2	ug/L	3.426	2.826	40.16
V_2924_A		532.0	ug/L	3.147	0.5915	12,640
Zn2062_A		547.4	ug/L	0.2150	0.03927	1,333
Y_3600_R		8,875.2	Cts/S	104.63	1.1789	8,875.2
Y_2243_A		9,269.7	Cts/S	3.9786	0.042921	9,269.7
Y_3600_A		338,180	Cts/S	3,354.7	0.99198	338,180

SI2008-001S

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:16:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.82	ug/L	0.3919	0.7710	1,808
Al3961_R		2,126	ug/L	33.24	1.564	767.2
As1891_A		104.6	ug/L	0.1488	0.1422	27.15
Au2427_A		5.704	ug/L	0.2295	4.023	24.32
B_2089_A		546.3	ug/L	0.5410	0.09903	475.9
Ba4554_R	W	1,990	ug/L	22.13	1.112	52,050
Be3130_R		51.63	ug/L	0.1819	0.3524	1,951
Ca3158_R		15,340	ug/L	132.6	0.8644	8,014
Cd2265_A		281.5	ug/L	0.4368	0.1552	4,637
Co2286_A		515.1	ug/L	0.1225	0.02379	2,037
Cr2677_A		219.3	ug/L	3.188	1.453	4,195
Cu3273_A		259.5	ug/L	1.247	0.4806	4,871
Fe2599_R		1,099	ug/L	4.868	0.4429	680.2
K_7664_R		12,390	ug/L	93.53	0.7548	5,752
Li6707_R		505.4	ug/L	3.763	0.7445	3,966
Mg2025_A		7,424	ug/L	9.823	0.1323	1,232
Mn2576_R		503.2	ug/L	4.806	0.9551	1,773
Mo2020_A		103.6	ug/L	0.7539	0.7277	173.1

SI2008-001S

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:16:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	32,600	ug/L	404.1	1.239	38,740
Ni2316_A		514.7	ug/L	0.8759	0.1702	1,328
Pb2203_A		104.0	ug/L	0.4380	0.4210	115.0
Sb2068_A		103.2	ug/L	1.454	1.409	33.67
Se1960_A		108.0	ug/L	0.2744	0.2540	17.66
Si2516_R		4,582	ug/L	49.10	1.072	813.2
Sn1899_A		518.5	ug/L	4.134	0.7973	208.4
Sr4215_R		585.0	ug/L	5.069	0.8665	19,370
Ti3349_A		527.2	ug/L	2.106	0.3995	24,960
Tl1908_A		121.2	ug/L	1.145	0.9450	40.16
V_2924_A		526.2	ug/L	3.939	0.7486	12,430
Zn2062_A		539.3	ug/L	0.1452	0.02693	1,313
Y_3600_R		8,679.5	Cts/S	117.03	1.3484	8,679.5
Y_2243_A		9,265.9	Cts/S	15.201	0.16405	9,265.9
Y_3600_A		336,120	Cts/S	4,139.4	1.2315	336,120

LCSWID02ICW2

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:20:47PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.17	ug/L	0.9311	1.819	1,850
Al3961_R		2,127	ug/L	69.61	3.272	757.5
As1891_A		103.1	ug/L	0.9866	0.9571	27.07
Au2427_A		5.903	ug/L	0.05577	0.9447	25.28
B_2089_A		527.3	ug/L	0.6257	0.1187	465.0
Ba4554_R		2,046	ug/L	38.03	1.859	52,920
Be3130_R		53.08	ug/L	1.059	1.995	1,984
Ca3158_R		2,625	ug/L	53.44	2.036	1,349
Cd2265_A		261.9	ug/L	0.1494	0.05705	4,365
Co2286_A		523.0	ug/L	0.8055	0.1540	2,092
Cr2677_A		212.3	ug/L	2.393	1.127	4,126
Cu3273_A		262.4	ug/L	2.282	0.8696	5,002
Fe2599_R		1,070	ug/L	25.51	2.385	654.8
K_7664_R		10,700	ug/L	169.2	1.581	4,915
Li6707_R		523.3	ug/L	9.337	1.784	4,061
Mg2025_A		5,236	ug/L	5.762	0.1100	884.2
Mn2576_R		527.0	ug/L	15.64	2.968	1,836
Mo2020_A		104.3	ug/L	0.6321	0.6061	176.3
Na5895_R		7,949	ug/L	134.3	1.690	9,414
Ni2316_A		523.4	ug/L	0.1638	0.03130	1,367
Pb2203_A		106.2	ug/L	1.397	1.316	118.8
Sb2068_A		102.7	ug/L	0.4654	0.4533	33.86
Se1960_A		108.6	ug/L	0.3071	0.2828	17.97
Si2516_R		1,038	ug/L	40.97	3.949	185.8
Sn1899_A		522.3	ug/L	0.4024	0.07705	212.4
Sr4215_R		525.5	ug/L	10.77	2.049	17,210
Ti3349_A		526.7	ug/L	3.949	0.7498	25,330
Tl1908_A	F	122.4	ug/L	1.038	0.8479	41.07
V_2924_A		527.9	ug/L	4.934	0.9348	12,670
Zn2062_A		516.5	ug/L	0.3220	0.06235	1,272
Y_3600_R		8,587.9	Cts/S	272.42	3.1721	8,587.9
Y_2243_A		9,377.2	Cts/S	18.133	0.19338	9,377.2
Y_3600_A		341,470	Cts/S	3,879.2	1.1360	341,470

PBWID02ICW2

Method Name: K6010-2011 Method Revision: 1,726

PBWID02ICW2

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:25:29PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.05065	ug/L	0.01169	23.08	6.213
Al3961_R		-7.719	ug/L	5.897	76.39	-4.006
As1891_A		-0.9486	ug/L	1.258	132.7	-0.6773
Au2427_A		-0.2173	ug/L	0.1919	88.33	1.788
B_2089_A		1.994	ug/L	0.3264	16.37	2.347
Ba4554_R		0.8866	ug/L	0.3234	36.47	63.18
Be3130_R		0.07283	ug/L	0.03599	49.41	-1.420
Ca3158_R		8.588	ug/L	8.476	98.69	-5.486
Cd2265_A		0.04316	ug/L	0.005466	12.66	0.9813
Co2286_A		0.1733	ug/L	0.2415	139.4	3.865
Cr2677_A		-0.1463	ug/L	0.1157	79.08	-0.8398
Cu3273_A		0.4882	ug/L	0.07970	16.32	40.36
Fe2599_R		6.548	ug/L	1.237	18.89	5.844
K_7664_R		18.29	ug/L	20.86	114.1	6.560
Li6707_R		1.835	ug/L	0.2805	15.29	24.77
Mg2025_A		4.896	ug/L	0.7090	14.48	-1.868
Mn2576_R		-1.323	ug/L	0.4545	34.35	-0.2188
Mo2020_A		0.3297	ug/L	0.1064	32.26	1.671
Na5895_R		21.65	ug/L	5.732	26.47	125.6
Ni2316_A		0.2168	ug/L	0.08961	41.34	0.01456
Pb2203_A		0.08446	ug/L	0.2951	349.4	-1.600
Sb2068_A		0.3211	ug/L	0.3048	94.92	0.08295
Se1960_A		3.572	ug/L	0.7822	21.90	1.271
Si2516_R		-2.284	ug/L	4.768	208.7	4.344
Sn1899_A		1.130	ug/L	0.1042	9.220	1.462
Sr4215_R		0.2196	ug/L	0.07302	33.24	-0.5483
Ti3349_A		0.4992	ug/L	0.09803	19.64	8.763
Tl1908_A		2.447	ug/L	0.3740	15.28	-0.05245
V_2924_A		0.08743	ug/L	0.3023	345.7	-4.621
Zn2062_A		0.4533	ug/L	0.01810	3.993	0.9597
Y_3600_R		8,866.7	Cts/S	141.28	1.5933	8,866.7
Y_2243_A		9,457.1	Cts/S	22.218	0.23493	9,457.1
Y_3600_A		345,510	Cts/S	814.96	0.23587	345,510

SI2008-001

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:30:18PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1754	ug/L	0.1308	74.57	-2.400
Al3961_R		88.86	ug/L	17.79	20.02	33.27
As1891_A		-0.6169	ug/L	0.5206	84.38	-0.5786
Au2427_A		0.02249	ug/L	0.1253	557.4	2.850
B_2089_A		22.20	ug/L	0.6441	2.901	19.85
Ba4554_R		32.41	ug/L	0.9082	2.803	905.9
Be3130_R		0.1993	ug/L	0.002365	1.187	3.440
Ca3158_R		12,580	ug/L	102.2	0.8123	6,723
Cd2265_A		22.40	ug/L	0.1210	0.5400	370.7
Co2286_A		0.09031	ug/L	0.004548	5.036	3.493
Cr2677_A		9.264	ug/L	0.1079	1.165	181.0
Cu3273_A		0.7255	ug/L	0.06940	9.565	44.18
Fe2599_R		66.35	ug/L	0.5674	0.8552	43.62
K_7664_R		1,967	ug/L	39.48	2.007	932.0
Li6707_R		0.8358	ug/L	1.811	216.6	16.80
Mg2025_A		2,313	ug/L	9.191	0.3974	378.0
Mn2576_R		-0.6316	ug/L	0.3340	52.87	2.280
Mo2020_A		0.07187	ug/L	0.1438	200.1	1.215

SI2008-001

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:30:18PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		24,730	ug/L	167.2	0.6760	30,070
Ni2316_A		0.6282	ug/L	0.2904	46.23	1.075
Pb2203_A		-0.2986	ug/L	0.2285	76.52	-2.023
Sb2068_A		-0.4518	ug/L	1.743	385.8	-0.1609
Se1960_A		1.678	ug/L	0.3496	20.84	0.9523
Si2516_R		3,452	ug/L	74.88	2.169	627.6
Sn1899_A		1.349	ug/L	0.4350	32.23	1.526
Sr4215_R		79.66	ug/L	0.7223	0.9067	2,691
Ti3349_A		2.580	ug/L	1.758	68.14	108.2
Tl1908_A		1.824	ug/L	1.224	67.11	-0.2769
V_2924_A		0.2197	ug/L	0.1647	75.00	-2.209
Zn2062_A		27.20	ug/L	0.1084	0.3986	66.30
Y_3600_R		8,878.2	Cts/S	27.758	0.31265	8,878.2
Y_2243_A		9,301.3	Cts/S	22.484	0.24173	9,301.3
Y_3600_A		339,890	Cts/S	992.66	0.29205	339,890

CCV

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:35:06PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		507.1	ug/L	7.729	1.524	18,080
Al3961_R		12,280	ug/L	134.5	1.095	4,501
As1891_A		491.1	ug/L	1.600	0.3258	129.2
Au2427_A		497.2	ug/L	19.33	3.887	2,211
B_2089_A		498.1	ug/L	0.2919	0.05860	446.3
Ba4554_R		482.9	ug/L	6.287	1.302	12,880
Be3130_R		491.5	ug/L	5.379	1.094	19,040
Ca3158_R		12,170	ug/L	206.6	1.698	6,468
Cd2265_A		499.5	ug/L	0.3444	0.06894	8,278
Co2286_A		501.7	ug/L	0.07051	0.01405	1,992
Cr2677_A		511.6	ug/L	7.029	1.374	9,802
Cu3273_A		505.4	ug/L	4.728	0.9354	9,482
Fe2599_R		12,470	ug/L	188.3	1.510	7,832
K_7664_R		12,320	ug/L	239.5	1.943	5,820
Li6707_R		488.6	ug/L	6.081	1.244	3,901
Mg2025_A		12,530	ug/L	25.00	0.1995	2,079
Mn2576_R		489.7	ug/L	4.672	0.9541	1,756
Mo2020_A		501.2	ug/L	2.910	0.5806	837.3
Na5895_R		12,150	ug/L	215.2	1.771	14,750
Ni2316_A		502.8	ug/L	0.4325	0.08602	1,303
Pb2203_A		505.6	ug/L	0.4421	0.08745	567.2
Sb2068_A		492.2	ug/L	4.124	0.8379	168.4
Se1960_A		496.1	ug/L	6.407	1.291	78.92
Si2516_R		12,240	ug/L	256.7	2.097	2,202
Sn1899_A		501.2	ug/L	1.571	0.3135	202.3
Sr4215_R		486.9	ug/L	5.036	1.034	16,400
Ti3349_A		510.8	ug/L	10.15	1.988	24,250
Tl1908_A		504.1	ug/L	3.583	0.7108	177.1
V_2924_A		511.2	ug/L	7.388	1.445	12,020
Zn2062_A		497.3	ug/L	0.4959	0.09972	1,215
Y_3600_R		8,831.6	Cts/S	135.26	1.5315	8,831.6
Y_2243_A		9,306.0	Cts/S	7.8754	0.084627	9,306.0
Y_3600_A		336,870	Cts/S	5,162.0	1.5324	336,870

CCB

Method Name: K6010-2011 Method Revision: 1,726

CCB

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:39:42PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2211	ug/L	0.09919	44.86	12.41
Al3961_R		-12.93	ug/L	9.747	75.37	-5.787
As1891_A		0.4797	ug/L	0.8061	168.0	-0.2925
Au2427_A		2.903	ug/L	0.7537	25.96	15.81
B_2089_A		1.562	ug/L	0.2099	13.43	1.991
Ba4554_R		0.07390	ug/L	0.2651	358.7	40.99
Be3130_R		0.3049	ug/L	0.05135	16.84	7.489
Ca3158_R		8.583	ug/L	8.402	97.89	-5.349
Cd2265_A		0.1917	ug/L	0.08583	44.78	3.475
Co2286_A		0.1189	ug/L	0.1164	97.90	3.635
Cr2677_A		-0.2106	ug/L	0.06256	29.71	-2.097
Cu3273_A		0.01118	ug/L	0.3436	3,073	31.13
Fe2599_R		10.94	ug/L	0.5519	5.046	8.494
K_7664_R		-4.847	ug/L	41.56	857.5	-4.324
Li6707_R		1.068	ug/L	1.402	131.3	18.33
Mg2025_A		3.932	ug/L	4.022	102.3	-2.022
Mn2576_R		-0.9028	ug/L	0.1663	18.42	1.281
Mo2020_A		1.503	ug/L	0.2631	17.51	3.652
Na5895_R		18.72	ug/L	9.499	50.75	120.4
Ni2316_A		0.08477	ug/L	0.02200	25.95	-0.3299
Pb2203_A		0.2632	ug/L	0.3349	127.2	-1.393
Sb2068_A		0.5280	ug/L	0.2729	51.70	0.1577
Se1960_A		0.6686	ug/L	3.491	522.1	0.8048
Si2516_R		-4.552	ug/L	2.258	49.60	3.875
Sn1899_A		0.0004070	ug/L	0.5016	123,400	0.9986
Sr4215_R		-0.07865	ug/L	0.2366	300.8	-10.51
Ti3349_A		0.2693	ug/L	0.2239	83.16	-2.350
Tl1908_A		2.122	ug/L	0.07719	3.637	-0.1707
V_2924_A		0.1398	ug/L	0.05232	37.44	-3.527
Zn2062_A		-0.02419	ug/L	0.08775	362.8	-0.2266
Y_3600_R		8,737.5	Cts/S	93.531	1.0705	8,737.5
Y_2243_A		9,435.8	Cts/S	8.8306	0.093586	9,435.8
Y_3600_A		344,560	Cts/S	373.64	0.10844	344,560

SI2008-001A

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:44:30PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		530.4	ug/L	1.127	0.2124	18,830
Al3961_R		10,950	ug/L	227.9	2.081	4,032
As1891_A		529.7	ug/L	3.792	0.7159	139.5
Au2427_A		4.380	ug/L	0.001117	0.02551	20.99
B_2089_A		579.1	ug/L	2.054	0.3547	516.9
Ba4554_R		540.1	ug/L	6.273	1.161	14,450
Be3130_R		544.3	ug/L	10.10	1.856	21,170
Ca3158_R		17,810	ug/L	245.5	1.379	9,503
Cd2265_A		571.9	ug/L	1.082	0.1891	9,452
Co2286_A		554.7	ug/L	0.3358	0.06054	2,199
Cr2677_A		568.8	ug/L	1.407	0.2473	10,830
Cu3273_A		556.0	ug/L	0.1459	0.02624	10,360
Fe2599_R		5,736	ug/L	143.0	2.494	3,618
K_7664_R		12,500	ug/L	289.3	2.315	5,923
Li6707_R		534.0	ug/L	8.095	1.516	4,278
Mg2025_A		8,042	ug/L	16.52	0.2054	1,340
Mn2576_R		534.3	ug/L	10.12	1.895	1,922
Mo2020_A		539.6	ug/L	3.906	0.7238	900.0

SI2008-001A

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:44:30PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	29,540	ug/L	354.0	1.199	35,840
Ni2316_A		555.4	ug/L	0.009305	0.001675	1,438
Pb2203_A		543.8	ug/L	0.2756	0.05068	609.5
Sb2068_A		533.2	ug/L	3.275	0.6141	183.7
Se1960_A		550.8	ug/L	5.685	1.032	87.39
Si2516_R		3,662	ug/L	73.60	2.010	665.3
Sn1899_A		1.623	ug/L	0.4619	28.46	1.635
Sr4215_R		597.1	ug/L	9.510	1.593	20,190
Ti3349_A		553.0	ug/L	3.810	0.6889	26,090
Tl1908_A		573.2	ug/L	2.312	0.4033	201.3
V_2924_A		569.2	ug/L	2.440	0.4286	13,290
Zn2062_A		597.5	ug/L	0.4623	0.07737	1,458
Y_3600_R		8,863.2	Cts/S	32.442	0.36603	8,863.2
Y_2243_A		9,292.4	Cts/S	12.932	0.13917	9,292.4
Y_3600_A		334,680	Cts/S	1,698.1	0.50737	334,680

SI2001-001

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:49:09PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-2.295	ug/L	0.5199	22.65	-1,033
Al3961_R	W	140,400	ug/L	4,004	2.851	54,550
As1891_A		95.85	ug/L	0.4580	0.4778	20.15
Au2427_A		36.13	ug/L	1.400	3.875	225.5
B_2089_A		13.61	ug/L	0.2918	2.144	13.00
Ba4554_R		502.4	ug/L	17.33	3.449	14,210
Be3130_R		8.080	ug/L	0.1169	1.446	125.8
Ca3158_R		18,600	ug/L	588.9	3.166	10,490
Cd2265_A		3.695	ug/L	0.4838	13.09	291.8
Co2286_A		50.91	ug/L	0.08395	0.1649	284.2
Cr2677_A		365.8	ug/L	0.6350	0.1736	7,154
Cu3273_A		320.4	ug/L	0.1923	0.06000	6,060
Fe2599_R	W	157,200	ug/L	4,957	3.154	104,700
K_7664_R		11,860	ug/L	417.7	3.521	5,943
Li6707_R		218.1	ug/L	7.260	3.328	1,853
Mg2025_A	W	39,980	ug/L	112.7	0.2818	6,750
Mn2576_R	W	4,209	ug/L	126.3	3.001	15,970
Mo2020_A		9.878	ug/L	0.5223	5.288	18.09
Na5895_R		1,613	ug/L	53.40	3.311	2,167
Ni2316_A		185.4	ug/L	0.6619	0.3570	477.9
Pb2203_A	W	1,321	ug/L	4.602	0.3482	1,517
Sb2068_A		0.1361	ug/L	1.479	1,086	3.219
Se1960_A		4.188	ug/L	0.3398	8.113	2.400
Si2516_R		1,743	ug/L	35.68	2.047	332.4
Sn1899_A		53.91	ug/L	0.02762	0.05124	23.27
Sr4215_R		106.4	ug/L	3.849	3.618	3,794
Ti3349_A	W	6,892	ug/L	62.01	0.8997	332,400
Tl1908_A		0.3392	ug/L	0.3637	107.2	-8.207
V_2924_A		295.2	ug/L	0.2407	0.08154	7,283
Zn2062_A		977.8	ug/L	1.827	0.1869	2,457
Y_3600_R		9,367.0	Cts/S	16.613	0.17736	9,367.0
Y_2243_A		9,564.5	Cts/S	24.364	0.25474	9,564.5
Y_3600_A		342,350	Cts/S	1,308.9	0.38234	342,350

SI2001-002

Method Name: K6010-2011 Method Revision: 1,726

SI2001-002

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:53:55PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.6802	ug/L	0.3763	55.33	-721.9
Al3961_R	W	101,200	ug/L	64.42	0.06368	38,140
As1891_A		68.35	ug/L	1.387	2.029	14.11
Au2427_A		26.93	ug/L	0.5968	2.216	165.2
B_2089_A		13.17	ug/L	0.3304	2.508	12.49
Ba4554_R		368.2	ug/L	4.221	1.146	10,120
Be3130_R		5.720	ug/L	0.03808	0.6658	79.24
Ca3158_R		18,100	ug/L	130.5	0.7214	9,906
Cd2265_A		4.051	ug/L	0.01464	0.3614	235.3
Co2286_A		33.79	ug/L	0.1895	0.5610	194.4
Cr2677_A		348.3	ug/L	1.822	0.5232	6,852
Cu3273_A		232.6	ug/L	0.7160	0.3078	4,436
Fe2599_R	W	114,800	ug/L	459.6	0.4005	74,210
K_7664_R		6,966	ug/L	74.76	1.073	3,386
Li6707_R		167.9	ug/L	0.7610	0.4531	1,387
Mg2025_A	W	25,600	ug/L	3.000	0.01172	4,303
Mn2576_R	W	3,311	ug/L	28.03	0.8466	12,190
Mo2020_A		7.157	ug/L	0.03910	0.5464	13.38
Na5895_R		3,227	ug/L	32.45	1.006	4,108
Ni2316_A		129.6	ug/L	0.2744	0.2118	332.1
Pb2203_A		763.8	ug/L	0.9358	0.1225	870.6
Sb2068_A		-0.1246	ug/L	0.6834	548.6	2.460
Se1960_A		2.848	ug/L	2.347	82.38	1.917
Si2516_R		1,678	ug/L	46.22	2.754	311.8
Sn1899_A		40.11	ug/L	0.8120	2.024	17.51
Sr4215_R		81.90	ug/L	0.8481	1.036	2,833
Ti3349_A	W	5,086	ug/L	37.72	0.7418	246,900
Tl1908_A		-0.7340	ug/L	0.6666	90.82	-6.798
V_2924_A		215.8	ug/L	0.2546	0.1180	5,348
Zn2062_A		829.5	ug/L	0.3324	0.04007	2,076
Y_3600_R		9,091.4	Cts/S	26.042	0.28645	9,091.4
Y_2243_A		9,528.3	Cts/S	2.1264	0.022317	9,528.3
Y_3600_A		344,640	Cts/S	931.20	0.27020	344,640

SI2001-003

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:58:42PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.9479	ug/L	0.02329	2.457	-908.4
Al3961_R	W	74,470	ug/L	1,381	1.855	27,460
As1891_A		122.9	ug/L	0.6776	0.5513	26.85
Au2427_A		22.45	ug/L	0.2211	0.9848	167.9
B_2089_A		6.762	ug/L	0.1161	1.716	6.644
Ba4554_R		642.1	ug/L	11.82	1.841	17,230
Be3130_R		5.053	ug/L	0.05329	1.055	56.84
Ca3158_R	W	27,890	ug/L	516.3	1.851	14,940
Cd2265_A		2.118	ug/L	0.2729	12.89	248.3
Co2286_A		47.56	ug/L	0.00007000	0.0001460	242.8
Cr2677_A		172.3	ug/L	0.6328	0.3672	3,325
Cu3273_A		431.5	ug/L	2.440	0.5655	8,037
Fe2599_R	W	150,300	ug/L	3,106	2.066	95,100
K_7664_R	W	31,680	ug/L	638.1	2.014	15,070
Li6707_R		254.8	ug/L	4.686	1.839	2,054
Mg2025_A	W	44,720	ug/L	111.5	0.2494	7,372
Mn2576_R	W	2,673	ug/L	51.96	1.944	9,634
Mo2020_A		6.961	ug/L	0.1342	1.927	12.75

SI2001-003

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 2:58:42PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		17,100	ug/L	330.9	1.935	20,870
Ni2316_A		136.6	ug/L	0.4550	0.3331	340.2
Pb2203_A	W	1,803	ug/L	0.2553	0.01416	2,035
Sb2068_A		4.260	ug/L	1.481	34.77	3.471
Se1960_A		-0.3113	ug/L	1.867	600.0	1.336
Si2516_R		1,338	ug/L	19.16	1.432	242.2
Sn1899_A		130.3	ug/L	0.3297	0.2531	53.49
Sr4215_R		121.1	ug/L	2.370	1.957	4,101
Ti3349_A	W	4,891	ug/L	29.14	0.5958	231,700
Tl1908_A		0.8456	ug/L	0.7917	93.63	-5.484
V_2924_A		186.2	ug/L	1.055	0.5667	4,547
Zn2062_A	W	2,003	ug/L	3.862	0.1928	4,916
Y_3600_R		8,892.8	Cts/S	35.580	0.40010	8,892.8
Y_2243_A		9,335.6	Cts/S	1.4664	0.015707	9,335.6
Y_3600_A		336,370	Cts/S	2,345.6	0.69732	336,370

SI2001-004

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:03:23PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.352	ug/L	0.1809	13.38	-872.3
Al3961_R	W	131,200	ug/L	932.3	0.7107	49,190
As1891_A		80.25	ug/L	1.952	2.432	16.78
Au2427_A		18.52	ug/L	0.5384	2.908	151.6
B_2089_A		8.973	ug/L	0.04020	0.4480	8.802
Ba4554_R		354.6	ug/L	6.326	1.784	9,695
Be3130_R		7.086	ug/L	0.05350	0.7549	134.4
Ca3158_R		9,939	ug/L	142.7	1.436	5,407
Cd2265_A		1.250	ug/L	0.07772	6.218	221.2
Co2286_A		41.55	ug/L	0.08218	0.1978	227.8
Cr2677_A		255.4	ug/L	1.906	0.7464	5,054
Cu3273_A		116.8	ug/L	1.023	0.8755	2,235
Fe2599_R	W	136,400	ug/L	1,010	0.7406	87,730
K_7664_R		9,220	ug/L	122.3	1.326	4,459
Li6707_R		202.6	ug/L	1.862	0.9190	1,663
Mg2025_A	W	34,230	ug/L	42.22	0.1234	5,822
Mn2576_R	W	2,156	ug/L	22.93	1.063	7,903
Mo2020_A		5.192	ug/L	0.4693	9.039	10.11
Na5895_R		800.2	ug/L	13.92	1.739	1,089
Ni2316_A		214.9	ug/L	1.104	0.5137	562.9
Pb2203_A		578.1	ug/L	1.485	0.2569	660.1
Sb2068_A		-1.192	ug/L	0.2635	22.10	2.215
Se1960_A		4.294	ug/L	3.020	70.32	2.208
Si2516_R		1,683	ug/L	1.268	0.07534	310.3
Sn1899_A		48.00	ug/L	0.2006	0.4178	20.99
Sr4215_R		63.30	ug/L	0.7145	1.129	2,176
Ti3349_A	W	5,040	ug/L	8.283	0.1643	245,800
Tl1908_A		2.131	ug/L	1.875	87.99	-4.899
V_2924_A		212.2	ug/L	1.122	0.5288	5,312
Zn2062_A		757.6	ug/L	0.2841	0.03750	1,918
Y_3600_R		9,043.2	Cts/S	40.308	0.44572	9,043.2
Y_2243_A		9,638.2	Cts/S	12.750	0.13228	9,638.2
Y_3600_A		346,230	Cts/S	1,924.2	0.55576	346,230

SI2001-005

Method Name: K6010-2011 Method Revision: 1,726

SI2001-005

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:08:08PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.536	ug/L	0.5945	38.72	-1,077
Al3961_R	W	110,300	ug/L	2,001	1.814	41,540
As1891_A		93.23	ug/L	3.676	3.943	18.53
Au2427_A		24.19	ug/L	1.000	4.133	187.3
B_2089_A		45.91	ug/L	0.2176	0.4739	41.10
Ba4554_R	W	1,030	ug/L	18.21	1.769	28,210
Be3130_R		7.200	ug/L	0.02395	0.3327	57.47
Ca3158_R	W	45,480	ug/L	677.0	1.488	24,890
Cd2265_A		2.996	ug/L	0.1442	4.813	294.1
Co2286_A		71.75	ug/L	0.2251	0.3137	373.9
Cr2677_A		293.9	ug/L	1.595	0.5429	5,697
Cu3273_A		747.9	ug/L	2.773	0.3708	14,030
Fe2599_R	W	170,100	ug/L	2,772	1.630	109,900
K_7664_R	W	28,600	ug/L	422.8	1.479	13,900
Li6707_R		301.1	ug/L	3.516	1.168	2,477
Mg2025_A	W	49,040	ug/L	117.4	0.2395	8,149
Mn2576_R	W	2,851	ug/L	47.14	1.654	10,490
Mo2020_A		6.982	ug/L	0.04198	0.6012	12.88
Na5895_R		7,386	ug/L	122.6	1.661	9,262
Ni2316_A		233.7	ug/L	0.1713	0.07329	595.7
Pb2203_A	W	1,992	ug/L	5.200	0.2610	2,263
Sb2068_A		3.009	ug/L	0.2550	8.476	3.464
Se1960_A		6.341	ug/L	0.1589	2.505	2.549
Si2516_R		2,312	ug/L	2.376	0.1028	427.1
Sn1899_A		187.7	ug/L	0.6112	0.3255	77.26
Sr4215_R		587.6	ug/L	11.18	1.903	20,360
Ti3349_A	W	7,922	ug/L	21.71	0.2740	378,300
Tl1908_A		3.921	ug/L	0.0008100	0.02067	-6.119
V_2924_A		299.6	ug/L	0.4042	0.1349	7,366
Zn2062_A	W	2,280	ug/L	2.106	0.09240	5,638
Y_3600_R		9,083.4	Cts/S	48.681	0.53593	9,083.4
Y_2243_A		9,410.5	Cts/S	19.547	0.20771	9,410.5
Y_3600_A		338,990	Cts/S	1,682.1	0.49622	338,990

SI2001-007

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:12:56PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		4.034	ug/L	1.567	38.83	-971.8
Al3961_R	W	79,120	ug/L	4,479	5.661	28,230
As1891_A		77.30	ug/L	1.027	1.328	13.22
Au2427_A		11.59	ug/L	0.9160	7.900	153.9
B_2089_A		31.45	ug/L	0.08186	0.2603	28.38
Ba4554_R	W	1,000	ug/L	56.88	5.686	25,950
Be3130_R		4.640	ug/L	0.1241	2.674	68.86
Ca3158_R	W	37,680	ug/L	1,915	5.083	19,530
Cd2265_A		6.215	ug/L	0.8081	13.00	376.2
Co2286_A		51.37	ug/L	0.2012	0.3917	246.3
Cr2677_A		167.0	ug/L	0.1481	0.08871	3,282
Cu3273_A		732.8	ug/L	1.835	0.2504	13,910
Fe2599_R	W	193,100	ug/L	8,879	4.598	118,200
K_7664_R		10,330	ug/L	381.9	3.699	4,753
Li6707_R		198.8	ug/L	9.086	4.569	1,553
Mg2025_A	W	30,820	ug/L	2.059	0.006683	5,079
Mn2576_R	W	1,589	ug/L	73.73	4.641	5,545
Mo2020_A		13.72	ug/L	0.2366	1.724	24.08

SI2001-007

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:12:56PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		2,081	ug/L	94.74	4.552	2,542
Ni2316_A		197.3	ug/L	0.7835	0.3971	494.6
Pb2203_A	W	3,760	ug/L	1.237	0.03291	4,257
Sb2068_A		16.84	ug/L	2.143	12.73	7.584
Se1960_A		50.15	ug/L	1.088	2.170	9.339
Si2516_R		1,798	ug/L	126.6	7.042	313.0
Sn1899_A		255.7	ug/L	1.195	0.4673	104.2
Sr4215_R		316.0	ug/L	16.87	5.337	10,370
Ti3349_A	W	3,810	ug/L	6.637	0.1742	183,600
Tl1908_A		2.173	ug/L	1.950	89.73	-3.875
V_2924_A		195.3	ug/L	0.3859	0.1976	4,841
Zn2062_A	W	5,347	ug/L	17.02	0.3182	13,140
Y_3600_R		8,614.5	Cts/S	391.68	4.5467	8,614.5
Y_2243_A		9,348.4	Cts/S	7.6978	0.082343	9,348.4
Y_3600_A		342,170	Cts/S	1,013.5	0.29620	342,170

SI2008-001L

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:17:39PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.7688	ug/L	0.7322	95.24	-1.763
Al3961_R		205.8	ug/L	56.47	27.44	14.26
As1891_A		1.233	ug/L	0.3041	24.67	-0.3586
Au2427_A		-1.707	ug/L	1.190	69.72	1.263
B_2089_A		23.37	ug/L	2.577	11.03	4.704
Ba4554_R		33.68	ug/L	1.730	5.136	219.1
Be3130_R		0.3395	ug/L	0.1290	37.99	-1.668
Ca3158_R		12,750	ug/L	95.42	0.7486	1,350
Cd2265_A		22.21	ug/L	0.2045	0.9207	75.02
Co2286_A		-0.7782	ug/L	0.05723	7.354	2.563
Cr2677_A		10.15	ug/L	0.8789	8.660	41.70
Cu3273_A		1.805	ug/L	2.659	147.3	37.65
Fe2599_R		401.7	ug/L	109.7	27.32	52.18
K_7664_R		1,925	ug/L	47.28	2.457	180.1
Li6707_R		5.969	ug/L	1.963	32.89	19.66
Mg2025_A		2,361	ug/L	9.731	0.4122	76.29
Mn2576_R		-2.244	ug/L	3.953	176.2	2.906
Mo2020_A		-0.04381	ug/L	0.7303	1,667	1.097
Na5895_R		25,120	ug/L	260.4	1.037	6,171
Ni2316_A		0.04789	ug/L	0.7891	1,648	-0.5392
Pb2203_A		5.315	ug/L	1.569	29.51	-0.4839
Sb2068_A		-4.108	ug/L	7.565	184.2	-0.3052
Se1960_A		-1.128	ug/L	9.098	806.5	0.6635
Si2516_R		3,346	ug/L	138.7	4.145	125.2
Sn1899_A		-1.238	ug/L	5.057	408.5	0.8997
Sr4215_R		80.38	ug/L	1.443	1.795	535.1
Ti3349_A		12.42	ug/L	1.751	14.10	104.7
Tl1908_A		-2.298	ug/L	7.536	328.0	-1.109
V_2924_A		0.1345	ug/L	0.9225	686.0	-6.134
Zn2062_A		30.59	ug/L	0.1093	0.3573	15.03
Y_3600_R		8,851.0	Cts/S	150.35	1.6987	8,851.0
Y_2243_A		9,455.9	Cts/S	6.7779	0.071679	9,455.9
Y_3600_A		343,900	Cts/S	5,161.1	1.5007	343,900

SI2008-002

Method Name: K6010-2011 Method Revision: 1,726

SI2008-002

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:22:27PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2352	ug/L	0.1174	49.93	10.95
Al3961_R		297.9	ug/L	14.25	4.784	114.3
As1891_A		-0.3994	ug/L	0.7473	187.1	-0.5062
Au2427_A		-0.6815	ug/L	0.3947	57.92	-0.3875
B_2089_A		20.29	ug/L	0.7532	3.712	17.46
Ba4554_R		27.94	ug/L	0.1913	0.6849	767.8
Be3130_R		0.2058	ug/L	0.04159	20.21	3.522
Ca3158_R	W	63,180	ug/L	92.89	0.1470	33,000
Cd2265_A		0.1824	ug/L	0.01536	8.422	3.414
Co2286_A		0.5100	ug/L	0.008533	1.673	4.977
Cr2677_A		1.913	ug/L	0.01019	0.5324	36.94
Cu3273_A		1.529	ug/L	0.5413	35.41	56.15
Fe2599_R		215.0	ug/L	1.751	0.8141	134.3
K_7664_R		3,450	ug/L	22.28	0.6459	1,598
Li6707_R		4.994	ug/L	0.7789	15.60	48.92
Mg2025_A		19,400	ug/L	3.203	0.01651	3,062
Mn2576_R		25.48	ug/L	0.1232	0.4835	93.88
Mo2020_A		0.001008	ug/L	0.1002	9,945	1.051
Na5895_R	W	135,400	ug/L	665.8	0.4916	160,400
Ni2316_A		2.347	ug/L	0.3098	13.20	5.292
Pb2203_A		-0.01555	ug/L	0.5232	3,364	-1.653
Sb2068_A		-0.8170	ug/L	0.5586	68.36	-0.2924
Se1960_A		2.030	ug/L	2.457	121.0	0.9698
Si2516_R		2,570	ug/L	24.08	0.9372	457.3
Sn1899_A		0.3866	ug/L	0.4631	119.8	1.094
Sr4215_R		423.1	ug/L	1.661	0.3925	13,990
Ti3349_A		5.750	ug/L	1.300	22.61	245.7
Tl1908_A		0.2635	ug/L	0.9674	367.2	-0.8214
V_2924_A		0.5496	ug/L	0.2628	47.81	5.998
Zn2062_A		48.58	ug/L	0.04644	0.09559	113.8
Y_3600_R		8,667.7	Cts/S	23.200	0.26766	8,667.7
Y_2243_A		8,926.2	Cts/S	0.85040	0.0095270	8,926.2
Y_3600_A		321,460	Cts/S	2,532.5	0.78783	321,460

SI2008-003

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:27:14PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2952	ug/L	0.2797	94.75	-189.6
Al3961_R		3,903	ug/L	49.52	1.269	1,466
As1891_A		22.96	ug/L	0.6557	2.855	4.499
Au2427_A		14.43	ug/L	0.4945	3.426	70.23
B_2089_A		48.67	ug/L	0.2177	0.4473	43.14
Ba4554_R		63.17	ug/L	0.5583	0.8838	1,762
Be3130_R		0.5023	ug/L	0.03633	7.233	13.07
Ca3158_R		15,550	ug/L	229.2	1.474	8,475
Cd2265_A		0.08456	ug/L	0.07434	87.91	47.22
Co2286_A		17.55	ug/L	0.03570	0.2034	73.66
Cr2677_A		5.327	ug/L	0.1009	1.895	114.8
Cu3273_A		15.80	ug/L	0.07992	0.5059	328.1
Fe2599_R	W	32,350	ug/L	478.9	1.480	20,830
K_7664_R		2,477	ug/L	25.52	1.030	1,197
Li6707_R		2.530	ug/L	0.2542	10.04	30.98
Mg2025_A		2,540	ug/L	0.4911	0.01934	415.5
Mn2576_R	W	1,872	ug/L	26.48	1.415	6,865
Mo2020_A		0.2659	ug/L	0.1483	55.75	1.568

SI2008-003

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:27:14PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		14,080	ug/L	135.9	0.9654	17,500
Ni2316_A		3.323	ug/L	0.1820	5.476	4.990
Pb2203_A		2.753	ug/L	0.6995	25.41	1.874
Sb2068_A		-1.085	ug/L	0.08706	8.022	0.08294
Se1960_A		1.109	ug/L	1.606	144.8	1.089
Si2516_R		8,307	ug/L	62.57	0.7532	1,532
Sn1899_A		1.758	ug/L	0.6428	36.56	1.702
Sr4215_R		124.3	ug/L	0.7201	0.5795	4,284
Ti3349_A		90.28	ug/L	7.684	8.512	4,352
Tl1908_A		-0.6710	ug/L	0.2015	30.03	-2.764
V_2924_A		7.431	ug/L	0.06388	0.8597	172.2
Zn2062_A		32.70	ug/L	0.2088	0.6386	80.31
Y_3600_R		9,052.0	Cts/S	50.650	0.55954	9,052.0
Y_2243_A		9,366.0	Cts/S	9.6359	0.10288	9,366.0
Y_3600_A		343,470	Cts/S	1,213.0	0.35316	343,470

CCV

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:31:59PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		505.6	ug/L	0.9335	0.1846	18,220
Al3961_R		12,310	ug/L	99.82	0.8108	4,461
As1891_A		491.6	ug/L	3.199	0.6508	129.7
Au2427_A		501.6	ug/L	20.24	4.035	2,238
B_2089_A		499.0	ug/L	0.00001100	0.000002000	448.6
Ba4554_R		484.9	ug/L	3.773	0.7782	12,780
Be3130_R		491.4	ug/L	6.071	1.236	18,810
Ca3158_R		12,130	ug/L	103.4	0.8527	6,371
Cd2265_A		496.4	ug/L	1.065	0.2146	8,254
Co2286_A		498.4	ug/L	0.2285	0.04584	1,986
Cr2677_A		509.3	ug/L	0.3983	0.07820	9,862
Cu3273_A		502.6	ug/L	0.2038	0.04054	9,529
Fe2599_R		12,520	ug/L	84.02	0.6709	7,775
K_7664_R		12,530	ug/L	138.6	1.106	5,850
Li6707_R		487.8	ug/L	4.493	0.9211	3,849
Mg2025_A		12,520	ug/L	27.78	0.2219	2,084
Mn2576_R		492.7	ug/L	5.404	1.097	1,746
Mo2020_A		502.8	ug/L	2.708	0.5384	842.9
Na5895_R		12,140	ug/L	132.3	1.089	14,570
Ni2316_A		500.8	ug/L	0.6602	0.1318	1,302
Pb2203_A		504.7	ug/L	2.205	0.4370	568.1
Sb2068_A		491.7	ug/L	0.5676	0.1154	168.7
Se1960_A		498.7	ug/L	2.862	0.5739	79.59
Si2516_R		12,240	ug/L	144.9	1.183	2,177
Sn1899_A		503.3	ug/L	3.110	0.6180	203.9
Sr4215_R		489.0	ug/L	5.754	1.177	16,280
Ti3349_A		509.9	ug/L	2.980	0.5844	24,460
Tl1908_A		505.0	ug/L	4.850	0.9605	178.0
V_2924_A		507.3	ug/L	1.470	0.2897	12,050
Zn2062_A		493.4	ug/L	0.7594	0.1539	1,209
Y_3600_R		8,726.3	Cts/S	116.19	1.3315	8,726.3
Y_2243_A		9,337.1	Cts/S	10.841	0.11611	9,337.1
Y_3600_A		340,420	Cts/S	433.18	0.12725	340,420

CCB

Method Name: K6010-2011 Method Revision: 1,726

CCB

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:36:35PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1851	ug/L	0.1081	58.42	11.16
Al3961_R		-11.61	ug/L	5.882	50.66	-5.219
As1891_A		0.3383	ug/L	0.2571	75.97	-0.3312
Au2427_A		2.614	ug/L	0.2956	11.31	14.55
B_2089_A		0.5649	ug/L	0.05614	9.937	1.115
Ba4554_R		0.09351	ug/L	0.2250	240.6	40.05
Be3130_R		0.3915	ug/L	0.04152	10.60	10.45
Ca3158_R		14.02	ug/L	4.920	35.08	-2.497
Cd2265_A		0.1682	ug/L	0.01916	11.39	3.090
Co2286_A		0.1463	ug/L	0.06331	43.28	3.757
Cr2677_A		0.1639	ug/L	0.1732	105.7	5.235
Cu3273_A		0.2032	ug/L	0.7011	345.0	35.05
Fe2599_R		12.28	ug/L	1.482	12.07	9.017
K_7664_R		-12.91	ug/L	32.93	255.0	-8.341
Li6707_R		0.9950	ug/L	1.699	170.7	16.93
Mg2025_A		4.864	ug/L	2.161	44.43	-1.870
Mn2576_R		-0.8840	ug/L	0.03148	3.561	1.313
Mo2020_A		1.488	ug/L	0.3935	26.45	3.636
Na5895_R		21.11	ug/L	1.453	6.884	119.3
Ni2316_A		0.3663	ug/L	0.2924	79.81	0.4112
Pb2203_A		0.3350	ug/L	0.1698	50.68	-1.314
Sb2068_A		-1.000	ug/L	0.9219	92.15	-0.3790
Se1960_A		3.383	ug/L	1.077	31.84	1.241
Si2516_R		5.122	ug/L	9.867	192.6	5.375
Sn1899_A		1.261	ug/L	0.5813	46.10	1.516
Sr4215_R		0.2278	ug/L	0.1792	78.69	-0.3949
Ti3349_A		0.5049	ug/L	0.04957	9.818	9.100
Tl1908_A		1.920	ug/L	0.2778	14.47	-0.2444
V_2924_A		0.1082	ug/L	0.2206	203.9	-4.381
Zn2062_A		0.07850	ug/L	0.1047	133.4	0.02725
Y_3600_R		8,470.3	Cts/S	445.33	5.2575	8,470.3
Y_2243_A		9,459.0	Cts/S	6.3439	0.067068	9,459.0
Y_3600_A		346,020	Cts/S	5,278.3	1.5254	346,020

SI2008-004

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:41:23PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1350	ug/L	0.1238	91.75	-2.375
Al3961_R		733.2	ug/L	7.675	1.047	271.7
As1891_A		0.4067	ug/L	1.011	248.7	-0.3211
Au2427_A		1.063	ug/L	0.2230	20.98	6.900
B_2089_A		35.10	ug/L	0.6305	1.796	31.48
Ba4554_R		44.74	ug/L	1.095	2.447	1,239
Be3130_R		0.4809	ug/L	0.06160	12.81	14.26
Ca3158_R		16,980	ug/L	167.8	0.9883	9,097
Cd2265_A		0.3591	ug/L	0.07665	21.35	6.699
Co2286_A		1.467	ug/L	0.07953	5.420	9.134
Cr2677_A		1.205	ug/L	0.1495	12.40	24.90
Cu3273_A		2.944	ug/L	0.2057	6.987	83.86
Fe2599_R		312.7	ug/L	5.490	1.756	199.7
K_7664_R		1,813	ug/L	19.42	1.071	861.0
Li6707_R		3.774	ug/L	0.3508	9.295	40.43
Mg2025_A		4,542	ug/L	7.795	0.1716	755.0
Mn2576_R		94.43	ug/L	1.514	1.603	344.9
Mo2020_A		0.3874	ug/L	0.09004	23.24	1.764

SI2008-004

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:41:23PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		10,270	ug/L	108.6	1.057	12,590
Ni2316_A		7.148	ug/L	0.005383	0.07531	18.19
Pb2203_A		2.131	ug/L	0.08477	3.979	0.6527
Sb2068_A		-0.8313	ug/L	0.8869	106.7	-0.3294
Se1960_A		2.149	ug/L	0.2685	12.50	1.050
Si2516_R		3,389	ug/L	31.15	0.9192	617.7
Sn1899_A		0.6753	ug/L	0.6270	92.85	1.272
Sr4215_R		97.30	ug/L	0.8758	0.9001	3,297
Ti3349_A		9.951	ug/L	1.069	10.74	448.6
Tl1908_A		0.6000	ug/L	0.1676	27.93	-0.8034
V_2924_A		1.098	ug/L	0.1886	17.18	18.58
Zn2062_A		148.9	ug/L	0.6897	0.4631	368.8
Y_3600_R		8,899.8	Cts/S	107.15	1.2040	8,899.8
Y_2243_A		9,426.1	Cts/S	2.9581	0.031382	9,426.1
Y_3600_A		330,990	Cts/S	6,331.8	1.9130	330,990

LCSOID01ICS1

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:46:09PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.60	ug/L	0.3837	0.7736	1,799
Al3961_R		2,049	ug/L	36.77	1.794	769.2
As1891_A		96.48	ug/L	0.01415	0.01467	25.47
Au2427_A		5.620	ug/L	0.1655	2.944	24.43
B_2089_A		494.3	ug/L	0.09714	0.01965	438.9
Ba4554_R		1,937	ug/L	57.02	2.944	52,800
Be3130_R		50.41	ug/L	1.237	2.454	1,985
Ca3158_R		2,428	ug/L	64.70	2.665	1,314
Cd2265_A		251.0	ug/L	0.1640	0.06533	4,212
Co2286_A		519.5	ug/L	0.3521	0.06777	2,092
Cr2677_A		212.2	ug/L	1.172	0.5522	4,136
Cu3273_A		262.0	ug/L	2.268	0.8655	5,012
Fe2599_R		1,061	ug/L	38.42	3.622	684.3
K_7664_R		9,868	ug/L	279.0	2.827	4,775
Li6707_R		485.4	ug/L	15.85	3.266	3,971
Mg2025_A		4,995	ug/L	1.126	0.02255	849.3
Mn2576_R		495.7	ug/L	18.10	3.652	1,820
Mo2020_A		102.3	ug/L	0.6591	0.6441	174.1
Na5895_R		7,344	ug/L	209.3	2.850	9,174
Ni2316_A		517.3	ug/L	0.1493	0.02886	1,360
Pb2203_A		101.4	ug/L	0.3283	0.3238	114.1
Sb2068_A		99.31	ug/L	0.5804	0.5844	32.88
Se1960_A		104.3	ug/L	1.129	1.083	17.39
Si2516_R		953.8	ug/L	33.14	3.475	180.5
Sn1899_A		530.1	ug/L	1.476	0.2784	217.0
Sr4215_R		487.2	ug/L	14.49	2.975	16,810
Ti3349_A		530.5	ug/L	5.649	1.065	25,590
Tl1908_A	W	116.6	ug/L	0.8282	0.7103	39.24
V_2924_A		528.1	ug/L	4.655	0.8815	12,710
Zn2062_A		505.7	ug/L	0.6536	0.1293	1,254
Y_3600_R		9,050.0	Cts/S	148.99	1.6463	9,050.0
Y_2243_A		9,437.2	Cts/S	3.5517	0.037635	9,437.2
Y_3600_A		342,550	Cts/S	1,795.5	0.52414	342,550

LC2OID01ICS1

Method Name: K6010-2011 Method Revision: 1,726

LC2OID01ICS1

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:50:50PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	26.56	ug/L	0.1806	0.6799	983.2
Al3961_R	F	1,151	ug/L	27.21	2.364	413.2
As1891_A	F	51.70	ug/L	1.296	2.507	13.52
Au2427_A		2.796	ug/L	0.0009130	0.03267	13.33
B_2089_A	F	264.7	ug/L	2.633	0.9948	236.4
Ba4554_R	F	1,101	ug/L	10.06	0.9139	28,760
Be3130_R	F	28.07	ug/L	0.2963	1.056	1,058
Ca3158_R	F	1,377	ug/L	30.38	2.207	709.3
Cd2265_A	F	135.9	ug/L	1.703	1.253	2,292
Co2286_A	F	276.6	ug/L	2.613	0.9446	1,121
Cr2677_A	F	114.1	ug/L	0.9550	0.8368	2,267
Cu3273_A	F	141.6	ug/L	1.357	0.9581	2,774
Fe2599_R	F	576.2	ug/L	13.79	2.393	356.8
K_7664_R	F	5,662	ug/L	100.1	1.768	2,623
Li6707_R	F	280.1	ug/L	1.099	0.3923	2,200
Mg2025_A	F	2,706	ug/L	26.86	0.9926	461.0
Mn2576_R	F	282.0	ug/L	5.311	1.883	994.2
Mo2020_A	F	54.95	ug/L	0.7179	1.306	94.49
Na5895_R	F	4,250	ug/L	33.27	0.7828	5,126
Ni2316_A	F	276.6	ug/L	2.646	0.9565	730.5
Pb2203_A	F	54.28	ug/L	1.898	3.497	60.61
Sb2068_A	F	52.30	ug/L	0.3536	0.6761	17.38
Se1960_A	F	53.56	ug/L	1.045	1.951	9.321
Si2516_R	F	530.2	ug/L	6.880	1.298	98.15
Sn1899_A	F	284.4	ug/L	3.824	1.345	117.4
Sr4215_R	F	279.5	ug/L	3.887	1.391	9,236
Ti3349_A	F	275.2	ug/L	1.450	0.5267	13,520
Tl1908_A	F	64.39	ug/L	0.2551	0.3962	21.39
V_2924_A	F	278.4	ug/L	2.483	0.8918	6,824
Zn2062_A	F	269.7	ug/L	3.213	1.191	671.9
Y_3600_R		8,668.7	Cts/S	255.96	2.9527	8,668.7
Y_2243_A		9,484.2	Cts/S	1.5641	0.016492	9,484.2
Y_3600_A		348,930	Cts/S	1,879.8	0.53874	348,930

PBSID01ICS1

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:55:32PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.005146	ug/L	0.2702	5,251	4.613
Al3961_R		-3.552	ug/L	18.98	534.3	-2.500
As1891_A		-0.4552	ug/L	0.4656	102.3	-0.5524
Au2427_A		-0.6827	ug/L	0.6462	94.64	-0.3125
B_2089_A		1.083	ug/L	0.1873	17.30	1.559
Ba4554_R		0.4748	ug/L	0.02629	5.537	53.17
Be3130_R		0.08048	ug/L	0.04719	58.64	-1.156
Ca3158_R		47.92	ug/L	4.835	10.09	15.84
Cd2265_A		0.04854	ug/L	0.05085	104.8	1.103
Co2286_A		-0.02125	ug/L	0.05699	268.2	3.126
Cr2677_A		0.4589	ug/L	0.1359	29.62	11.30
Cu3273_A		1.118	ug/L	0.1649	14.75	53.69
Fe2599_R		19.09	ug/L	4.418	23.15	14.00
K_7664_R		-3.148	ug/L	5.554	176.5	-3.750
Li6707_R		1.058	ug/L	1.530	144.6	18.91
Mg2025_A		16.25	ug/L	1.189	7.318	0.02290
Mn2576_R		-0.5556	ug/L	0.4244	76.38	2.594
Mo2020_A		0.1886	ug/L	0.04352	23.08	1.451

PBSID01ICS1

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 3:55:32PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		52.05	ug/L	12.14	23.32	165.3
Ni2316_A		0.4071	ug/L	0.3789	93.06	0.5209
Pb2203_A		-0.4730	ug/L	0.3157	66.75	-2.271
Sb2068_A		0.4275	ug/L	1.676	392.0	0.04855
Se1960_A		0.8761	ug/L	1.246	142.2	0.8511
Si2516_R		8.593	ug/L	0.1937	2.254	6.406
Sn1899_A		24.39	ug/L	0.4121	1.690	11.11
Sr4215_R		0.1532	ug/L	0.009460	6.173	-2.824
Ti3349_A		0.6500	ug/L	0.01070	1.646	16.49
Tl1908_A		0.7115	ug/L	0.04815	6.768	-0.6928
V_2924_A		0.1862	ug/L	0.02487	13.36	-2.313
Zn2062_A		0.5885	ug/L	0.09352	15.89	1.312
Y_3600_R		9,021.6	Cts/S	12.113	0.13427	9,021.6
Y_2243_A		9,584.3	Cts/S	14.354	0.14977	9,584.3
Y_3600_A		353,720	Cts/S	2,567.3	0.72579	353,720

SI2008-007

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:00:21PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.07877	ug/L	0.2234	283.6	1.450
Al3961_R		13.21	ug/L	7.383	55.88	5.156
As1891_A		-0.6245	ug/L	0.07546	12.08	-0.5824
Au2427_A		-0.4048	ug/L	0.2892	71.43	0.9375
B_2089_A		20.89	ug/L	0.3517	1.684	18.81
Ba4554_R		32.82	ug/L	2.216	6.752	859.6
Be3130_R		0.02355	ug/L	0.1255	532.8	-3.258
Ca3158_R		13,720	ug/L	1,008	7.348	6,869
Cd2265_A		11.57	ug/L	0.02294	0.1983	192.5
Co2286_A		0.2370	ug/L	0.08411	35.49	4.068
Cr2677_A		10.00	ug/L	0.08644	0.8643	196.4
Cu3273_A		0.5067	ug/L	0.09787	19.32	40.29
Fe2599_R		16.15	ug/L	0.2608	1.615	11.20
K_7664_R		1,944	ug/L	92.58	4.763	863.9
Li6707_R		0.9474	ug/L	3.052	322.2	16.04
Mg2025_A		2,428	ug/L	7.063	0.2909	399.1
Mn2576_R		-1.265	ug/L	0.05228	4.135	0.00009319
Mo2020_A		-0.07340	ug/L	0.02456	33.46	0.9782
Na5895_R		24,010	ug/L	1,718	7.156	27,370
Ni2316_A		0.3026	ug/L	0.00009100	0.02997	0.2365
Pb2203_A		0.3960	ug/L	1.109	280.1	-1.240
Sb2068_A		-1.167	ug/L	1.454	124.6	-0.4066
Se1960_A		-0.2205	ug/L	3.927	1,781	0.6561
Si2516_R		3,379	ug/L	202.9	6.006	576.1
Sn1899_A		0.3403	ug/L	0.2217	65.13	1.127
Sr4215_R		86.93	ug/L	6.300	7.246	2,753
Ti3349_A		0.04346	ug/L	0.1318	303.2	-13.19
Tl1908_A		0.9032	ug/L	0.5970	66.10	-0.6064
V_2924_A		0.2521	ug/L	0.2670	105.9	-1.522
Zn2062_A		33.89	ug/L	0.03016	0.08897	83.14
Y_3600_R		8,337.2	Cts/S	433.95	5.2050	8,337.2
Y_2243_A		9,353.1	Cts/S	19.624	0.20982	9,353.1
Y_3600_A		341,880	Cts/S	4,523.9	1.3233	341,880

SI2006-023

Method Name: K6010-2011 Method Revision: 1,726

SI2006-023

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:05:07PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3610	ug/L	0.1998	55.33	-8.900
Al3961_R		-0.1907	ug/L	6.909	3,622	-1.241
As1891_A		-0.1791	ug/L	2.427	1,356	-0.4725
Au2427_A		-0.5950	ug/L	0.2798	47.02	0.07500
B_2089_A		1.910	ug/L	0.02155	1.128	2.269
Ba4554_R		0.5536	ug/L	0.1088	19.65	51.47
Be3130_R		0.1289	ug/L	0.1368	106.1	0.5369
Ca3158_R		86.69	ug/L	8.015	9.246	34.28
Cd2265_A		0.02862	ug/L	0.02451	85.64	0.7379
Co2286_A		0.03277	ug/L	0.01443	44.01	3.310
Cr2677_A		-0.2022	ug/L	0.01452	7.177	-1.940
Cu3273_A		1.294	ug/L	0.4177	32.29	55.85
Fe2599_R		5.286	ug/L	4.490	84.94	4.696
K_7664_R		13.07	ug/L	26.93	206.0	3.355
Li6707_R		0.2461	ug/L	1.117	453.8	11.78
Mg2025_A		13.73	ug/L	0.9308	6.779	-0.3979
Mn2576_R		-0.3379	ug/L	0.4638	137.3	3.219
Mo2020_A		-0.1517	ug/L	0.07693	50.71	0.8580
Na5895_R		290.9	ug/L	24.30	8.355	427.4
Ni2316_A		0.09014	ug/L	0.2681	297.4	-0.3213
Pb2203_A		-0.03658	ug/L	0.9876	2,700	-1.748
Sb2068_A		0.3026	ug/L	0.5291	174.9	0.07851
Se1960_A		-0.3720	ug/L	0.9446	253.9	0.6425
Si2516_R		108.1	ug/L	26.42	24.45	22.81
Sn1899_A		0.6466	ug/L	0.5769	89.22	1.270
Sr4215_R		0.06717	ug/L	0.1894	282.0	-5.619
Ti3349_A		0.1807	ug/L	0.05843	32.34	-6.763
Tl1908_A		0.9503	ug/L	0.1149	12.09	-0.5985
V_2924_A		-0.07149	ug/L	0.1279	179.0	-8.442
Zn2062_A		1.907	ug/L	0.07297	3.826	4.593
Y_3600_R		8,412.3	Cts/S	617.97	7.3460	8,412.3
Y_2243_A		9,496.0	Cts/S	3.4401	0.036226	9,496.0
Y_3600_A		345,720	Cts/S	183.74	0.053148	345,720

LC2OID01ICS1

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:09:56PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.19	ug/L	0.7177	1.489	1,766
Al3961_R		1,932	ug/L	82.78	4.284	724.6
As1891_A		98.96	ug/L	0.8499	0.8588	26.20
Au2427_A		4.420	ug/L	0.04684	1.060	19.20
B_2089_A		484.6	ug/L	0.3314	0.06839	431.4
Ba4554_R		1,901	ug/L	66.44	3.495	51,780
Be3130_R		48.45	ug/L	1.527	3.151	1,906
Ca3158_R		2,363	ug/L	74.82	3.167	1,277
Cd2265_A		247.9	ug/L	0.06220	0.02509	4,169
Co2286_A		512.3	ug/L	0.3695	0.07212	2,068
Cr2677_A		208.4	ug/L	1.958	0.9397	4,105
Cu3273_A		257.4	ug/L	2.308	0.8965	4,977
Fe2599_R		1,019	ug/L	29.60	2.904	657.3
K_7664_R		9,701	ug/L	295.6	3.047	4,690
Li6707_R		471.8	ug/L	17.30	3.666	3,857
Mg2025_A		4,919	ug/L	16.61	0.3376	838.6
Mn2576_R		479.3	ug/L	18.85	3.932	1,759
Mo2020_A		101.1	ug/L	0.6109	0.6042	172.5

LC2OID01ICS1

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:09:56PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		7,251	ug/L	235.1	3.243	9,051
Ni2316_A		512.4	ug/L	0.2527	0.04933	1,350
Pb2203_A		99.84	ug/L	0.2653	0.2657	112.7
Sb2068_A		97.07	ug/L	1.711	1.763	32.21
Se1960_A		100.5	ug/L	0.05102	0.05075	16.84
Si2516_R		920.0	ug/L	22.85	2.483	174.1
Sn1899_A		522.8	ug/L	0.6714	0.1284	214.6
Sr4215_R		474.3	ug/L	15.83	3.338	16,350
Ti3349_A		512.5	ug/L	0.3930	0.07667	24,990
Tl1908_A		115.2	ug/L	0.9815	0.8519	38.91
V_2924_A		512.6	ug/L	2.054	0.4007	12,470
Zn2062_A		502.4	ug/L	1.303	0.2594	1,249
Y_3600_R		9,041.3	Cts/S	45.094	0.49875	9,041.3
Y_2243_A		9,462.0	Cts/S	9.2877	0.098158	9,462.0
Y_3600_A		346,210	Cts/S	3,959.6	1.1437	346,210

SI1907-018

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:14:37PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.03372	ug/L	0.04842	143.6	3.050
Al3961_R		17.73	ug/L	18.37	103.6	14.27
As1891_A		-0.04648	ug/L	1.969	4,237	-0.4236
Au2427_A		0.07016	ug/L	0.2355	335.6	3.000
B_2089_A		13.83	ug/L	0.3498	2.529	12.46
Ba4554_R		34.90	ug/L	0.04249	0.1218	966.3
Be3130_R		0.1227	ug/L	0.02409	19.63	0.5211
Ca3158_R	W	66,400	ug/L	686.5	1.034	35,290
Cd2265_A		0.04406	ug/L	0.01936	43.94	0.9722
Co2286_A		0.2412	ug/L	0.03914	16.22	4.027
Cr2677_A		0.4672	ug/L	0.1450	31.04	10.98
Cu3273_A		1.752	ug/L	0.4557	26.01	63.26
Fe2599_R		7.407	ug/L	4.778	64.51	6.356
K_7664_R		758.0	ug/L	6.969	0.9194	355.6
Li6707_R		18.02	ug/L	0.1005	0.5577	153.5
Mg2025_A		20,630	ug/L	32.70	0.1585	3,361
Mn2576_R		-0.8648	ug/L	0.2955	34.17	1.433
Mo2020_A		-0.05545	ug/L	0.2457	443.2	0.9917
Na5895_R		13,340	ug/L	163.8	1.228	16,170
Ni2316_A		0.1683	ug/L	0.1141	67.81	-0.1112
Pb2203_A		-0.3778	ug/L	0.5146	136.2	-2.080
Sb2068_A		-0.6690	ug/L	0.6333	94.66	-0.2536
Se1960_A		1.712	ug/L	4.028	235.3	0.9483
Si2516_R		9,967	ug/L	84.82	0.8510	1,792
Sn1899_A		0.8297	ug/L	0.9775	117.8	1.306
Sr4215_R		177.4	ug/L	1.777	1.002	5,963
Ti3349_A		0.02676	ug/L	0.1666	622.4	-13.94
Tl1908_A		1.650	ug/L	0.8364	50.69	-0.3326
V_2924_A		-0.08603	ug/L	0.1166	135.5	-8.685
Zn2062_A		2.400	ug/L	0.04522	1.884	5.650
Y_3600_R		8,821.8	Cts/S	14.767	0.16740	8,821.8
Y_2243_A		9,216.8	Cts/S	11.629	0.12618	9,216.8
Y_3600_A		338,220	Cts/S	288.82	0.085394	338,220

SI1907-018A

Method Name: K6010-2011 Method Revision: 1,726

SI1907-018A

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:19:25PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		526.5	ug/L	0.1750	0.03323	18,800
Al3961_R		11,090	ug/L	97.60	0.8803	4,063
As1891_A		536.9	ug/L	3.604	0.6712	139.9
Au2427_A		3.453	ug/L	0.4309	12.48	16.69
B_2089_A		577.9	ug/L	0.2885	0.04992	510.6
Ba4554_R		547.5	ug/L	6.951	1.269	14,560
Be3130_R		548.4	ug/L	3.181	0.5801	21,190
Ca3158_R	W	70,320	ug/L	780.3	1.110	37,320
Cd2265_A		549.5	ug/L	0.3974	0.07231	8,990
Co2286_A		551.0	ug/L	0.7977	0.1448	2,162
Cr2677_A		550.9	ug/L	3.510	0.6372	10,540
Cu3273_A		555.1	ug/L	0.2029	0.03655	10,400
Fe2599_R		5,651	ug/L	55.53	0.9826	3,542
K_7664_R		11,470	ug/L	135.2	1.179	5,403
Li6707_R		561.5	ug/L	5.378	0.9579	4,470
Mg2025_A	W	25,780	ug/L	24.64	0.09556	4,213
Mn2576_R		530.8	ug/L	3.703	0.6977	1,898
Mo2020_A		540.3	ug/L	3.523	0.6522	892.0
Na5895_R		18,710	ug/L	276.7	1.479	22,590
Ni2316_A		550.9	ug/L	1.920	0.3485	1,412
Pb2203_A		540.5	ug/L	0.6872	0.1271	599.5
Sb2068_A		542.3	ug/L	0.1755	0.03237	184.9
Se1960_A		558.3	ug/L	4.206	0.7534	87.67
Si2516_R		10,140	ug/L	135.3	1.334	1,820
Sn1899_A		1.307	ug/L	0.2688	20.57	1.492
Sr4215_R		696.0	ug/L	7.075	1.016	23,380
Ti3349_A		542.8	ug/L	0.05203	0.009584	25,750
Tl1908_A		568.9	ug/L	0.9567	0.1682	197.7
V_2924_A		561.9	ug/L	0.8922	0.1588	13,200
Zn2062_A		569.8	ug/L	0.04911	0.008618	1,376
Y_3600_R		8,807.3	Cts/S	29.316	0.33286	8,807.3
Y_2243_A		9,197.7	Cts/S	7.3339	0.079736	9,197.7
Y_3600_A		336,490	Cts/S	1,282.4	0.38112	336,490

SI1907-018L

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:24:04PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.9300	ug/L	0.9646	103.7	11.15
Al3961_R		78.23	ug/L	15.84	20.24	6.443
As1891_A		6.847	ug/L	1.426	20.83	-0.05375
Au2427_A		-1.921	ug/L	4.820	250.9	1.025
B_2089_A		19.24	ug/L	3.820	19.86	4.010
Ba4554_R		34.65	ug/L	0.3559	1.027	223.7
Be3130_R		1.481	ug/L	0.05363	3.620	7.247
Ca3158_R		68,550	ug/L	595.2	0.8684	7,288
Cd2265_A		0.05484	ug/L	0.04348	79.29	0.4405
Co2286_A		1.006	ug/L	0.8115	80.63	3.954
Cr2677_A		0.3946	ug/L	0.7019	177.9	3.576
Cu3273_A		4.289	ug/L	1.369	31.92	47.46
Fe2599_R		45.15	ug/L	11.19	24.79	7.378
K_7664_R		666.0	ug/L	14.36	2.156	60.76
Li6707_R		17.70	ug/L	0.5543	3.132	38.28
Mg2025_A		21,230	ug/L	42.48	0.2001	704.2
Mn2576_R		-3.739	ug/L	4.911	131.3	1.875
Mo2020_A		10.39	ug/L	2.450	23.57	4.614

SI1907-018L

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:24:04PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		13,670	ug/L	219.7	1.607	3,396
Ni2316_A		4.219	ug/L	0.6140	14.56	1.662
Pb2203_A		-0.9242	ug/L	1.523	164.8	-1.905
Sb2068_A		9.850	ug/L	1.638	16.63	0.6548
Se1960_A		10.56	ug/L	2.008	19.02	1.032
Si2516_R		10,090	ug/L	88.77	0.8798	367.0
Sn1899_A		6.246	ug/L	4.321	69.18	1.504
Sr4215_R		180.1	ug/L	1.618	0.8979	1,206
Ti3349_A		0.8988	ug/L	0.02614	2.909	-6.688
Tl1908_A		4.127	ug/L	4.701	113.9	-0.6391
V_2924_A		1.319	ug/L	0.03260	2.470	-0.6353
Zn2062_A		4.581	ug/L	0.8140	17.77	2.100
Y_3600_R		8,832.7	Cts/S	110.52	1.2513	8,832.7
Y_2243_A		9,411.2	Cts/S	5.3913	0.057286	9,411.2
Y_3600_A		345,400	Cts/S	1,797.6	0.52045	345,400

CCV

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:28:51PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		498.7	ug/L	4.235	0.8492	18,120
Al3961_R		12,200	ug/L	48.90	0.4007	4,485
As1891_A		490.2	ug/L	1.094	0.2231	129.6
Au2427_A		496.1	ug/L	18.58	3.746	2,218
B_2089_A		495.8	ug/L	0.1921	0.03875	446.7
Ba4554_R		484.4	ug/L	5.092	1.051	12,950
Be3130_R		486.3	ug/L	1.810	0.3723	18,880
Ca3158_R		12,030	ug/L	138.8	1.154	6,407
Cd2265_A		498.3	ug/L	0.2048	0.04109	8,302
Co2286_A		500.0	ug/L	1.243	0.2487	1,996
Cr2677_A		505.3	ug/L	1.552	0.3071	9,867
Cu3273_A		498.5	ug/L	5.987	1.201	9,530
Fe2599_R		12,240	ug/L	99.91	0.8162	7,709
K_7664_R		12,340	ug/L	195.5	1.584	5,842
Li6707_R		488.6	ug/L	6.402	1.310	3,910
Mg2025_A		12,480	ug/L	7.366	0.05902	2,081
Mn2576_R		483.0	ug/L	5.542	1.147	1,736
Mo2020_A		503.1	ug/L	1.757	0.3493	844.9
Na5895_R		12,180	ug/L	120.5	0.9893	14,820
Ni2316_A		502.4	ug/L	0.01581	0.003148	1,309
Pb2203_A		505.4	ug/L	1.284	0.2540	570.1
Sb2068_A		491.4	ug/L	1.778	0.3619	168.9
Se1960_A		498.8	ug/L	0.6362	0.1276	79.76
Si2516_R		12,080	ug/L	146.9	1.216	2,179
Sn1899_A		501.8	ug/L	0.4377	0.08723	203.6
Sr4215_R		487.2	ug/L	5.028	1.032	16,450
Ti3349_A		500.9	ug/L	3.299	0.6585	24,230
Tl1908_A		506.4	ug/L	2.100	0.4147	178.9
V_2924_A		502.3	ug/L	4.278	0.8518	12,030
Zn2062_A		498.3	ug/L	1.027	0.2062	1,224
Y_3600_R		8,851.0	Cts/S	95.825	1.0826	8,851.0
Y_2243_A		9,355.4	Cts/S	8.3925	0.089707	9,355.4
Y_3600_A		343,230	Cts/S	1,949.5	0.56799	343,230

CCB

Method Name: K6010-2011 Method Revision: 1,726

CCB

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:33:29PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.02598	ug/L	0.1724	663.5	5.338
Al3961_R		-11.44	ug/L	3.821	33.40	-5.313
As1891_A		0.1120	ug/L	0.3527	314.9	-0.3912
Au2427_A		2.678	ug/L	0.3988	14.89	14.83
B_2089_A		1.150	ug/L	0.2883	25.06	1.639
Ba4554_R		0.2782	ug/L	0.3764	135.3	46.75
Be3130_R		0.3397	ug/L	0.03606	10.62	8.912
Ca3158_R		12.45	ug/L	14.11	113.4	-3.364
Cd2265_A		0.2012	ug/L	0.06746	33.53	3.637
Co2286_A		0.1659	ug/L	0.1378	83.05	3.832
Cr2677_A		0.03384	ug/L	0.2223	657.1	2.695
Cu3273_A		0.2892	ug/L	0.06167	21.32	36.69
Fe2599_R		8.177	ug/L	0.5451	6.666	6.841
K_7664_R		41.39	ug/L	12.18	29.43	17.35
Li6707_R		-1.310	ug/L	2.839	216.7	-0.3750
Mg2025_A		4.340	ug/L	3.073	70.80	-1.954
Mn2576_R		-1.135	ug/L	0.1607	14.16	0.4688
Mo2020_A		1.820	ug/L	0.5692	31.28	4.193
Na5895_R		6.209	ug/L	6.921	111.5	106.4
Ni2316_A		0.5738	ug/L	0.1673	29.16	0.9577
Pb2203_A		0.1635	ug/L	0.3932	240.5	-1.509
Sb2068_A		-1.387	ug/L	0.5774	41.63	-0.5112
Se1960_A		1.834	ug/L	0.8956	48.83	0.9923
Si2516_R		0.4847	ug/L	2.023	417.5	4.813
Sn1899_A		0.2171	ug/L	0.08678	39.97	1.089
Sr4215_R		0.2153	ug/L	0.08246	38.29	-0.6733
Ti3349_A		0.5218	ug/L	0.08867	16.99	10.00
Tl1908_A		2.425	ug/L	0.7559	31.17	-0.06066
V_2924_A		-0.04021	ug/L	0.2497	621.0	-7.997
Zn2062_A		0.2730	ug/L	0.05488	20.10	0.5104
Y_3600_R		8,819.8	Cts/S	14.938	0.16936	8,819.8
Y_2243_A		9,449.8	Cts/S	17.330	0.18339	9,449.8
Y_3600_A		346,900	Cts/S	2,040.8	0.58831	346,900

SI1907-018P

Method Name: K6010-2011 Method Revision: 1,726
Analyst Name: GEJ
Acquire Date: 4/3/2015 4:38:17PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		54.57	ug/L	6.004	11.00	1,819
Al3961_R		2,047	ug/L	8.582	0.4193	758.1
As1891_A		102.6	ug/L	0.4445	0.4332	26.44
Au2427_A		6.192	ug/L	0.2975	4.805	26.29
B_2089_A		539.9	ug/L	0.5309	0.09833	467.1
Ba4554_R	W	2,015	ug/L	12.71	0.6309	53,610
Be3130_R		51.82	ug/L	0.04533	0.08748	1,991
Ca3158_R	W	65,330	ug/L	444.7	0.6806	34,750
Cd2265_A		255.3	ug/L	0.2965	0.1161	4,177
Co2286_A		513.0	ug/L	0.2640	0.05146	2,014
Cr2677_A		221.1	ug/L	26.91	12.17	3,958
Cu3273_A		277.3	ug/L	32.94	11.88	4,870
Fe2599_R		1,015	ug/L	4.765	0.4695	639.0
K_7664_R		11,000	ug/L	10.13	0.09206	5,193
Li6707_R		522.5	ug/L	3.695	0.7072	4,171
Mg2025_A		24,380	ug/L	11.86	0.04863	3,984
Mn2576_R		497.2	ug/L	2.165	0.4355	1,782
Mo2020_A		102.9	ug/L	1.249	1.214	170.7

KATAHDIN ANALYTICAL SERVICES
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) ANALYST: GES ANALYSIS DATE: 04.21.15

FILE NAME: I I 0 20 A

METHOD: ICP

- ☐ 200.7
- ☑ 6010C
- ☑ DoD
- ☐ _____

REVIEWED
EG 04-21-15
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initals) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep. Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW 15433	04.13.15	04.13.16	0 ug/L
Standard 1	MW15439	04.16.15	06.28.15	Varies by Element
ICV	MW15434	04.13.15	04.30.15	Varies by Element
PQL	MW 15374	03.06.15	05.01.15	Varies by Element
LRS1	MW15430	04.07.15	05.26.15	Varies by Element
LRS2	MW15437	04.15.15	07.15.15	Varies by Element
ICSA	MW15422	04.01.15	07.01.15	Varies by Element
ICSAB	MW15436	04.15.15	05.01.15	Varies by Element
CCV	MW15431	04.09.15	06.23.15	Varies by Element
Internal Standard	MW15438	04.15.15	07.15.15	5.0 mg/L Yttrium

Additional Comments and Notes:

GES 04.22.15

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IID20A	4/20/2015	15:17	GEJ
Std 1	1.000	IID20A	4/20/2015	15:22	GEJ
ICV	1.000	IID20A	4/20/2015	15:27	GEJ
ICB	1.000	IID20A	4/20/2015	15:31	GEJ
PQL	1.000	IID20A	4/20/2015	15:36	GEJ
LRS1	1.000	IID20A	4/20/2015	15:42	GEJ
LRS2	1.000	IID20A	4/20/2015	15:48	GEJ
ICSA	1.000	IID20A	4/20/2015	15:56	GEJ
ICSAB	1.000	IID20A	4/20/2015	16:01	GEJ
CCV	1.000	IID20A	4/20/2015	16:06	GEJ
CCB	1.000	IID20A	4/20/2015	16:10	GEJ
LCSWID17ICW1	1.000	IID20A	4/20/2015	16:15	GEJ
PBWID17ICW1	1.000	IID20A	4/20/2015	16:20	GEJ
SI2313-004	1.000	IID20A	4/20/2015	16:24	GEJ
SI2291-006	1.000	IID20A	4/20/2015	16:29	GEJ
SI2403-001	1.000	IID20A	4/20/2015	16:34	GEJ
LCSOID15ICS1	1.000	IID20A	4/20/2015	16:39	GEJ
LCSOID15ICS1	1.000	IID20A	4/20/2015	16:43	GEJ
SI2293-001	2.000	IID20A	4/20/2015	16:48	GEJ
SI2293-002	1.000	IID20A	4/20/2015	16:53	GEJ
SI2293-003	2.000	IID20A	4/20/2015	16:57	GEJ
CCV	1.000	IID20A	4/20/2015	17:02	GEJ
CCB	1.000	IID20A	4/20/2015	17:07	GEJ
SI2293-004	2.000	IID20A	4/20/2015	17:11	GEJ
SI2313-003	1.000	IID20A	4/20/2015	17:16	GEJ
SI2319-001	1.000	IID20A	4/20/2015	17:21	GEJ
SI2319-002	2.000	IID20A	4/20/2015	17:25	GEJ
SI2319-003	2.000	IID20A	4/20/2015	17:30	GEJ
SI2319-004	2.000	IID20A	4/20/2015	17:35	GEJ
SI2319-005	2.000	IID20A	4/20/2015	17:39	GEJ
SI2319-006	2.000	IID20A	4/20/2015	17:44	GEJ
SI2319-007	2.000	IID20A	4/20/2015	17:49	GEJ
SI2319-008	2.000	IID20A	4/20/2015	17:53	GEJ
CCV	1.000	IID20A	4/20/2015	17:58	GEJ
CCB	1.000	IID20A	4/20/2015	18:03	GEJ
SI2324-001	1.000	IID20A	4/20/2015	18:08	GEJ
SI2313-003	1.000	IID20A	4/20/2015	18:12	GEJ
LCSOID13ICS1	1.000	IID20A	4/20/2015	18:17	GEJ
PBSID13ICS1	1.000	IID20A	4/20/2015	18:22	GEJ
SI2238-001	1.000	IID20A	4/20/2015	18:26	GEJ
SI2238-003	1.000	IID20A	4/20/2015	18:31	GEJ
SI2238-003A	1.000	IID20A	4/20/2015	18:36	GEJ
SI2238-003L	5.000	IID20A	4/20/2015	18:40	GEJ
SI2238-003P	1.000	IID20A	4/20/2015	18:45	GEJ

Intensity Report

Author:

Published: 4/21/2015 9:42:33AM

Notes:

Blank

Method Name: K6010-2011 Method Revision: 1,746

Analyst Name: GEJ

Acquire Date: 4/20/2015 3:17:51PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.00005200	Cts/S	0.000005000	9.067	15.29
Al3961_R		-0.0008540	Cts/S	0.00003700	4.377	-11.73
As1891_A		-0.0001220	Cts/S	0.00003700	30.56	-1.005
Au2427_A		0.0002030	Cts/S	0.0004460	219.6	1.675
B_2089_A		0.0002890	Cts/S	0.00001100	3.945	2.382
Ba4554_R		0.005549	Cts/S	0.0001940	3.503	76.07
Be3130_R		-0.00004500	Cts/S	0.0008540	1,881	-0.8308
Ca3158_R		-0.0003640	Cts/S	0.0001790	49.29	-4.950
Cd2265_A		0.0002170	Cts/S	0.0001050	48.29	1.792
Co2286_A		0.0006530	Cts/S	0.00002300	3.528	5.387
Cr2677_A		0.00001100	Cts/S	0.000007000	61.90	3.316
Cu3273_A		-0.00001100	Cts/S	0.00001400	133.6	-3.188
Fe2599_R		0.0004970	Cts/S	0.00005600	11.21	6.837
K_7664_R		-0.007763	Cts/S	0.00007800	1.011	-106.5
Li6707_R		-0.0003690	Cts/S	0.00003400	9.126	-5.049
Mg2025_A		-0.0004730	Cts/S	0.00001000	2.142	-3.901
Mn2576_R		-0.00001500	Cts/S	0.0001030	672.7	-0.1854
Mo2020_A		0.000002000	Cts/S	0.00002000	960.7	-0.01737
Na5895_R		-0.003323	Cts/S	0.001381	41.55	-45.24
Ni2316_A		-0.0002100	Cts/S	0.000005000	2.605	-1.734
Pb2203_A		-0.0001870	Cts/S	0.00004100	21.79	-1.541
Sb2068_A		-0.00001200	Cts/S	0.00001800	142.7	-0.1015
Se1960_A		0.0001260	Cts/S	0.00001700	13.74	1.038
Si2516_R		0.0002990	Cts/S	0.0001600	53.52	4.145
Sn1899_A		0.0003360	Cts/S	0.000009000	2.566	2.773
Sr4215_R		-0.0008570	Cts/S	0.001226	143.2	-11.45
Ti3349_A		-0.00005400	Cts/S	0.000005000	9.165	-15.86
Tl1908_A		-0.0001020	Cts/S	0.00003700	35.85	-0.8397
V_2924_A		-0.00001800	Cts/S	0.00001700	92.39	-5.291
Zn2062_A		0.00001300	Cts/S	0.00004800	376.6	0.1057
Y_3600_R		13,717	Cts/S	487.77	3.5561	13,717
Y_2243_A		8,246.3	Cts/S	3.0300	0.036744	8,246.3
Y_3600_A		293,720	Cts/S	1,564.2	0.53255	293,720

Std 1

Method Name: K6010-2011 Method Revision: 1,746

Analyst Name: GEJ

Acquire Date: 4/20/2015 3:22:35PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1085	Cts/S	0.0003710	0.3419	31,510
Al3961_R		1.070	Cts/S	0.04620	4.317	13,980
As1891_A		0.02949	Cts/S	0.0001440	0.4894	237.6
Au2427_A		0.4730	Cts/S	0.01440	3.044	3,811
B_2089_A		0.09776	Cts/S	0.00006900	0.07066	787.6
Ba4554_R		2.813	Cts/S	0.1201	4.270	36,740
Be3130_R		3.769	Cts/S	0.1612	4.277	49,230
Ca3158_R		1.268	Cts/S	0.05467	4.310	16,570
Cd2265_A		1.808	Cts/S	0.0002220	0.01229	14,570
Co2286_A		0.4643	Cts/S	0.0005520	0.1189	3,741
Cr2677_A		0.05670	Cts/S	0.0002340	0.4126	16,470
Cu3273_A		0.05890	Cts/S	0.0002000	0.3389	17,110
Fe2599_R		0.9049	Cts/S	0.04266	4.714	11,820

Std 1

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:22:35PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
K_7664_R		0.9676	Cts/S	0.04244	4.386	12,640
Li6707_R		0.6546	Cts/S	0.02476	3.783	8,550
Mg2025_A		0.4391	Cts/S	0.0004580	0.1044	3,538
Mn2576_R		0.1971	Cts/S	0.007355	3.731	2,575
Mo2020_A		0.1662	Cts/S	0.0008040	0.4836	1,339
Na5895_R		2.913	Cts/S	0.1212	4.162	38,050
Ni2316_A		0.2881	Cts/S	0.0003420	0.1188	2,321
Pb2203_A		0.1263	Cts/S	0.0001230	0.09765	1,018
Sb2068_A		0.03634	Cts/S	0.00006500	0.1797	292.8
Se1960_A		0.01709	Cts/S	0.00009400	0.5523	137.7
Si2516_R		0.2327	Cts/S	0.01175	5.049	3,039
Sn1899_A		0.04548	Cts/S	0.00001500	0.03327	366.5
Sr4215_R		3.646	Cts/S	0.1506	4.130	47,620
Ti3349_A		0.1474	Cts/S	0.001189	0.8068	42,820
Tl1908_A		0.03882	Cts/S	0.0001200	0.3081	312.8
V_2924_A		0.07317	Cts/S	0.0003240	0.4430	21,260
Zn2062_A		0.3092	Cts/S	0.001100	0.3559	2,491
Y_3600_R		13,068	Cts/S	319.19	2.4424	13,068
Y_2243_A		8,057.0	Cts/S	15.919	0.19758	8,057.0
Y_3600_A		290,490	Cts/S	800.70	0.27564	290,490

ICV

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:27:08PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		404.3	ug/L	3.181	0.7869	12,850
Al3961_R	W	10,550	ug/L	537.9	5.100	5,894
As1891_A		389.5	ug/L	0.5571	0.1430	93.27
Au2427_A		418.1	ug/L	9.666	2.312	1,616
B_2089_A		401.5	ug/L	1.392	0.3467	322.2
Ba4554_R		402.6	ug/L	19.72	4.899	14,840
Be3130_R		402.8	ug/L	19.65	4.879	19,840
Ca3158_R		10,100	ug/L	518.0	5.126	6,697
Cd2265_A		400.5	ug/L	0.3495	0.08729	5,918
Co2286_A		405.5	ug/L	0.07121	0.01756	1,542
Cr2677_A		408.0	ug/L	4.653	1.140	6,773
Cu3273_A		404.4	ug/L	3.998	0.9887	6,970
Fe2599_R		9,977	ug/L	492.6	4.937	4,724
K_7664_R		13,610	ug/L	692.8	5.090	6,840
Li6707_R		403.4	ug/L	21.21	5.258	3,448
Mg2025_A		10,240	ug/L	2.587	0.02526	1,468
Mn2576_R		404.4	ug/L	15.37	3.800	1,042
Mo2020_A		405.5	ug/L	0.8270	0.2039	550.7
Na5895_R		10,170	ug/L	475.0	4.671	15,460
Ni2316_A		405.5	ug/L	0.07437	0.01834	953.6
Pb2203_A		405.2	ug/L	1.303	0.3215	417.2
Sb2068_A		396.5	ug/L	2.154	0.5434	117.6
Se1960_A		396.6	ug/L	1.090	0.2749	56.02
Si2516_R		10,240	ug/L	544.0	5.311	1,248
Sn1899_A		419.5	ug/L	1.054	0.2512	157.5
Sr4215_R		402.9	ug/L	19.48	4.836	19,190
Ti3349_A		399.5	ug/L	4.769	1.194	17,230
Tl1908_A		414.2	ug/L	2.433	0.5873	130.9
V_2924_A		408.1	ug/L	4.200	1.029	8,737
Zn2062_A		400.7	ug/L	0.04520	0.01128	1,012
Y_3600_R		13,075	Cts/S	190.97	1.4606	13,075

ICV

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:27:08PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Y_2243_A		8,171.5	Cts/S	2.6402	0.032309	8,171.5
Y_3600_A		292,700	Cts/S	3,476.8	1.1878	292,700

ICB

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:31:44PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.09912	ug/L	0.2216	223.6	18.60
Al3961_R		7.309	ug/L	16.43	224.8	-7.087
As1891_A		2.551	ug/L	1.179	46.20	-0.3812
Au2427_A		1.809	ug/L	0.7391	40.86	8.725
B_2089_A		0.3376	ug/L	0.007401	2.192	2.705
Ba4554_R		-0.2070	ug/L	0.1281	61.88	65.98
Be3130_R		-0.04931	ug/L	0.04763	96.60	-3.060
Ca3158_R		-5.324	ug/L	1.407	26.42	-8.412
Cd2265_A		0.03955	ug/L	0.1211	306.2	2.391
Co2286_A		0.07196	ug/L	0.01541	21.41	5.684
Cr2677_A		-0.4158	ug/L	0.02796	6.726	-3.647
Cu3273_A		0.4141	ug/L	0.3619	87.39	4.013
Fe2599_R		4.759	ug/L	0.4705	9.886	8.890
K_7664_R		32.10	ug/L	14.52	45.24	-86.47
Li6707_R		-1.522	ug/L	0.8765	57.57	-18.18
Mg2025_A		1.669	ug/L	1.991	119.3	-3.664
Mn2576_R		0.8864	ug/L	0.08838	9.971	2.117
Mo2020_A		2.159	ug/L	0.4023	18.63	2.954
Na5895_R		-6.674	ug/L	7.602	113.9	-54.35
Ni2316_A		0.5420	ug/L	0.3152	58.15	-0.4417
Pb2203_A		-0.2430	ug/L	0.3311	136.2	-1.804
Sb2068_A		-0.8730	ug/L	1.125	128.9	-0.3703
Se1960_A		3.367	ug/L	4.180	124.2	1.513
Si2516_R		8.603	ug/L	6.500	75.55	5.043
Sn1899_A		0.9044	ug/L	0.1824	20.17	3.121
Sr4215_R		-0.1226	ug/L	0.1293	105.5	-17.26
Ti3349_A		0.2036	ug/L	0.1418	69.63	-7.012
Tl1908_A		3.311	ug/L	0.8187	24.73	0.2340
V_2924_A		0.01826	ug/L	0.01314	71.97	-5.198
Zn2062_A		0.05237	ug/L	0.004626	8.834	0.2414
Y_3600_R		13,274	Cts/S	197.21	1.4857	13,274
Y_2243_A		8,275.9	Cts/S	26.542	0.32071	8,275.9
Y_3600_A		297,250	Cts/S	2,333.8	0.78514	297,250

PQL

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:36:29PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.96	ug/L	0.2402	2.192	371.9
Al3961_R		326.9	ug/L	11.62	3.554	169.7
As1891_A	W	9.798	ug/L	1.966	20.07	1.413
Au2427_A		99.05	ug/L	3.042	3.072	390.2
B_2089_A		51.14	ug/L	0.05285	0.1033	43.14
Ba4554_R		5.276	ug/L	0.05275	0.9999	262.9
Be3130_R		5.273	ug/L	0.09422	1.787	255.7
Ca3158_R		120.4	ug/L	13.75	11.42	74.13
Cd2265_A		5.143	ug/L	0.03711	0.7216	79.50
Co2286_A		10.46	ug/L	0.09795	0.9368	46.03

PQL

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:36:29PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Cr2677_A		10.25	ug/L	0.06714	0.6549	176.6
Cu3273_A		26.82	ug/L	0.1930	0.7195	467.9
Fe2599_R		107.9	ug/L	3.763	3.488	56.82
K_7664_R		1,111	ug/L	17.31	1.558	459.5
Li6707_R		112.1	ug/L	3.060	2.729	943.7
Mg2025_A		106.5	ug/L	4.378	4.111	11.91
Mn2576_R		5.468	ug/L	0.4667	8.536	13.73
Mo2020_A		11.35	ug/L	0.1278	1.126	15.76
Na5895_R		1,105	ug/L	20.87	1.888	1,622
Ni2316_A		10.92	ug/L	0.009565	0.08758	24.58
Pb2203_A		4.308	ug/L	0.2079	4.827	2.959
Sb2068_A		8.312	ug/L	0.3720	4.475	2.151
Se1960_A		8.671	ug/L	1.492	17.21	2.282
Si2516_R		222.6	ug/L	27.53	12.37	30.57
Sn1899_A		105.1	ug/L	0.5047	0.4803	42.46
Sr4215_R		11.28	ug/L	0.2182	1.935	520.0
Ti3349_A		15.12	ug/L	0.3780	2.501	648.2
Tl1908_A		17.59	ug/L	1.051	5.977	4.900
V_2924_A		10.08	ug/L	0.3056	3.032	214.4
Zn2062_A		20.79	ug/L	0.04744	0.2282	53.87
Y_3600_R		12,914	Cts/S	157.45	1.2192	12,914
Y_2243_A		8,358.0	Cts/S	13.678	0.16366	8,358.0
Y_3600_A		298,120	Cts/S	3,880.8	1.3018	298,120

LRS1

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:42:52PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	1,561	ug/L	2.588	0.1658	46,850
Al3961_R		89.43	ug/L	18.11	20.24	122.6
As1891_A		20,390	ug/L	27.78	0.1362	4,871
Au2427_A		21,720	ug/L	242.1	1.115	82,610
B_2089_A		19,440	ug/L	14.28	0.07345	14,960
Ba4554_R		19,630	ug/L	196.4	1.001	718,600
Be3130_R		19,950	ug/L	609.0	3.052	981,000
Ca3158_R		-28.63	ug/L	6.809	23.78	-12.43
Cd2265_A		18,490	ug/L	70.16	0.3794	269,300
Co2286_A		19,890	ug/L	9.616	0.04836	74,360
Cr2677_A		19,210	ug/L	2.229	0.01161	317,100
Cu3273_A		19,820	ug/L	111.5	0.5629	339,900
Fe2599_R		203,900	ug/L	1,095	0.5370	96,200
K_7664_R		-28.77	ug/L	89.54	311.3	-115.6
Li6707_R		20,800	ug/L	123.3	0.5925	177,700
Mg2025_A		-2,642	ug/L	2.761	0.1045	211.7
Mn2576_R		20,910	ug/L	88.45	0.4231	53,750
Mo2020_A		5,014	ug/L	13.73	0.2738	6,718
Na5895_R		4.085	ug/L	11.81	289.0	-37.21
Ni2316_A		19,620	ug/L	43.83	0.2234	45,610
Pb2203_A		20,030	ug/L	43.85	0.2189	20,510
Sb2068_A		20,200	ug/L	28.74	0.1423	5,925
Se1960_A		20,170	ug/L	2.333	0.01157	2,759
Si2516_R		246.8	ug/L	5.644	2.287	43.06
Sn1899_A		19,360	ug/L	53.84	0.2780	7,053
Sr4215_R		20,150	ug/L	316.1	1.568	958,700
Ti3349_A		19,750	ug/L	313.6	1.588	847,300
Tl1908_A		19,520	ug/L	6.903	0.03537	6,121

LRS1

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:42:52PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
V_2924_A		19,810	ug/L	138.3	0.6978	424,200
Zn2062_A		18,520	ug/L	35.96	0.1941	46,190
Y_3600_R		13,042	Cts/S	134.87	1.0341	13,042
Y_2243_A		8,064.3	Cts/S	25.599	0.31743	8,064.3
Y_3600_A		291,190	Cts/S	1,449.9	0.49794	291,190

LRS2

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:48:17PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		12.07	ug/L	1.627	13.48	-2,689
Al3961_R		509,900	ug/L	11,040	2.166	274,800
As1891_A		2.165	ug/L	3.534	163.2	-7.117
Au2427_A		10.66	ug/L	3.187	29.89	157.2
B_2089_A		19.59	ug/L	1.426	7.278	15.95
Ba4554_R		1.623	ug/L	0.1338	8.243	127.3
Be3130_R		0.6955	ug/L	0.1945	27.96	31.87
Ca3158_R		474,600	ug/L	32,280	6.801	303,300
Cd2265_A		2.873	ug/L	0.3420	11.90	293.7
Co2286_A		0.7401	ug/L	0.2606	35.20	3.645
Cr2677_A		-1.042	ug/L	0.01463	1.405	-12.83
Cu3273_A		-2.182	ug/L	0.6558	30.06	23.94
Fe2599_R		249,000	ug/L	5,940	2.385	113,500
K_7664_R		307,700	ug/L	4,409	1.433	151,100
Li6707_R		31.99	ug/L	0.7531	2.354	259.3
Mg2025_A		189,100	ug/L	1,180	0.6237	24,220
Mn2576_R		9.202	ug/L	0.9711	10.55	28.08
Mo2020_A		9.248	ug/L	2.022	21.87	11.29
Na5895_R		200,400	ug/L	3,208	1.600	294,500
Ni2316_A		-0.2764	ug/L	0.3053	110.5	-21.84
Pb2203_A		3.288	ug/L	2.549	77.52	-62.02
Sb2068_A		2.791	ug/L	2.493	89.31	4.551
Se1960_A		13.39	ug/L	0.8930	6.669	4.300
Si2516_R		50,930	ug/L	1,139	2.236	5,966
Sn1899_A		6.909	ug/L	3.449	49.93	4.767
Sr4215_R		7.587	ug/L	0.1278	1.685	337.8
Ti3349_A		18.70	ug/L	1.006	5.377	696.0
Tl1908_A		3.234	ug/L	3.595	111.1	2.400
V_2924_A		0.2240	ug/L	0.1558	69.54	45.14
Zn2062_A		2.947	ug/L	0.5103	17.32	6.797
Y_3600_R		12,597	Cts/S	109.85	0.87203	12,597
Y_2243_A		7,349.2	Cts/S	52.643	0.71631	7,349.2
Y_3600_A		257,570	Cts/S	945.03	0.36690	257,570

ICSA

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:56:31PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	8.764	ug/L	3.643	41.56	-2,137
Al3961_R		525,900	ug/L	10,730	2.040	284,100
As1891_A		-3.191	ug/L	0.1841	5.769	-6.479
Au2427_A		-1.719	ug/L	0.2697	15.69	88.30
B_2089_A		8.800	ug/L	0.4303	4.889	8.257
Ba4554_R		-0.2085	ug/L	0.4330	207.7	62.55
Be3130_R		0.04029	ug/L	0.09808	243.5	1.283

ICSA

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 3:56:31PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ca3158_R		489,100	ug/L	32,280	6.601	313,200
Cd2265_A		2.564	ug/L	0.3669	14.31	233.1
Co2286_A		0.2818	ug/L	0.2220	78.78	2.803
Cr2677_A		0.6882	ug/L	0.08532	12.40	12.70
Cu3273_A		-2.109	ug/L	0.07087	3.361	33.80
Fe2599_R		193,300	ug/L	6,297	3.258	88,280
K_7664_R		439.6	ug/L	38.11	8.670	118.4
Li6707_R		16.95	ug/L	1.108	6.535	135.4
Mg2025_A		483,800	ug/L	153.5	0.03172	62,040
Mn2576_R		-0.8056	ug/L	0.1747	21.69	2.121
Mo2020_A		-0.04427	ug/L	0.7420	1,676	-0.06902
Na5895_R		61.52	ug/L	0.8218	1.336	48.67
Ni2316_A		-1.487	ug/L	0.05522	3.714	-20.04
Pb2203_A		1.965	ug/L	2.175	110.7	-65.97
Sb2068_A		-0.3561	ug/L	3.431	963.7	3.141
Se1960_A		6.900	ug/L	2.680	38.85	3.426
Si2516_R		8.024	ug/L	20.75	258.6	5.639
Sn1899_A		5.306	ug/L	0.7772	14.65	4.238
Sr4215_R	W	5.062	ug/L	0.2434	4.809	222.2
Ti3349_A		2.941	ug/L	0.06012	2.045	99.29
Tl1908_A		1.353	ug/L	1.368	101.1	1.629
V_2924_A		-0.1900	ug/L	0.1214	63.89	28.08
Zn2062_A		0.3008	ug/L	0.2466	82.00	0.7780
Y_3600_R		12,627	Cts/S	206.59	1.6361	12,627
Y_2243_A		7,360.3	Cts/S	7.9332	0.10778	7,360.3
Y_3600_A		261,890	Cts/S	2,075.9	0.79266	261,890

ICSAB

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:01:20PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		217.7	ug/L	3.083	1.416	3,999
Al3961_R		493,500	ug/L	10,090	2.044	271,500
As1891_A		93.26	ug/L	0.7022	0.7529	15.03
Au2427_A		525.2	ug/L	10.66	2.029	1,909
B_2089_A		504.2	ug/L	0.6208	0.1231	363.2
Ba4554_R		509.0	ug/L	22.93	4.505	18,440
Be3130_R		499.7	ug/L	23.64	4.730	24,210
Ca3158_R		456,000	ug/L	34,160	7.490	297,400
Cd2265_A		935.1	ug/L	3.161	0.3380	12,600
Co2286_A		459.1	ug/L	2.175	0.4737	1,568
Cr2677_A		478.2	ug/L	2.070	0.4328	7,166
Cu3273_A		500.2	ug/L	4.528	0.9053	7,849
Fe2599_R		184,700	ug/L	8,898	4.818	85,880
K_7664_R		21,420	ug/L	856.0	3.995	10,640
Li6707_R		565.1	ug/L	19.18	3.393	4,753
Mg2025_A		468,900	ug/L	2,094	0.4466	60,090
Mn2576_R		478.8	ug/L	22.16	4.628	1,217
Mo2020_A		489.5	ug/L	3.761	0.7683	598.2
Na5895_R		21,660	ug/L	877.6	4.052	32,430
Ni2316_A		905.6	ug/L	3.385	0.3738	1,905
Pb2203_A		44.55	ug/L	2.804	6.294	-22.25
Sb2068_A		594.3	ug/L	6.183	1.040	161.8
Se1960_A		55.70	ug/L	4.016	7.210	9.430
Si2516_R	F	235.9	ug/L	12.50	5.298	33.52
Sn1899_A		477.3	ug/L	1.127	0.2362	160.9

ICSAB

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:01:20PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Sr4215_R		526.7	ug/L	24.02	4.561	24,680
Ti3349_A		489.9	ug/L	0.8924	0.1822	19,080
Tl1908_A		94.55	ug/L	3.176	3.359	26.89
V_2924_A		487.9	ug/L	1.235	0.2531	9,465
Zn2062_A		910.3	ug/L	3.505	0.3850	2,071
Y_3600_R		12,857	Cts/S	172.10	1.3385	12,857
Y_2243_A		7,354.0	Cts/S	30.415	0.41358	7,354.0
Y_3600_A		264,250	Cts/S	528.38	0.19995	264,250

CCV

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:06:03PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		517.5	ug/L	4.327	0.8362	16,500
Al3961_R		13,130	ug/L	43.13	0.3285	7,217
As1891_A		497.2	ug/L	1.626	0.3271	120.6
Au2427_A		497.5	ug/L	19.32	3.883	1,945
B_2089_A		503.5	ug/L	1.298	0.2578	407.8
Ba4554_R		526.7	ug/L	4.383	0.8322	19,070
Be3130_R		522.8	ug/L	3.095	0.5921	25,320
Ca3158_R	W	13,230	ug/L	56.00	0.4231	8,624
Cd2265_A		501.3	ug/L	0.2004	0.03997	7,489
Co2286_A		500.8	ug/L	0.5233	0.1045	1,923
Cr2677_A		515.0	ug/L	4.940	0.9592	8,582
Cu3273_A		513.3	ug/L	4.718	0.9190	8,884
Fe2599_R		12,950	ug/L	83.76	0.6470	6,024
K_7664_R		13,080	ug/L	97.37	0.7444	6,458
Li6707_R	W	532.5	ug/L	5.904	1.109	4,476
Mg2025_A		12,980	ug/L	17.58	0.1354	1,882
Mn2576_R		526.5	ug/L	7.798	1.481	1,334
Mo2020_A		504.7	ug/L	1.105	0.2189	692.9
Na5895_R		13,170	ug/L	108.0	0.8200	19,690
Ni2316_A		504.3	ug/L	0.006272	0.001244	1,199
Pb2203_A		511.4	ug/L	0.4238	0.08287	532.8
Sb2068_A		500.8	ug/L	1.900	0.3794	150.3
Se1960_A		494.3	ug/L	1.145	0.2318	70.32
Si2516_R	W	13,250	ug/L	126.6	0.9557	1,586
Sn1899_A		505.8	ug/L	0.3345	0.06614	191.4
Sr4215_R	W	527.4	ug/L	3.934	0.7459	24,700
Ti3349_A		507.7	ug/L	5.681	1.119	21,990
Tl1908_A		505.5	ug/L	3.548	0.7019	161.7
V_2924_A		506.7	ug/L	5.737	1.132	10,890
Zn2062_A		492.6	ug/L	1.748	0.3548	1,258
Y_3600_R		12,849	Cts/S	141.81	1.1037	12,849
Y_2243_A		8,260.6	Cts/S	2.7074	0.032774	8,260.6
Y_3600_A		293,860	Cts/S	2,531.6	0.86149	293,860

CCB

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:10:40PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4414	ug/L	0.09784	22.17	30.15
Al3961_R		2.182	ug/L	12.94	593.1	-9.955
As1891_A		2.930	ug/L	2.614	89.19	-0.2912
Au2427_A		1.817	ug/L	0.3323	18.29	8.838

CCB

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:10:40PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
B_2089_A		4.179	ug/L	0.8869	21.22	5.805
Ba4554_R		-0.05297	ug/L	0.09829	185.5	71.61
Be3130_R		0.07790	ug/L	0.01710	21.95	3.288
Ca3158_R		2.479	ug/L	0.4546	18.34	-3.166
Cd2265_A		0.03641	ug/L	0.01668	45.82	2.374
Co2286_A		-0.2024	ug/L	0.01634	8.072	4.692
Cr2677_A		-0.2932	ug/L	0.4049	138.1	-1.625
Cu3273_A		0.05812	ug/L	0.3946	678.9	-2.213
Fe2599_R		4.064	ug/L	0.3665	9.017	8.552
K_7664_R		67.26	ug/L	51.98	77.28	-67.84
Li6707_R		5.115	ug/L	3.731	72.94	39.16
Mg2025_A		0.1780	ug/L	2.265	1,273	-3.928
Mn2576_R		-0.1436	ug/L	1.378	959.8	-0.6234
Mo2020_A		3.077	ug/L	0.6027	19.59	4.266
Na5895_R		4.275	ug/L	4.363	102.0	-37.38
Ni2316_A		0.2480	ug/L	0.1120	45.16	-1.156
Pb2203_A		-1.079	ug/L	0.6156	57.03	-2.715
Sb2068_A		0.2520	ug/L	0.8262	327.9	-0.03182
Se1960_A		1.464	ug/L	0.1920	13.11	1.262
Si2516_R		24.40	ug/L	3.592	14.72	6.989
Sn1899_A		1.177	ug/L	0.2835	24.08	3.261
Sr4215_R		-0.2953	ug/L	0.3182	107.7	-25.46
Ti3349_A		0.4828	ug/L	0.3061	63.39	5.325
Tl1908_A		2.710	ug/L	1.460	53.89	0.04052
V_2924_A		-0.2867	ug/L	0.08378	29.22	-12.16
Zn2062_A		-0.04075	ug/L	0.1484	364.3	0.002740
Y_3600_R		13,267	Cts/S	326.20	2.4587	13,267
Y_2243_A		8,373.7	Cts/S	8.0074	0.095626	8,373.7
Y_3600_A		300,780	Cts/S	1,405.5	0.46728	300,780

LCSWID17ICW1

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:15:25PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		53.15	ug/L	0.4645	0.8739	1,740
Al3961_R		2,191	ug/L	116.9	5.337	1,234
As1891_A		104.5	ug/L	3.680	3.520	24.95
Au2427_A		2.063	ug/L	1.249	60.54	19.53
B_2089_A		492.1	ug/L	0.1873	0.03806	394.5
Ba4554_R		2,140	ug/L	92.17	4.307	79,800
Be3130_R		53.67	ug/L	2.109	3.930	2,669
Ca3158_R		2,601	ug/L	138.3	5.318	1,747
Cd2265_A		256.6	ug/L	0.4106	0.1600	3,876
Co2286_A		532.8	ug/L	0.3978	0.07466	2,072
Cr2677_A		217.8	ug/L	1.163	0.5342	3,701
Cu3273_A		271.1	ug/L	0.8523	0.3143	4,777
Fe2599_R		1,057	ug/L	44.94	4.253	513.9
K_7664_R		10,360	ug/L	348.4	3.362	5,264
Li6707_R		535.8	ug/L	23.68	4.419	4,651
Mg2025_A		5,317	ug/L	9.258	0.1741	787.0
Mn2576_R		539.0	ug/L	26.15	4.852	1,410
Mo2020_A		105.5	ug/L	0.02490	0.02361	146.5
Na5895_R		7,959	ug/L	335.1	4.210	12,280
Ni2316_A		535.4	ug/L	0.08356	0.01561	1,289
Pb2203_A		104.3	ug/L	0.1486	0.1424	109.0
Sb2068_A		102.9	ug/L	0.06550	0.06363	29.87

LCSWID17ICW1

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:15:25PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Se1960_A		99.69	ug/L	0.001501	0.001505	15.22
Si2516_R		1,048	ug/L	72.44	6.915	133.3
Sn1899_A		522.4	ug/L	0.6274	0.1201	200.1
Sr4215_R		521.9	ug/L	22.87	4.382	25,240
Ti3349_A		519.3	ug/L	4.908	0.9451	22,890
Tl1908_A		110.8	ug/L	0.4022	0.3630	33.64
V_2924_A		534.9	ug/L	4.122	0.7706	11,800
Zn2062_A		516.5	ug/L	1.587	0.3073	1,337
Y_3600_R		13,277	Cts/S	291.51	2.1957	13,277
Y_2243_A		8,364.3	Cts/S	17.133	0.20483	8,364.3
Y_3600_A		299,340	Cts/S	793.30	0.26501	299,340

PBWID17ICW1

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:20:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.06288	ug/L	0.2051	326.2	13.64
Al3961_R		4.180	ug/L	10.40	248.9	-9.024
As1891_A		1.730	ug/L	0.8784	50.77	-0.5949
Au2427_A		0.3177	ug/L	0.2482	78.13	2.987
B_2089_A		2.925	ug/L	0.1748	5.975	4.802
Ba4554_R		0.5437	ug/L	0.01891	3.478	94.96
Be3130_R		-0.02625	ug/L	0.04949	188.5	-1.946
Ca3158_R		-0.9353	ug/L	14.20	1,518	-5.482
Cd2265_A		-0.03895	ug/L	0.007153	18.36	1.239
Co2286_A		-0.08721	ug/L	0.1037	118.9	5.179
Cr2677_A		-0.3608	ug/L	0.2099	58.18	-2.763
Cu3273_A		0.2156	ug/L	0.4551	211.1	0.5500
Fe2599_R		-1.003	ug/L	3.357	334.7	6.182
K_7664_R		86.05	ug/L	25.68	29.84	-59.19
Li6707_R		4.467	ug/L	1.260	28.22	34.36
Mg2025_A		6.882	ug/L	7.487	108.8	-2.979
Mn2576_R		0.9182	ug/L	1.255	136.6	2.209
Mo2020_A		1.103	ug/L	0.1933	17.52	1.530
Na5895_R		12.86	ug/L	5.236	40.72	-24.50
Ni2316_A		0.2446	ug/L	0.06348	25.96	-1.177
Pb2203_A		-0.8223	ug/L	0.4556	55.41	-2.460
Sb2068_A		-0.4509	ug/L	0.9434	209.2	-0.2477
Se1960_A		-2.547	ug/L	0.4540	17.82	0.6986
Si2516_R		6.456	ug/L	14.24	220.6	4.832
Sn1899_A		1.124	ug/L	0.3941	35.06	3.267
Sr4215_R		0.1241	ug/L	0.01470	11.84	-5.418
Ti3349_A		0.4630	ug/L	0.08602	18.58	4.350
Tl1908_A		0.3746	ug/L	1.199	320.2	-0.7348
V_2924_A		-0.5045	ug/L	0.5371	106.5	-16.78
Zn2062_A		0.4394	ug/L	0.1555	35.39	1.258
Y_3600_R		13,421	Cts/S	116.15	0.86546	13,421
Y_2243_A		8,441.5	Cts/S	3.8746	0.045899	8,441.5
Y_3600_A		302,150	Cts/S	1,062.6	0.35167	302,150

SI2313-004

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:24:48PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3933	ug/L	0.003571	0.9081	20.68

SI2313-004

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:24:48PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Al3961_R		1,088	ug/L	38.46	3.534	595.4
As1891_A		2.059	ug/L	1.674	81.29	-0.5024
Au2427_A		-0.6487	ug/L	0.02208	3.404	-0.2500
B_2089_A		19.06	ug/L	0.08282	0.4345	16.80
Ba4554_R		47.89	ug/L	1.169	2.442	1,823
Be3130_R		0.1028	ug/L	0.1014	98.64	3.582
Ca3158_R		1,572	ug/L	70.97	4.515	1,034
Cd2265_A		0.03913	ug/L	0.008337	21.30	2.793
Co2286_A		1.005	ug/L	0.1397	13.90	9.211
Cr2677_A		0.9919	ug/L	0.1332	13.43	18.94
Cu3273_A		0.9884	ug/L	0.4202	42.52	13.15
Fe2599_R		427.7	ug/L	7.394	1.729	208.0
K_7664_R		355.2	ug/L	9.739	2.742	79.36
Li6707_R		5.286	ug/L	0.9281	17.56	40.24
Mg2025_A		437.8	ug/L	4.827	1.103	57.40
Mn2576_R		20.80	ug/L	2.964	14.25	53.15
Mo2020_A		0.9858	ug/L	0.4864	49.34	1.303
Na5895_R	F	288,100	ug/L	20,060	6.962	437,600
Ni2316_A		1.782	ug/L	0.2519	14.14	2.402
Pb2203_A		0.7282	ug/L	1.351	185.5	-0.9169
Sb2068_A		0.3919	ug/L	1.591	406.1	0.02254
Se1960_A		-0.2348	ug/L	0.7134	303.9	0.9835
Si2516_R		2,288	ug/L	86.90	3.798	280.8
Sn1899_A		1.227	ug/L	0.4536	36.98	3.138
Sr4215_R		17.16	ug/L	0.5512	3.211	804.1
Ti3349_A		26.05	ug/L	0.4469	1.715	1,056
Tl1908_A		0.6619	ug/L	0.1205	18.21	-0.6296
V_2924_A		0.4275	ug/L	0.2793	65.33	4.153
Zn2062_A		30.41	ug/L	0.1778	0.5848	75.55
Y_3600_R		13,027	Cts/S	194.18	1.4905	13,027
Y_2243_A		8,016.3	Cts/S	145.45	1.8145	8,016.3
Y_3600_A		279,220	Cts/S	490.79	0.17577	279,220

SI2291-006

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:29:35PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.01273	ug/L	0.09700	762.3	14.84
Al3961_R		16.18	ug/L	10.66	65.91	1.675
As1891_A		1.765	ug/L	0.1277	7.233	-0.5560
Au2427_A		-0.8119	ug/L	1.505	185.4	-0.8750
B_2089_A		8.983	ug/L	0.7127	7.934	9.126
Ba4554_R		32.84	ug/L	1.414	4.308	1,399
Be3130_R		0.03546	ug/L	0.07054	198.9	1.277
Ca3158_R		17,560	ug/L	384.4	2.189	12,760
Cd2265_A		0.1108	ug/L	0.01888	17.04	3.356
Co2286_A		0.1322	ug/L	0.3451	260.9	5.704
Cr2677_A		0.2400	ug/L	0.1517	63.22	7.563
Cu3273_A		1.416	ug/L	0.5777	40.80	21.59
Fe2599_R		16.56	ug/L	3.289	19.87	15.71
K_7664_R		2,276	ug/L	103.7	4.555	1,161
Li6707_R		11.55	ug/L	2.808	24.30	103.0
Mg2025_A		1,892	ug/L	45.85	2.424	260.0
Mn2576_R		29.77	ug/L	0.6400	2.150	83.81
Mo2020_A		0.4075	ug/L	0.1482	36.36	0.5273
Na5895_R	F	256,700	ug/L	10,030	3.907	428,700

SI2291-006

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:29:35PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ni2316_A		1.956	ug/L	0.1344	6.868	2.832
Pb2203_A		6.527	ug/L	0.09383	1.438	5.132
Sb2068_A		0.2159	ug/L	3.167	1,467	-0.08325
Se1960_A		1.452	ug/L	2.617	180.2	1.209
Si2516_R		242.6	ug/L	3.169	1.306	36.58
Sn1899_A		1.138	ug/L	0.08401	7.384	3.100
Sr4215_R		61.79	ug/L	1.422	2.302	3,215
Ti3349_A		0.2151	ug/L	0.04749	22.07	-6.613
Tl1908_A		0.5282	ug/L	0.4986	94.38	-0.6710
V_2924_A		-0.2704	ug/L	0.01199	4.433	-11.52
Zn2062_A		489.8	ug/L	6.326	1.292	1,212
Y_3600_R		14,323	Cts/S	157.70	1.1010	14,323
Y_2243_A		7,998.1	Cts/S	155.90	1.9492	7,998.1
Y_3600_A		297,560	Cts/S	941.35	0.31636	297,560

SI2403-001

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:34:24PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3284	ug/L	0.5130	156.2	24.62
Al3961_R		44.30	ug/L	13.04	29.44	23.97
As1891_A		3.146	ug/L	0.7783	24.74	-0.2275
Au2427_A		-1.040	ug/L	0.6341	60.98	-2.250
B_2089_A		18.49	ug/L	0.5033	2.721	16.22
Ba4554_R		10.32	ug/L	0.5247	5.084	442.2
Be3130_R		0.03826	ug/L	0.006820	17.83	1.274
Ca3158_R	W	52,380	ug/L	2,447	4.672	34,040
Cd2265_A		-0.07066	ug/L	0.07046	99.71	0.7269
Co2286_A		-0.02081	ug/L	0.1028	494.2	5.113
Cr2677_A		0.7058	ug/L	0.4245	60.15	14.44
Cu3273_A		0.3633	ug/L	0.05318	14.64	2.988
Fe2599_R		13.26	ug/L	2.001	15.09	12.51
K_7664_R		2,552	ug/L	142.6	5.586	1,176
Li6707_R		11.35	ug/L	0.5401	4.760	90.55
Mg2025_A		6,914	ug/L	9.656	0.1397	954.0
Mn2576_R		0.3521	ug/L	0.3190	90.61	0.6847
Mo2020_A		0.3318	ug/L	0.1318	39.74	0.4218
Na5895_R	W	68,730	ug/L	3,336	4.853	102,700
Ni2316_A		0.5241	ug/L	0.8332	159.0	-0.4718
Pb2203_A		-1.382	ug/L	0.4816	34.85	-2.888
Sb2068_A		-0.6357	ug/L	1.012	159.2	-0.2844
Se1960_A		4.200	ug/L	1.163	27.70	1.567
Si2516_R		6,411	ug/L	315.1	4.915	766.9
Sn1899_A		1.228	ug/L	0.8243	67.10	3.114
Sr4215_R		159.0	ug/L	7.562	4.756	7,416
Ti3349_A		-0.3237	ug/L	0.3060	94.53	-28.61
Tl1908_A		1.403	ug/L	0.5259	37.48	-0.3700
V_2924_A		-0.3088	ug/L	0.2225	72.05	-11.59
Zn2062_A		3.208	ug/L	0.09457	2.948	7.994
Y_3600_R		12,815	Cts/S	256.35	2.0004	12,815
Y_2243_A		7,950.2	Cts/S	8.0678	0.10148	7,950.2
Y_3600_A		281,360	Cts/S	1,048.1	0.37251	281,360

LCSOID15ICS1

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ

LCSOID15ICS1

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:39:07PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	216.0	ug/L	4.500	2.083	6,670
Al3961_R	F	7,841	ug/L	246.5	3.144	4,252
As1891_A	F	245.5	ug/L	4.887	1.991	58.19
Au2427_A		1.306	ug/L	0.4308	32.98	20.97
B_2089_A		525.3	ug/L	2.516	0.4791	413.0
Ba4554_R		1,710	ug/L	60.78	3.554	61,020
Be3130_R	F	233.6	ug/L	7.191	3.078	11,160
Ca3158_R	F	4,701	ug/L	150.2	3.195	3,024
Cd2265_A	F	365.2	ug/L	3.967	1.086	5,377
Co2286_A		560.5	ug/L	2.186	0.3901	2,125
Cr2677_A	F	358.2	ug/L	4.892	1.366	5,808
Cu3273_A	F	384.3	ug/L	5.888	1.532	6,463
Fe2599_R	F	7,642	ug/L	292.9	3.833	3,516
K_7664_R		11,260	ug/L	401.7	3.566	5,480
Li6707_R	W	577.9	ug/L	19.08	3.302	4,800
Mg2025_A	W	5,813	ug/L	13.30	0.2288	838.2
Mn2576_R	F	622.9	ug/L	20.34	3.265	1,559
Mo2020_A	F	247.1	ug/L	4.963	2.009	334.4
Na5895_R	F	13,190	ug/L	489.6	3.713	19,480
Ni2316_A		566.2	ug/L	0.8218	0.1451	1,328
Pb2203_A	F	256.0	ug/L	5.192	2.029	262.1
Sb2068_A	F	242.9	ug/L	6.738	2.774	71.36
Se1960_A	F	246.6	ug/L	1.217	0.4934	35.12
Si2516_R	F	1,357	ug/L	23.68	1.745	164.4
Sn1899_A	W	409.5	ug/L	4.201	1.026	153.3
Sr4215_R		575.5	ug/L	19.51	3.390	26,640
Ti3349_A	F	861.6	ug/L	9.956	1.156	36,260
Tl1908_A	F	257.4	ug/L	6.550	2.544	79.49
V_2924_A	W	578.1	ug/L	4.513	0.7807	12,150
Zn2062_A		569.8	ug/L	1.515	0.2659	1,435
Y_3600_R		12,696	Cts/S	99.136	0.78082	12,696
Y_2243_A		8,144.5	Cts/S	0.32228	0.0039570	8,144.5
Y_3600_A		285,780	Cts/S	1,485.4	0.51977	285,780

LCSOID15ICS1

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:43:46PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.42	ug/L	0.2474	0.4812	1,653
Al3961_R		2,138	ug/L	52.29	2.446	1,152
As1891_A		103.3	ug/L	2.560	2.479	23.99
Au2427_A		0.5408	ug/L	0.5100	94.30	13.00
B_2089_A		477.8	ug/L	0.06214	0.01301	373.2
Ba4554_R		2,097	ug/L	89.95	4.289	74,830
Be3130_R		52.63	ug/L	2.229	4.236	2,504
Ca3158_R		2,627	ug/L	96.82	3.686	1,688
Cd2265_A		255.6	ug/L	0.04053	0.01586	3,760
Co2286_A		517.7	ug/L	0.5215	0.1007	1,961
Cr2677_A		210.4	ug/L	1.831	0.8703	3,511
Cu3273_A		257.4	ug/L	1.236	0.4801	4,452
Fe2599_R		1,032	ug/L	50.36	4.879	480.5
K_7664_R		10,450	ug/L	402.0	3.848	5,078
Li6707_R		531.9	ug/L	21.15	3.976	4,419
Mg2025_A		5,155	ug/L	13.19	0.2558	743.2
Mn2576_R		527.6	ug/L	21.08	3.996	1,320
Mo2020_A		103.2	ug/L	0.6202	0.6009	139.6

LCSOID15ICS1

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:43:46PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		7,943	ug/L	331.8	4.177	11,720
Ni2316_A		521.4	ug/L	0.1381	0.02648	1,223
Pb2203_A		103.4	ug/L	0.5802	0.5614	105.2
Sb2068_A		100.1	ug/L	0.4577	0.4573	28.19
Se1960_A		106.1	ug/L	2.442	2.300	15.71
Si2516_R		922.2	ug/L	42.78	4.639	112.8
Sn1899_A		544.4	ug/L	1.673	0.3072	203.0
Sr4215_R		521.3	ug/L	21.45	4.114	24,130
Ti3349_A		512.3	ug/L	3.588	0.7004	22,170
Tl1908_A		109.1	ug/L	0.4027	0.3692	32.29
V_2924_A		511.1	ug/L	2.825	0.5528	11,070
Zn2062_A		509.5	ug/L	0.006852	0.001345	1,284
Y_3600_R		12,700	Cts/S	70.052	0.55159	12,700
Y_2243_A		8,146.4	Cts/S	9.7507	0.11969	8,146.4
Y_3600_A		293,890	Cts/S	3,119.2	1.0613	293,890

SI2293-001

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:48:27PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7103	ug/L	0.1237	17.41	26.76
Al3961_R		5.448	ug/L	0.4077	7.483	-9.158
As1891_A		7.775	ug/L	1.263	16.24	-0.05497
Au2427_A		-0.8570	ug/L	0.8166	95.29	0.02500
B_2089_A		2.312	ug/L	1.158	50.10	3.337
Ba4554_R		-0.5468	ug/L	0.2876	52.60	59.47
Be3130_R		0.02564	ug/L	0.2192	854.8	-0.03038
Ca3158_R		103.1	ug/L	8.589	8.334	27.99
Cd2265_A		0.05768	ug/L	0.1429	247.8	2.257
Co2286_A		0.3742	ug/L	0.009188	2.455	6.168
Cr2677_A		1.821	ug/L	0.4166	22.88	18.63
Cu3273_A		0.09165	ug/L	0.8364	912.6	-2.412
Fe2599_R		26.08	ug/L	17.99	68.99	12.03
K_7664_R		97.92	ug/L	107.6	109.9	-72.63
Li6707_R		13.05	ug/L	0.3193	2.447	48.58
Mg2025_A		35.24	ug/L	5.903	16.75	-1.373
Mn2576_R		0.1126	ug/L	4.062	3,609	-0.09002
Mo2020_A		1.725	ug/L	0.2145	12.44	1.176
Na5895_R		103.9	ug/L	1.430	1.376	34.06
Ni2316_A		1.685	ug/L	0.1018	6.038	0.2729
Pb2203_A		-0.3047	ug/L	0.8761	287.5	-1.718
Sb2068_A		0.5303	ug/L	2.289	431.7	-0.09205
Se1960_A		-0.1952	ug/L	2.401	1,230	1.035
Si2516_R		-3.453	ug/L	72.69	2,105	3.495
Sn1899_A		51.16	ug/L	0.4099	0.8012	12.42
Sr4215_R		-0.2034	ug/L	0.7732	380.2	-15.14
Ti3349_A		1.715	ug/L	0.2236	13.04	21.48
Tl1908_A		4.875	ug/L	0.2249	4.613	-0.04969
V_2924_A		0.02322	ug/L	0.03686	158.8	-5.247
Zn2062_A		5.907	ug/L	0.3031	5.131	7.717
Y_3600_R		12,443	Cts/S	186.28	1.4970	12,443
Y_2243_A		8,326.3	Cts/S	1.7512	0.021032	8,326.3
Y_3600_A		296,290	Cts/S	55.435	0.018709	296,290

SI2293-002

Method Name: K6010-2011 Method Revision: 1,746

SI2293-002

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:53:12PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		7.500	ug/L	2.255	30.07	-2,013
Al3961_R	W	107,600	ug/L	3,922	3.643	59,580
As1891_A		334.6	ug/L	2.475	0.7396	74.99
Au2427_A		-0.6264	ug/L	0.8113	129.5	106.0
B_2089_A	W	1,561	ug/L	0.5877	0.03766	1,217
Ba4554_R	W	1,271	ug/L	41.19	3.242	46,230
Be3130_R		15.86	ug/L	0.3608	2.274	619.5
Ca3158_R	W	49,630	ug/L	1,852	3.731	32,580
Cd2265_A		5.899	ug/L	0.6290	10.66	276.1
Co2286_A		62.85	ug/L	0.2711	0.4313	287.0
Cr2677_A		423.1	ug/L	5.168	1.222	6,922
Cu3273_A		284.2	ug/L	1.775	0.6245	4,788
Fe2599_R	W	162,700	ug/L	6,295	3.870	76,160
K_7664_R		13,380	ug/L	438.5	3.278	6,654
Li6707_R		171.8	ug/L	6.835	3.979	1,451
Mg2025_A		17,250	ug/L	26.29	0.1524	2,467
Mn2576_R	W	1,252	ug/L	47.79	3.816	3,197
Mo2020_A		73.43	ug/L	0.5184	0.7059	100.1
Na5895_R	W	27,520	ug/L	916.5	3.330	41,500
Ni2316_A		183.4	ug/L	0.4179	0.2279	418.1
Pb2203_A		345.4	ug/L	0.2267	0.06564	345.0
Sb2068_A		4.837	ug/L	0.1538	3.180	4.074
Se1960_A		14.70	ug/L	2.769	18.84	3.787
Si2516_R		1,291	ug/L	67.93	5.261	160.5
Sn1899_A		37.43	ug/L	0.3564	0.9522	16.63
Sr4215_R	W	2,012	ug/L	67.68	3.363	94,960
Ti3349_A	W	4,479	ug/L	11.60	0.2590	190,200
Tl1908_A		16.63	ug/L	0.07175	0.4314	1.326
V_2924_A		583.3	ug/L	2.829	0.4850	12,500
Zn2062_A		486.3	ug/L	0.04478	0.009207	1,235
Y_3600_R		12,945	Cts/S	257.86	1.9920	12,945
Y_2243_A		8,210.1	Cts/S	2.2567	0.027487	8,210.1
Y_3600_A		288,280	Cts/S	2,381.5	0.82609	288,280

SI2293-003

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:57:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		27.33	ug/L	2.723	9.963	-2,768
Al3961_R	W	236,800	ug/L	2,050	0.8654	64,350
As1891_A		518.0	ug/L	3.727	0.7196	53.65
Au2427_A		-3.939	ug/L	1.365	34.64	162.4
B_2089_A		1,199	ug/L	1.357	0.1132	465.1
Ba4554_R	W	2,507	ug/L	30.71	1.225	44,770
Be3130_R		21.45	ug/L	0.1815	0.8461	300.3
Ca3158_R	W	164,700	ug/L	1,644	0.9983	53,080
Cd2265_A		13.26	ug/L	0.1878	1.417	361.9
Co2286_A		186.0	ug/L	0.4607	0.2478	414.5
Cr2677_A		688.8	ug/L	0.7175	0.1042	5,642
Cu3273_A		1,438	ug/L	2.163	0.1505	12,140
Fe2599_R	W	462,100	ug/L	4,494	0.9726	106,200
K_7664_R		30,710	ug/L	508.2	1.655	7,512
Li6707_R		434.7	ug/L	8.915	2.051	1,804
Mg2025_A	W	73,080	ug/L	98.28	0.1345	5,179
Mn2576_R	W	5,756	ug/L	59.21	1.029	7,210
Mo2020_A		103.3	ug/L	0.2926	0.2832	69.76

SI2293-003

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 4:57:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		41,350	ug/L	656.4	1.588	30,590
Ni2316_A		579.0	ug/L	2.189	0.3780	656.9
Pb2203_A	W	4,843	ug/L	11.58	0.2390	2,486
Sb2068_A		17.33	ug/L	0.4509	2.602	5.485
Se1960_A		16.98	ug/L	2.226	13.11	3.184
Si2516_R		4,387	ug/L	74.75	1.704	264.6
Sn1899_A		303.9	ug/L	2.537	0.8348	58.53
Sr4215_R	W	2,439	ug/L	28.09	1.152	56,480
Ti3349_A	W	12,530	ug/L	17.67	0.1411	265,800
Tl1908_A		26.47	ug/L	2.958	11.18	-1.108
V_2924_A		999.8	ug/L	3.830	0.3830	10,780
Zn2062_A	W	2,585	ug/L	6.512	0.2519	3,253
Y_3600_R		12,702	Cts/S	129.74	1.0214	12,702
Y_2243_A		8,132.5	Cts/S	14.409	0.17718	8,132.5
Y_3600_A		288,150	Cts/S	143.99	0.049970	288,150

CCV

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 5:02:33PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		514.8	ug/L	0.4195	0.08149	16,010
Al3961_R		13,080	ug/L	145.1	1.110	6,984
As1891_A		492.3	ug/L	1.009	0.2049	117.2
Au2427_A		489.6	ug/L	18.39	3.757	1,879
B_2089_A		495.5	ug/L	0.03368	0.006797	394.2
Ba4554_R		524.5	ug/L	6.130	1.169	18,460
Be3130_R		518.7	ug/L	4.789	0.9231	24,420
Ca3158_R		13,080	ug/L	159.1	1.216	8,282
Cd2265_A		503.4	ug/L	0.1003	0.01993	7,383
Co2286_A		499.1	ug/L	0.5511	0.1104	1,882
Cr2677_A		516.4	ug/L	1.524	0.2952	8,393
Cu3273_A		509.5	ug/L	3.286	0.6449	8,598
Fe2599_R		12,850	ug/L	175.3	1.364	5,813
K_7664_R		13,050	ug/L	195.2	1.496	6,260
Li6707_R	W	538.8	ug/L	6.431	1.194	4,402
Mg2025_A		12,800	ug/L	38.35	0.2996	1,821
Mn2576_R		519.7	ug/L	3.674	0.7070	1,279
Mo2020_A		502.6	ug/L	2.178	0.4333	677.5
Na5895_R	W	13,210	ug/L	218.7	1.655	19,200
Ni2316_A		504.9	ug/L	0.9426	0.1867	1,179
Pb2203_A		508.3	ug/L	1.898	0.3734	519.9
Sb2068_A		495.9	ug/L	2.420	0.4880	146.1
Se1960_A		487.5	ug/L	1.098	0.2252	68.11
Si2516_R		12,970	ug/L	272.1	2.098	1,510
Sn1899_A		504.8	ug/L	2.268	0.4492	187.6
Sr4215_R		525.1	ug/L	5.902	1.124	23,900
Ti3349_A		509.7	ug/L	0.3925	0.07701	21,520
Tl1908_A		500.2	ug/L	0.7060	0.1412	157.0
V_2924_A		508.3	ug/L	0.5382	0.1059	10,660
Zn2062_A		495.8	ug/L	1.840	0.3712	1,243
Y_3600_R		12,487	Cts/S	21.480	0.17202	12,487
Y_2243_A		8,109.5	Cts/S	5.2789	0.065095	8,109.5
Y_3600_A		286,540	Cts/S	1,382.6	0.48253	286,540

CCB

Method Name: K6010-2011 Method Revision: 1,746

CCB

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 5:07:10PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.03154	ug/L	0.1551	491.7	14.10
Al3961_R		-13.54	ug/L	19.14	141.4	-18.60
As1891_A		3.897	ug/L	0.7324	18.79	-0.05122
Au2427_A		1.984	ug/L	0.8131	40.99	9.325
B_2089_A		1.717	ug/L	0.7448	43.37	3.765
Ba4554_R		-0.3187	ug/L	0.2384	74.79	60.67
Be3130_R		0.1053	ug/L	0.1248	118.6	4.583
Ca3158_R		-9.359	ug/L	2.660	28.42	-10.92
Cd2265_A		0.01181	ug/L	0.03747	317.3	1.971
Co2286_A		-0.05895	ug/L	0.2964	502.8	5.154
Cr2677_A		-0.2188	ug/L	0.4659	212.9	-0.3614
Cu3273_A		0.1521	ug/L	0.01898	12.48	-0.5500
Fe2599_R		7.517	ug/L	6.151	81.83	10.03
K_7664_R		33.71	ug/L	20.97	62.20	-84.03
Li6707_R		6.925	ug/L	1.116	16.11	54.25
Mg2025_A		-2.851	ug/L	4.398	154.3	-4.290
Mn2576_R		-0.1157	ug/L	0.1356	117.2	-0.4981
Mo2020_A		2.287	ug/L	0.3083	13.48	3.109
Na5895_R		12.17	ug/L	13.87	114.0	-24.71
Ni2316_A		0.3162	ug/L	0.001631	0.5158	-0.9752
Pb2203_A		-0.8454	ug/L	0.1148	13.58	-2.419
Sb2068_A		1.196	ug/L	2.099	175.5	0.2515
Se1960_A		3.214	ug/L	0.2571	7.999	1.483
Si2516_R		4.531	ug/L	5.858	129.3	4.454
Sn1899_A		1.647	ug/L	1.506	91.46	3.377
Sr4215_R		0.02151	ug/L	0.4849	2,254	-10.05
Ti3349_A		0.5461	ug/L	0.002699	0.4942	7.825
Tl1908_A		1.973	ug/L	0.3594	18.21	-0.1981
V_2924_A		-0.3081	ug/L	0.2248	72.97	-12.19
Zn2062_A		-0.1906	ug/L	0.09081	47.63	-0.3794
Y_3600_R		13,027	Cts/S	96.990	0.74453	13,027
Y_2243_A		8,223.0	Cts/S	8.1466	0.099070	8,223.0
Y_3600_A		292,090	Cts/S	2,308.6	0.79035	292,090

SI2293-004

Method Name: K6010-2011 Method Revision: 1,746
Analyst Name: GEJ
Acquire Date: 4/20/2015 5:11:55PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		24.51	ug/L	6.602	26.94	-1,541
Al3961_R	W	150,800	ug/L	5,396	3.578	39,600
As1891_A		158.4	ug/L	1.383	0.8733	13.43
Au2427_A		-2.516	ug/L	1.232	48.95	114.2
B_2089_A		158.3	ug/L	0.6029	0.3809	63.65
Ba4554_R		1,926	ug/L	56.72	2.945	33,270
Be3130_R		8.344	ug/L	0.01427	0.1710	54.56
Ca3158_R	W	173,900	ug/L	6,083	3.498	54,160
Cd2265_A		6.817	ug/L	0.6504	9.541	210.9
Co2286_A		106.3	ug/L	0.2725	0.2564	245.7
Cr2677_A		329.8	ug/L	7.803	2.366	2,712
Cu3273_A		1,571	ug/L	33.29	2.119	13,300
Fe2599_R	W	278,600	ug/L	9,005	3.232	61,890
K_7664_R		22,400	ug/L	528.6	2.360	5,271
Li6707_R		277.9	ug/L	13.68	4.924	1,112
Mg2025_A	W	52,790	ug/L	153.2	0.2902	3,746
Mn2576_R	W	5,359	ug/L	176.8	3.299	6,487
Mo2020_A		23.12	ug/L	0.5326	2.304	15.62

KATAHDIN ANALYTICAL SERVICES
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) ANALYST: GES ANALYSIS DATE: 04·21·15

FILE NAME: IIDZI A

METHOD: ICP

- ☐ 200.7
- ☑ 6010C
- ☑ DoD
- ☐ _____

REVIEWED
gm 04-21-15
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initals) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep. Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW 15433	04·13·15	04·13·16	0 ug/L
Standard 1	MW15439	04·16·15	06·28·15	Varies by Element
ICV	MW15434	04·13·15	04·30·15	Varies by Element
PQL	MW 15374	03·06·15	05·01·15	Varies by Element
LRS1	MW15430	04·07·15	05·26·15	Varies by Element
LRS2	MW15437	04·15·15	07·15·15	Varies by Element
ICSA	MW15422	04·01·15	07·01·15	Varies by Element
ICSAB	MW15436	04·15·15	05·01·15	Varies by Element
CCV	MW15431	04·09·15	06·23·15	Varies by Element
Internal Standard	MW15438	04·15·15	07·15·15	5.0 mg/L Yttrium

Additional Comments and Notes:

GES 04·21·15

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IID21A	4/21/2015	11:07	GEJ
Std 1	1.000	IID21A	4/21/2015	11:12	GEJ
ICV	1.000	IID21A	4/21/2015	11:16	GEJ
ICB	1.000	IID21A	4/21/2015	11:21	GEJ
PQL	1.000	IID21A	4/21/2015	11:26	GEJ
LRS1	1.000	IID21A	4/21/2015	11:32	GEJ
LRS2	1.000	IID21A	4/21/2015	11:37	GEJ
ICSA	1.000	IID21A	4/21/2015	11:46	GEJ
ICSAB	1.000	IID21A	4/21/2015	11:50	GEJ
CCV	1.000	IID21A	4/21/2015	11:55	GEJ
CCB	1.000	IID21A	4/21/2015	12:00	GEJ
LCSOID15ICS1	1.000	IID21A	4/21/2015	12:05	GEJ
PBSID15ICS1	1.000	IID21A	4/21/2015	12:09	GEJ
SI2313-003	1.000	IID21A	4/21/2015	12:14	GEJ
SI2319-001	2.000	IID21A	4/21/2015	12:19	GEJ
SI2319-002	2.000	IID21A	4/21/2015	12:23	GEJ
SI2319-003	2.000	IID21A	4/21/2015	12:28	GEJ
SI2319-004	2.000	IID21A	4/21/2015	12:33	GEJ
SI2319-005	2.000	IID21A	4/21/2015	12:38	GEJ
SI2319-006	2.000	IID21A	4/21/2015	12:42	GEJ
SI2319-007	2.000	IID21A	4/21/2015	12:47	GEJ
CCV	1.000	IID21A	4/21/2015	12:52	GEJ
CCB	1.000	IID21A	4/21/2015	12:56	GEJ
SI2319-008	2.000	IID21A	4/21/2015	13:01	GEJ
SI2008-001 R	1.000	IID21A	4/21/2015	13:06	GEJ
SI2008-001KRA	1.000	IID21A	4/21/2015	13:10	GEJ
SI2008-001KRL	5.000	IID21A	4/21/2015	13:15	GEJ
SI2008-001P	1.000	IID21A	4/21/2015	13:20	GEJ
SI2008-001S	1.000	IID21A	4/21/2015	13:25	GEJ
CCV	1.000	IID21A	4/21/2015	13:29	GEJ
CCB	1.000	IID21A	4/21/2015	13:34	GEJ
PQL	1.000	IID21A	4/21/2015	13:39	GEJ
ICSA	1.000	IID21A	4/21/2015	13:43	GEJ
ICSAB	1.000	IID21A	4/21/2015	13:48	GEJ
CCV	1.000	IID21A	4/21/2015	13:53	GEJ
CCB	1.000	IID21A	4/21/2015	13:58	GEJ

Intensity Report

Author:

Published: 4/21/2015 2:08:54PM

Notes:

Blank

Method Name: K6010-2011 Method Revision: 1,747

Analyst Name: GEJ

Acquire Date: 4/21/2015 11:07:32AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.0001110	Cts/S	0.00001700	14.91	29.22
Al3961_R		-0.001207	Cts/S	0.00006000	4.967	-14.51
As1891_A		-0.00006600	Cts/S	0.00006300	94.85	-0.5375
Au2427_A		0.0002440	Cts/S	0.0001100	44.95	1.975
B_2089_A		0.0002050	Cts/S	0.00001300	6.587	1.661
Ba4554_R		0.007113	Cts/S	0.0003570	5.026	85.52
Be3130_R		0.0002580	Cts/S	0.0004490	173.9	3.181
Ca3158_R		-0.0008000	Cts/S	0.0002060	25.75	-9.577
Cd2265_A		0.00005000	Cts/S	0.00001000	18.95	0.4096
Co2286_A		0.0006350	Cts/S	0.00005900	9.365	5.151
Cr2677_A		0.000005000	Cts/S	0.000004000	84.53	1.366
Cu3273_A		0.00003100	Cts/S	0.00002200	71.46	8.125
Fe2599_R		0.0002850	Cts/S	0.0006170	216.6	3.311
K_7664_R		-0.004520	Cts/S	0.0003830	8.469	-54.24
Li6707_R		0.002240	Cts/S	0.0007680	34.31	27.05
Mg2025_A		-0.0004140	Cts/S	0.00001900	4.665	-3.362
Mn2576_R		0.0001480	Cts/S	0.000008000	5.554	1.776
Mo2020_A		0.000004000	Cts/S	0.00002300	651.4	0.02861
Na5895_R		-0.006613	Cts/S	0.00006200	0.9424	-79.44
Ni2316_A		-0.0002360	Cts/S	0.00002700	11.37	-1.913
Pb2203_A		-0.0001910	Cts/S	0.00005200	27.39	-1.550
Sb2068_A		0.00002100	Cts/S	0.00001600	75.51	0.1730
Se1960_A		0.0001590	Cts/S	0.00005600	35.44	1.293
Si2516_R		0.0003210	Cts/S	0.0001090	33.96	3.834
Sn1899_A		0.0004220	Cts/S	0.00001300	3.059	3.427
Sr4215_R		-0.001175	Cts/S	0.00001300	1.089	-14.12
Ti3349_A		-0.0001140	Cts/S	0.00001400	11.89	-29.98
Tl1908_A		-0.00002200	Cts/S	0.00001400	63.26	-0.1763
V_2924_A		-0.00004500	Cts/S	0.000007000	16.02	-11.71
Zn2062_A		0.0000	Cts/S	0.00006100	19,550	-0.001988
Y_3600_R		12,014	Cts/S	352.56	2.9344	12,014
Y_2243_A		8,111.2	Cts/S	17.798	0.21942	8,111.2
Y_3600_A		262,690	Cts/S	1,196.6	0.45552	262,690

Std 1

Method Name: K6010-2011 Method Revision: 1,747

Analyst Name: GEJ

Acquire Date: 4/21/2015 11:12:16AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1217	Cts/S	0.0005780	0.4751	31,530
Al3961_R		1.146	Cts/S	0.05364	4.680	13,710
As1891_A		0.02775	Cts/S	0.0001360	0.4888	219.8
Au2427_A		0.5012	Cts/S	0.01324	2.641	3,970
B_2089_A		0.09108	Cts/S	0.0001900	0.2083	721.4
Ba4554_R		2.918	Cts/S	0.1360	4.663	34,900
Be3130_R		3.878	Cts/S	0.1818	4.687	46,380
Ca3158_R		1.481	Cts/S	0.07362	4.971	17,710
Cd2265_A		1.945	Cts/S	0.003816	0.1962	15,400
Co2286_A		0.4367	Cts/S	0.0008190	0.1876	3,459
Cr2677_A		0.06787	Cts/S	0.0005580	0.8218	17,590
Cu3273_A		0.05746	Cts/S	0.0004920	0.8570	14,890
Fe2599_R		0.8581	Cts/S	0.04110	4.789	10,260

Std 1

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:12:16AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
K_7664_R		0.9647	Cts/S	0.04607	4.776	11,540
Li6707_R		0.7338	Cts/S	0.03560	4.851	8,776
Mg2025_A		0.4575	Cts/S	0.0009180	0.2007	3,624
Mn2576_R		0.2203	Cts/S	0.01113	5.054	2,635
Mo2020_A		0.1857	Cts/S	0.0006280	0.3384	1,471
Na5895_R		3.037	Cts/S	0.1400	4.610	36,330
Ni2316_A		0.2923	Cts/S	0.00006000	0.02042	2,315
Pb2203_A		0.1379	Cts/S	0.0003760	0.2726	1,092
Sb2068_A		0.03572	Cts/S	0.00002200	0.06160	282.9
Se1960_A		0.01493	Cts/S	0.00008800	0.5911	118.2
Si2516_R		0.2508	Cts/S	0.01505	6.001	2,999
Sn1899_A		0.04868	Cts/S	0.00006700	0.1380	385.6
Sr4215_R		3.969	Cts/S	0.1894	4.772	47,460
Ti3349_A		0.1671	Cts/S	0.0009580	0.5731	43,300
Tl1908_A		0.03337	Cts/S	0.0002080	0.6247	264.3
V_2924_A		0.08093	Cts/S	0.0004250	0.5256	20,970
Zn2062_A		0.2792	Cts/S	0.0002490	0.08912	2,212
Y_3600_R		11,964	Cts/S	148.81	1.2438	11,964
Y_2243_A		7,920.6	Cts/S	16.735	0.21129	7,920.6
Y_3600_A		259,120	Cts/S	1,290.0	0.49782	259,120

ICV

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:16:49AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		399.3	ug/L	7.786	1.950	12,790
Al3961_R	W	10,660	ug/L	490.8	4.605	5,782
As1891_A		393.1	ug/L	0.7169	0.1824	87.28
Au2427_A		419.4	ug/L	12.50	2.981	1,689
B_2089_A		401.2	ug/L	0.2348	0.05854	294.5
Ba4554_R		402.5	ug/L	18.75	4.659	13,960
Be3130_R		406.4	ug/L	18.89	4.648	18,680
Ca3158_R		10,250	ug/L	445.1	4.343	7,190
Cd2265_A		399.2	ug/L	0.3508	0.08786	6,235
Co2286_A		406.0	ug/L	0.3848	0.09478	1,427
Cr2677_A		403.3	ug/L	8.610	2.135	7,199
Cu3273_A		399.0	ug/L	7.232	1.812	6,035
Fe2599_R		10,110	ug/L	525.3	5.198	4,112
K_7664_R		13,550	ug/L	703.1	5.188	6,172
Li6707_R		406.7	ug/L	21.10	5.187	3,552
Mg2025_A		10,110	ug/L	3.420	0.03382	1,485
Mn2576_R		405.5	ug/L	18.27	4.506	1,059
Mo2020_A		404.3	ug/L	1.021	0.2525	602.9
Na5895_R		10,230	ug/L	523.3	5.114	14,690
Ni2316_A		405.5	ug/L	0.9747	0.2404	950.8
Pb2203_A		406.1	ug/L	1.388	0.3418	448.8
Sb2068_A		398.3	ug/L	0.2170	0.05448	114.3
Se1960_A		394.5	ug/L	2.346	0.5948	48.06
Si2516_R		10,360	ug/L	516.3	4.985	1,233
Sn1899_A		417.1	ug/L	2.816	0.6751	165.0
Sr4215_R		406.2	ug/L	19.95	4.912	19,090
Ti3349_A		397.5	ug/L	9.359	2.354	17,450
Tl1908_A		412.0	ug/L	1.307	0.3172	110.3
V_2924_A		405.3	ug/L	9.003	2.221	8,620
Zn2062_A		402.0	ug/L	0.4695	0.1168	901.5
Y_3600_R		11,853	Cts/S	156.49	1.3203	11,853

ICV

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:16:49AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Y_2243_A		8,030.8	Cts/S	11.271	0.14035	8,030.8
Y_3600_A		263,040	Cts/S	5,512.9	2.0958	263,040

ICB

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:21:25AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.4255	ug/L	0.3416	80.29	15.69
Al3961_R		1.353	ug/L	7.409	547.4	-13.83
As1891_A		1.837	ug/L	1.033	56.23	-0.1225
Au2427_A		1.497	ug/L	0.01168	0.7804	8.013
B_2089_A		0.7350	ug/L	0.1458	19.83	2.233
Ba4554_R		-0.1034	ug/L	0.03369	32.58	82.44
Be3130_R		-0.01846	ug/L	0.09166	496.5	2.250
Ca3158_R		5.991	ug/L	11.94	199.3	-5.352
Cd2265_A		0.03976	ug/L	0.01186	29.82	1.041
Co2286_A		-0.2567	ug/L	0.2433	94.78	4.256
Cr2677_A		-0.2963	ug/L	0.03246	10.95	-3.981
Cu3273_A		-0.8520	ug/L	0.8607	101.0	-4.838
Fe2599_R		3.955	ug/L	2.320	58.66	5.092
K_7664_R		10.14	ug/L	52.43	517.3	-50.05
Li6707_R		-1.024	ug/L	1.771	173.0	18.11
Mg2025_A		-2.887	ug/L	1.684	58.32	-3.789
Mn2576_R		-0.5418	ug/L	0.4804	88.66	0.3425
Mo2020_A		2.058	ug/L	0.04170	2.026	3.131
Na5895_R		14.72	ug/L	3.202	21.76	-58.34
Ni2316_A		-0.01162	ug/L	0.2781	2,392	-1.938
Pb2203_A		-1.052	ug/L	0.9331	88.69	-2.735
Sb2068_A		0.2861	ug/L	0.9511	332.4	0.2567
Se1960_A		1.395	ug/L	2.138	153.3	1.461
Si2516_R		8.978	ug/L	18.56	206.7	4.981
Sn1899_A		-0.7944	ug/L	1.523	191.6	3.118
Sr4215_R		0.08342	ug/L	0.03421	41.01	-10.21
Ti3349_A		0.7181	ug/L	0.08767	12.21	1.638
Tl1908_A		-0.8995	ug/L	0.7161	79.61	-0.4224
V_2924_A		-0.09711	ug/L	0.2084	214.6	-14.25
Zn2062_A		0.1076	ug/L	0.2518	234.0	0.2424
Y_3600_R		12,103	Cts/S	97.841	0.80840	12,103
Y_2243_A		8,118.2	Cts/S	1.2876	0.015860	8,118.2
Y_3600_A		267,070	Cts/S	320.95	0.12018	267,070

PQL

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:26:10AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.05	ug/L	0.1888	1.879	363.1
Al3961_R		335.0	ug/L	5.850	1.746	168.7
As1891_A		8.288	ug/L	2.098	25.32	1.347
Au2427_A		97.44	ug/L	3.925	4.028	398.3
B_2089_A		50.10	ug/L	0.1085	0.2166	38.06
Ba4554_R		5.480	ug/L	0.02741	0.5001	274.8
Be3130_R		5.249	ug/L	0.1243	2.368	245.3
Ca3158_R	W	124.3	ug/L	8.569	6.896	78.24
Cd2265_A		5.065	ug/L	0.01696	0.3348	80.93
Co2286_A		10.25	ug/L	0.1393	1.359	41.80

PQL

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:26:10AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Cr2677_A		9.965	ug/L	0.1199	1.203	184.7
Cu3273_A		24.95	ug/L	0.3550	1.423	396.8
Fe2599_R		113.8	ug/L	4.998	4.390	49.94
K_7664_R		1,156	ug/L	123.5	10.68	480.0
Li6707_R		106.6	ug/L	5.162	4.843	955.6
Mg2025_A		106.6	ug/L	1.131	1.062	12.78
Mn2576_R		5.633	ug/L	0.9489	16.85	16.55
Mo2020_A		10.77	ug/L	0.2434	2.261	16.37
Na5895_R		1,135	ug/L	7.641	0.6730	1,568
Ni2316_A		10.63	ug/L	0.07759	0.7303	23.50
Pb2203_A		5.070	ug/L	0.04292	0.8465	4.131
Sb2068_A		8.586	ug/L	1.568	18.26	2.425
Se1960_A		8.762	ug/L	1.783	20.35	2.361
Si2516_R		233.3	ug/L	23.21	9.949	31.66
Sn1899_A		102.7	ug/L	1.259	1.226	43.97
Sr4215_R		11.65	ug/L	0.0005690	0.004885	537.2
Ti3349_A		15.03	ug/L	0.1232	0.8197	649.9
Tl1908_A		14.59	ug/L	0.7404	5.074	3.821
V_2924_A		10.14	ug/L	0.03048	0.3007	210.4
Zn2062_A		21.11	ug/L	0.09058	0.4290	48.24
Y_3600_R		11,914	Cts/S	73.991	0.62103	11,914
Y_2243_A		8,176.8	Cts/S	3.0356	0.037125	8,176.8
Y_3600_A		271,060	Cts/S	257.18	0.094882	271,060

LRS1

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:32:34AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	1,564	ug/L	0.3526	0.02254	46,850
Al3961_R		103.3	ug/L	1.394	1.349	125.2
As1891_A		20,710	ug/L	50.09	0.2418	4,470
Au2427_A		21,820	ug/L	99.97	0.4581	84,590
B_2089_A		19,310	ug/L	16.24	0.08411	13,330
Ba4554_R		19,920	ug/L	1,006	5.047	695,500
Be3130_R		19,730	ug/L	476.1	2.413	917,500
Ca3158_R		-16.09	ug/L	2.625	16.32	-8.862
Cd2265_A		18,810	ug/L	46.69	0.2482	283,400
Co2286_A		20,110	ug/L	24.47	0.1217	68,000
Cr2677_A		19,340	ug/L	167.1	0.8640	339,300
Cu3273_A		19,960	ug/L	54.39	0.2725	296,300
Fe2599_R		204,000	ug/L	2,149	1.053	83,950
K_7664_R		-20.56	ug/L	12.65	61.55	-63.76
Li6707_R		20,930	ug/L	208.4	0.9956	183,600
Mg2025_A		-1,619	ug/L	20.53	1.268	363.2
Mn2576_R		20,750	ug/L	205.0	0.9881	54,760
Mo2020_A		5,031	ug/L	22.04	0.4380	7,243
Na5895_R		11.64	ug/L	2.038	17.52	-62.31
Ni2316_A		19,810	ug/L	50.24	0.2537	44,940
Pb2203_A		20,090	ug/L	48.53	0.2416	21,590
Sb2068_A		20,140	ug/L	31.65	0.1571	5,580
Se1960_A		20,340	ug/L	11.17	0.05491	2,329
Si2516_R		244.7	ug/L	10.02	4.093	42.40
Sn1899_A		19,440	ug/L	45.60	0.2346	7,277
Sr4215_R		20,300	ug/L	332.5	1.638	966,200
Ti3349_A		19,540	ug/L	216.7	1.109	843,700
Tl1908_A		19,770	ug/L	18.13	0.09166	5,119

LRS1

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:32:34AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
V_2924_A		19,620	ug/L	14.72	0.07502	412,600
Zn2062_A		18,890	ug/L	13.70	0.07256	40,900
Y_3600_R		11,991	Cts/S	3.4061	0.028404	11,991
Y_2243_A		7,755.6	Cts/S	9.8392	0.12687	7,755.6
Y_3600_A		258,490	Cts/S	1,356.1	0.52461	258,490

LRS2

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:37:52AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.501	ug/L	2.684	178.8	-2,896
Al3961_R		484,200	ug/L	21,440	4.428	263,300
As1891_A		9.607	ug/L	1.032	10.74	-4.798
Au2427_A		13.11	ug/L	2.476	18.88	173.8
B_2089_A		16.14	ug/L	0.8560	5.304	12.09
Ba4554_R		1.668	ug/L	0.8493	50.90	142.1
Be3130_R		0.4569	ug/L	0.09987	21.86	23.49
Ca3158_R		466,200	ug/L	29,610	6.351	327,800
Cd2265_A		-0.8825	ug/L	0.2605	29.52	257.7
Co2286_A		0.9618	ug/L	0.2671	27.78	4.282
Cr2677_A		-0.1337	ug/L	0.01793	13.41	-1.490
Cu3273_A		-2.191	ug/L	0.01475	0.6731	27.43
Fe2599_R		247,600	ug/L	4,115	1.662	100,800
K_7664_R		307,600	ug/L	3,521	1.145	141,500
Li6707_R		25.93	ug/L	1.128	4.349	251.7
Mg2025_A		187,100	ug/L	73.04	0.03903	24,800
Mn2576_R		9.283	ug/L	1.224	13.19	31.65
Mo2020_A		10.23	ug/L	1.945	19.02	13.89
Na5895_R		201,900	ug/L	2,304	1.141	291,600
Ni2316_A		1.988	ug/L	0.04444	2.235	-17.23
Pb2203_A		0.2499	ug/L	3.008	1,204	-56.05
Sb2068_A		4.351	ug/L	3.482	80.03	5.020
Se1960_A		8.636	ug/L	4.303	49.82	3.514
Si2516_R		51,100	ug/L	718.1	1.405	6,076
Sn1899_A		8.425	ug/L	1.211	14.37	6.055
Sr4215_R		7.612	ug/L	0.05553	0.7295	344.6
Ti3349_A		18.83	ug/L	0.9174	4.872	716.3
Tl1908_A		0.8829	ug/L	2.107	238.6	1.889
V_2924_A		1.957	ug/L	0.3842	19.64	72.94
Zn2062_A		3.352	ug/L	0.4970	14.83	6.843
Y_3600_R		11,866	Cts/S	30.219	0.25467	11,866
Y_2243_A		7,303.4	Cts/S	12.105	0.16575	7,303.4
Y_3600_A		236,260	Cts/S	2,460.9	1.0416	236,260

ICSA

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:46:09AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7731	ug/L	1.935	250.3	-2,286
Al3961_R		502,600	ug/L	33,890	6.743	273,000
As1891_A		1.219	ug/L	1.052	86.35	-4.763
Au2427_A		1.316	ug/L	0.9791	74.40	102.5
B_2089_A		6.800	ug/L	0.4043	5.946	5.842
Ba4554_R		-0.3080	ug/L	0.3236	105.1	73.63
Be3130_R		-0.04005	ug/L	0.03788	94.59	1.116

ICSA

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:46:09AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ca3158_R		472,700	ug/L	14,130	2.989	332,100
Cd2265_A		-0.8219	ug/L	0.2182	26.54	196.3
Co2286_A		0.01061	ug/L	0.06573	619.8	1.905
Cr2677_A		1.275	ug/L	0.01292	1.013	21.50
Cu3273_A		-2.431	ug/L	0.07818	3.216	32.29
Fe2599_R		192,100	ug/L	3,943	2.052	78,140
K_7664_R		451.8	ug/L	47.65	10.55	153.9
Li6707_R		9.574	ug/L	2.217	23.15	109.7
Mg2025_A		475,600	ug/L	2,797	0.5882	62,450
Mn2576_R		-0.3919	ug/L	0.4380	111.8	5.213
Mo2020_A		0.9290	ug/L	0.1084	11.67	1.273
Na5895_R		106.0	ug/L	2.192	2.069	74.54
Ni2316_A		0.07025	ug/L	0.1436	204.4	-16.76
Pb2203_A		-0.9465	ug/L	5.784	611.1	-61.05
Sb2068_A		1.087	ug/L	0.7665	70.52	3.593
Se1960_A		4.636	ug/L	1.134	24.45	3.000
Si2516_R		-6.509	ug/L	1.741	26.76	3.932
Sn1899_A		2.078	ug/L	0.3838	18.47	3.782
Sr4215_R	W	5.277	ug/L	0.1026	1.944	234.4
Ti3349_A		2.916	ug/L	0.2050	7.031	89.45
Tl1908_A		-4.178	ug/L	1.250	29.92	0.4524
V_2924_A		0.9854	ug/L	0.1830	18.58	45.17
Zn2062_A		-0.04299	ug/L	0.3247	755.4	-0.09391
Y_3600_R		11,855	Cts/S	127.65	1.0768	11,855
Y_2243_A		7,235.5	Cts/S	38.819	0.53651	7,235.5
Y_3600_A		239,790	Cts/S	847.32	0.35336	239,790

ICSAB

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:50:58AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		206.5	ug/L	0.07115	0.03446	3,822
Al3961_R		496,700	ug/L	26,100	5.254	267,300
As1891_A		97.86	ug/L	0.2933	0.2997	15.15
Au2427_A		523.6	ug/L	7.954	1.519	1,994
B_2089_A		497.6	ug/L	1.525	0.3064	329.6
Ba4554_R		516.9	ug/L	13.34	2.580	17,750
Be3130_R		503.9	ug/L	9.938	1.972	22,950
Ca3158_R		468,300	ug/L	690.2	0.1474	325,900
Cd2265_A		914.5	ug/L	0.5629	0.06155	13,090
Co2286_A		454.0	ug/L	0.2719	0.05988	1,440
Cr2677_A		467.0	ug/L	6.442	1.380	7,581
Cu3273_A		494.6	ug/L	9.687	1.959	6,858
Fe2599_R		187,000	ug/L	4,198	2.244	75,360
K_7664_R		21,490	ug/L	363.6	1.692	9,727
Li6707_R		562.7	ug/L	12.93	2.298	4,860
Mg2025_A		460,700	ug/L	526.7	0.1143	60,740
Mn2576_R		477.6	ug/L	7.404	1.550	1,240
Mo2020_A		479.9	ug/L	0.7695	0.1603	647.1
Na5895_R		21,930	ug/L	460.9	2.102	31,270
Ni2316_A		892.7	ug/L	0.7090	0.07942	1,881
Pb2203_A		44.85	ug/L	2.458	5.481	-14.85
Sb2068_A		589.8	ug/L	3.337	0.5657	156.0
Se1960_A		53.63	ug/L	1.537	2.867	8.256
Si2516_R	F	214.5	ug/L	17.60	8.205	30.46
Sn1899_A		461.7	ug/L	0.6259	0.1356	164.9

ICSAB

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:50:58AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Sr4215_R		533.8	ug/L	12.36	2.315	24,870
Ti3349_A		480.6	ug/L	7.454	1.551	19,190
Tl1908_A		92.64	ug/L	2.412	2.603	22.82
V_2924_A		477.9	ug/L	8.201	1.716	9,280
Zn2062_A		895.1	ug/L	0.3007	0.03360	1,816
Y_3600_R		11,740	Cts/S	66.295	0.56469	11,740
Y_2243_A		7,262.5	Cts/S	9.5020	0.13084	7,262.5
Y_3600_A		239,220	Cts/S	3,855.3	1.6116	239,220

CCV

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 11:55:46AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		494.1	ug/L	5.443	1.102	16,290
Al3961_R		13,060	ug/L	126.3	0.9670	7,182
As1891_A		497.0	ug/L	1.732	0.3485	111.5
Au2427_A		493.1	ug/L	19.52	3.959	2,005
B_2089_A		503.6	ug/L	0.1014	0.02013	372.5
Ba4554_R		525.8	ug/L	7.699	1.464	18,470
Be3130_R		521.0	ug/L	6.735	1.293	24,270
Ca3158_R		12,940	ug/L	201.5	1.558	9,200
Cd2265_A		495.0	ug/L	0.1388	0.02805	7,803
Co2286_A		500.4	ug/L	0.2358	0.04712	1,774
Cr2677_A		492.4	ug/L	3.269	0.6639	9,052
Cu3273_A		499.2	ug/L	7.758	1.554	7,773
Fe2599_R		12,840	ug/L	214.4	1.670	5,295
K_7664_R		12,900	ug/L	197.2	1.529	5,951
Li6707_R		526.6	ug/L	6.717	1.275	4,654
Mg2025_A		12,660	ug/L	21.24	0.1678	1,876
Mn2576_R		521.3	ug/L	5.852	1.123	1,380
Mo2020_A		497.1	ug/L	2.360	0.4747	748.1
Na5895_R		13,040	ug/L	199.0	1.526	18,990
Ni2316_A		501.8	ug/L	1.043	0.2078	1,188
Pb2203_A		497.4	ug/L	0.4203	0.08450	555.2
Sb2068_A		500.7	ug/L	0.2611	0.05214	145.1
Se1960_A		498.0	ug/L	5.177	1.039	60.90
Si2516_R	W	13,210	ug/L	256.8	1.944	1,593
Sn1899_A		493.4	ug/L	0.9767	0.1980	196.4
Sr4215_R		524.0	ug/L	6.627	1.265	24,970
Ti3349_A		485.8	ug/L	6.297	1.296	21,970
Tl1908_A		503.0	ug/L	1.377	0.2738	136.0
V_2924_A		487.5	ug/L	3.918	0.8037	10,680
Zn2062_A		495.2	ug/L	0.009593	0.001937	1,121
Y_3600_R		12,009	Cts/S	182.10	1.5164	12,009
Y_2243_A		8,105.7	Cts/S	16.696	0.20597	8,105.7
Y_3600_A		270,850	Cts/S	1,473.1	0.54388	270,850

CCB

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:00:23PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.06807	ug/L	0.2855	419.4	27.75
Al3961_R		23.23	ug/L	3.895	16.77	-1.710
As1891_A		0.5247	ug/L	0.8406	160.2	-0.4224
Au2427_A		2.926	ug/L	0.5055	17.28	13.90

CCB

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:00:23PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
B_2089_A		5.035	ug/L	0.5857	11.63	5.381
Ba4554_R		0.5367	ug/L	0.2123	39.56	107.6
Be3130_R		0.1257	ug/L	0.006220	4.950	9.215
Ca3158_R		32.47	ug/L	3.686	11.35	13.95
Cd2265_A		0.09664	ug/L	0.01413	14.62	1.978
Co2286_A		-0.1358	ug/L	0.1092	80.41	4.723
Cr2677_A		0.02263	ug/L	0.1163	513.8	1.837
Cu3273_A		0.6814	ug/L	0.6695	98.26	19.13
Fe2599_R		24.37	ug/L	4.475	18.36	13.91
K_7664_R		20.12	ug/L	35.57	176.7	-46.33
Li6707_R		0.6184	ug/L	0.01816	2.937	33.40
Mg2025_A		8.364	ug/L	2.092	25.01	-2.139
Mn2576_R		-0.5431	ug/L	0.8570	157.8	0.3450
Mo2020_A		3.247	ug/L	0.4732	14.58	4.961
Na5895_R		34.92	ug/L	1.263	3.615	-29.28
Ni2316_A		0.2051	ug/L	0.1675	81.69	-1.434
Pb2203_A		-0.4122	ug/L	1.329	322.5	-2.034
Sb2068_A		1.169	ug/L	0.7531	64.41	0.5166
Se1960_A		-0.1630	ug/L	1.976	1,212	1.285
Si2516_R		1.543	ug/L	5.376	348.4	4.176
Sn1899_A		-0.2411	ug/L	1.237	513.0	3.361
Sr4215_R		0.1684	ug/L	0.1138	67.56	-6.268
Ti3349_A		1.092	ug/L	0.1355	12.40	18.80
Tl1908_A		0.3293	ug/L	2.033	617.3	-0.08797
V_2924_A		0.3946	ug/L	0.2559	64.85	-3.777
Zn2062_A		1.582	ug/L	0.08069	5.100	3.616
Y_3600_R		12,404	Cts/S	88.089	0.71015	12,404
Y_2243_A		8,182.6	Cts/S	10.107	0.12352	8,182.6
Y_3600_A		273,110	Cts/S	464.68	0.17015	273,110

LCSOID15ICS1

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:05:10PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.97	ug/L	1.895	3.791	1,655
Al3961_R		2,111	ug/L	51.46	2.437	1,184
As1891_A		101.4	ug/L	2.946	2.906	22.45
Au2427_A		3.629	ug/L	0.2406	6.630	26.29
B_2089_A		476.1	ug/L	0.8640	0.1815	345.6
Ba4554_R		2,105	ug/L	52.41	2.490	75,840
Be3130_R		52.51	ug/L	1.371	2.612	2,508
Ca3158_R		2,557	ug/L	58.99	2.307	1,865
Cd2265_A		249.3	ug/L	0.4063	0.1629	3,937
Co2286_A		510.6	ug/L	0.7646	0.1498	1,816
Cr2677_A		205.2	ug/L	9.334	4.549	3,731
Cu3273_A		260.0	ug/L	9.239	3.553	4,006
Fe2599_R		1,039	ug/L	15.33	1.475	444.4
K_7664_R		10,220	ug/L	186.6	1.825	4,844
Li6707_R		521.7	ug/L	15.35	2.943	4,747
Mg2025_A		5,090	ug/L	6.201	0.1218	763.8
Mn2576_R		517.1	ug/L	8.057	1.558	1,409
Mo2020_A		102.0	ug/L	0.6071	0.5954	153.9
Na5895_R		7,856	ug/L	186.1	2.369	11,750
Ni2316_A		512.4	ug/L	0.6593	0.1287	1,217
Pb2203_A		101.0	ug/L	0.6567	0.6504	112.0
Sb2068_A		99.76	ug/L	2.036	2.040	27.86

LCSOID15ICS1

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:05:10PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Se1960_A		96.81	ug/L	0.7900	0.8160	12.94
Si2516_R		908.1	ug/L	30.12	3.317	116.6
Sn1899_A		525.2	ug/L	1.658	0.3156	209.6
Sr4215_R		519.3	ug/L	12.30	2.369	25,480
Ti3349_A		499.6	ug/L	19.03	3.810	22,310
Tl1908_A		104.9	ug/L	0.1773	0.1691	27.06
V_2924_A		501.5	ug/L	18.70	3.728	10,940
Zn2062_A		499.6	ug/L	1.296	0.2594	1,135
Y_3600_R		12,365	Cts/S	82.090	0.66391	12,365
Y_2243_A		8,133.2	Cts/S	2.4103	0.029636	8,133.2
Y_3600_A		267,910	Cts/S	8,305.1	3.0999	267,910

PBSID15ICS1

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:09:50PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3437	ug/L	0.3106	90.39	18.55
Al3961_R		20.52	ug/L	23.03	112.2	-3.328
As1891_A		1.011	ug/L	0.7978	78.93	-0.3137
Au2427_A		1.497	ug/L	0.6511	43.48	8.137
B_2089_A		4.659	ug/L	0.6757	14.50	5.090
Ba4554_R		0.6543	ug/L	0.2491	38.08	105.4
Be3130_R		0.09902	ug/L	0.1106	111.7	7.381
Ca3158_R		47.87	ug/L	12.44	26.00	23.68
Cd2265_A		0.07626	ug/L	0.0008090	1.061	1.658
Co2286_A		0.09696	ug/L	0.2832	292.1	5.575
Cr2677_A		0.5682	ug/L	0.1848	32.53	11.98
Cu3273_A		0.4034	ug/L	0.6153	152.5	14.81
Fe2599_R		22.46	ug/L	11.30	50.32	12.27
K_7664_R		-51.52	ug/L	33.06	64.16	-76.00
Li6707_R		1.147	ug/L	0.8782	76.57	35.89
Mg2025_A		17.81	ug/L	1.420	7.971	-0.7394
Mn2576_R		0.4401	ug/L	0.04326	9.829	2.864
Mo2020_A		1.396	ug/L	0.2965	21.25	2.157
Na5895_R		50.94	ug/L	0.8054	1.581	-4.783
Ni2316_A		0.4800	ug/L	0.01988	4.141	-0.7826
Pb2203_A		0.2292	ug/L	0.01606	7.006	-1.312
Sb2068_A		0.9426	ug/L	1.060	112.5	0.3923
Se1960_A		-2.361	ug/L	0.2534	10.73	1.024
Si2516_R		8.131	ug/L	3.441	42.32	4.701
Sn1899_A		22.55	ug/L	0.06257	0.2775	12.41
Sr4215_R		0.3170	ug/L	0.1111	35.04	1.073
Ti3349_A		1.252	ug/L	0.2038	16.29	26.04
Tl1908_A		-0.3463	ug/L	0.8782	253.6	-0.2756
V_2924_A		0.2334	ug/L	0.06849	29.35	-7.190
Zn2062_A		2.797	ug/L	0.1414	5.054	6.420
Y_3600_R		11,705	Cts/S	456.14	3.8968	11,705
Y_2243_A		8,214.7	Cts/S	3.3339	0.040584	8,214.7
Y_3600_A		273,860	Cts/S	1,051.3	0.38390	273,860

SI2313-003

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:14:36PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3929	ug/L	0.5942	151.2	-402.9

SI2313-003

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:14:36PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Al3961_R		8,699	ug/L	54.91	0.6312	4,845
As1891_A		13.65	ug/L	1.025	7.508	1.519
Au2427_A		1.810	ug/L	0.3239	17.89	29.31
B_2089_A		10.31	ug/L	0.6962	6.755	9.134
Ba4554_R		82.91	ug/L	0.5369	0.6476	3,028
Be3130_R		0.7260	ug/L	0.02882	3.969	7.748
Ca3158_R		4,110	ug/L	40.48	0.9849	2,960
Cd2265_A		0.2108	ug/L	0.08910	42.27	42.61
Co2286_A		14.71	ug/L	0.3419	2.325	64.96
Cr2677_A		36.56	ug/L	0.04153	0.1136	675.6
Cu3273_A		34.29	ug/L	0.3352	0.9775	534.1
Fe2599_R	W	31,820	ug/L	266.4	0.8373	13,310
K_7664_R		1,103	ug/L	27.32	2.477	466.3
Li6707_R		4.896	ug/L	0.7873	16.08	71.05
Mg2025_A		1,582	ug/L	5.739	0.3628	230.3
Mn2576_R		141.0	ug/L	1.144	0.8114	380.9
Mo2020_A		4.084	ug/L	0.1563	3.827	6.179
Na5895_R	W	26,100	ug/L	387.6	1.485	38,660
Ni2316_A		26.54	ug/L	0.3528	1.330	58.29
Pb2203_A		40.22	ug/L	0.8430	2.096	43.73
Sb2068_A		-0.4784	ug/L	1.641	343.1	0.4186
Se1960_A		-2.052	ug/L	4.297	209.5	1.135
Si2516_R		2,377	ug/L	10.01	0.4211	294.3
Sn1899_A		24.61	ug/L	0.1482	0.6023	13.07
Sr4215_R		51.35	ug/L	0.7456	1.452	2,471
Ti3349_A		882.0	ug/L	10.85	1.230	39,960
Tl1908_A		-0.09675	ug/L	1.118	1,156	-0.4984
V_2924_A		42.37	ug/L	0.6274	1.481	951.6
Zn2062_A		64.80	ug/L	0.4053	0.6255	147.0
Y_3600_R		12,188	Cts/S	317.16	2.6021	12,188
Y_2243_A		8,117.7	Cts/S	8.3212	0.10251	8,117.7
Y_3600_A		271,500	Cts/S	2,776.1	1.0225	271,500

SI2319-001

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:19:18PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.685	ug/L	4.724	280.4	-2,396
Al3961_R	W	236,200	ug/L	4,790	2.028	68,220
As1891_A		172.9	ug/L	5.853	3.384	13.55
Au2427_A		34.61	ug/L	4.606	13.31	238.2
B_2089_A		51.00	ug/L	3.659	7.174	20.03
Ba4554_R		661.8	ug/L	13.11	1.981	12,230
Be3130_R		9.319	ug/L	0.06976	0.7486	146.7
Ca3158_R		17,760	ug/L	389.0	2.190	6,626
Cd2265_A		-0.2508	ug/L	0.02871	11.45	212.1
Co2286_A		159.6	ug/L	3.722	2.332	308.1
Cr2677_A		424.6	ug/L	5.217	1.229	3,873
Cu3273_A		239.4	ug/L	3.501	1.462	1,829
Fe2599_R	W	350,700	ug/L	6,987	1.993	75,860
K_7664_R		28,090	ug/L	561.4	1.999	6,808
Li6707_R		336.2	ug/L	10.90	3.242	1,579
Mg2025_A	W	87,390	ug/L	1,765	2.019	6,455
Mn2576_R	W	7,864	ug/L	181.4	2.307	10,920
Mo2020_A		3.990	ug/L	0.6839	17.14	3.062
Na5895_R		4,443	ug/L	84.19	1.895	3,327

SI2319-001

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:19:18PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ni2316_A		484.6	ug/L	8.764	1.808	559.5
Pb2203_A		186.4	ug/L	3.075	1.650	93.31
Sb2068_A		2.436	ug/L	5.263	216.1	3.172
Se1960_A		-17.94	ug/L	4.814	26.84	1.047
Si2516_R		4,872	ug/L	37.81	0.7760	312.8
Sn1899_A		34.10	ug/L	0.2044	0.5993	10.14
Sr4215_R		160.7	ug/L	2.945	1.833	4,006
Ti3349_A	W	4,867	ug/L	65.06	1.337	108,600
Tl1908_A		2.428	ug/L	4.434	182.6	-2.876
V_2924_A		390.3	ug/L	4.825	1.236	4,307
Zn2062_A		747.2	ug/L	15.81	2.116	849.5
Y_3600_R		12,607	Cts/S	90.949	0.72143	12,607
Y_2243_A		8,139.4	Cts/S	9.7859	0.12023	8,139.4
Y_3600_A		267,310	Cts/S	5,680.6	2.1252	267,310

SI2319-002

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:23:58PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.368	ug/L	4.762	348.2	-2,401
Al3961_R	W	237,000	ug/L	10,810	4.559	70,670
As1891_A		147.6	ug/L	0.5645	0.3825	10.87
Au2427_A		32.55	ug/L	0.3283	1.009	220.0
B_2089_A		59.12	ug/L	2.080	3.518	23.14
Ba4554_R		687.2	ug/L	27.26	3.967	13,110
Be3130_R		10.07	ug/L	0.2574	2.555	186.5
Ca3158_R		18,390	ug/L	824.7	4.485	7,083
Cd2265_A		-0.5580	ug/L	1.055	189.2	208.0
Co2286_A		156.6	ug/L	1.054	0.6734	301.2
Cr2677_A		427.5	ug/L	2.836	0.6633	3,980
Cu3273_A		252.8	ug/L	4.652	1.840	1,978
Fe2599_R	W	345,100	ug/L	14,020	4.062	77,080
K_7664_R		31,730	ug/L	1,026	3.233	7,947
Li6707_R		353.4	ug/L	13.92	3.940	1,712
Mg2025_A	W	88,600	ug/L	598.0	0.6750	6,603
Mn2576_R	W	6,213	ug/L	259.1	4.170	8,906
Mo2020_A		2.309	ug/L	0.1738	7.528	1.801
Na5895_R		5,795	ug/L	159.9	2.759	4,506
Ni2316_A		474.9	ug/L	3.055	0.6434	553.0
Pb2203_A		147.7	ug/L	0.6287	0.4256	71.93
Sb2068_A		-1.769	ug/L	2.122	120.0	2.563
Se1960_A		-7.706	ug/L	1.581	20.51	1.623
Si2516_R		2,566	ug/L	20.25	0.7890	172.5
Sn1899_A		28.18	ug/L	1.897	6.731	9.052
Sr4215_R		186.6	ug/L	7.546	4.043	4,806
Ti3349_A	W	3,982	ug/L	40.73	1.023	90,790
Tl1908_A		-0.6741	ug/L	0.1838	27.26	-2.600
V_2924_A		388.8	ug/L	3.247	0.8351	4,378
Zn2062_A		753.0	ug/L	3.589	0.4766	863.9
Y_3600_R		13,016	Cts/S	0.46008	0.0035350	13,016
Y_2243_A		8,212.5	Cts/S	0.13396	0.0016310	8,212.5
Y_3600_A		273,140	Cts/S	625.60	0.22904	273,140

SI2319-003

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ

SI2319-003

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:28:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-2.266	ug/L	6.344	280.0	-2,368
Al3961_R	W	220,500	ug/L	8,336	3.781	65,030
As1891_A		162.7	ug/L	1.716	1.055	12.67
Au2427_A		36.08	ug/L	6.309	17.49	234.5
B_2089_A		52.66	ug/L	1.572	2.985	20.78
Ba4554_R		628.1	ug/L	24.16	3.846	11,860
Be3130_R		8.645	ug/L	0.1046	1.210	148.7
Ca3158_R		18,420	ug/L	697.7	3.788	7,019
Cd2265_A		-0.6138	ug/L	1.032	168.2	203.1
Co2286_A		154.7	ug/L	0.1637	0.1058	297.5
Cr2677_A		415.1	ug/L	2.795	0.6733	3,866
Cu3273_A		257.1	ug/L	0.7313	0.2844	2,009
Fe2599_R	W	338,300	ug/L	12,930	3.823	74,750
K_7664_R		30,130	ug/L	1,281	4.252	7,463
Li6707_R		333.5	ug/L	11.95	3.584	1,600
Mg2025_A	W	86,920	ug/L	217.8	0.2505	6,469
Mn2576_R	W	7,292	ug/L	258.8	3.549	10,340
Mo2020_A		3.452	ug/L	0.03047	0.8826	2.676
Na5895_R		4,778	ug/L	169.5	3.547	3,660
Ni2316_A		485.1	ug/L	1.456	0.3002	564.8
Pb2203_A		164.3	ug/L	1.696	1.032	82.32
Sb2068_A		-1.059	ug/L	2.095	197.9	2.594
Se1960_A		-9.115	ug/L	1.873	20.55	1.542
Si2516_R		2,877	ug/L	64.40	2.239	190.7
Sn1899_A		27.54	ug/L	0.3938	1.430	8.914
Sr4215_R		170.9	ug/L	7.292	4.266	4,353
Ti3349_A	W	3,987	ug/L	35.84	0.8990	90,840
Tl1908_A		2.515	ug/L	1.702	67.70	-2.558
V_2924_A		365.1	ug/L	2.750	0.7532	4,107
Zn2062_A		715.7	ug/L	1.685	0.2355	819.9
Y_3600_R		12,877	Cts/S	34.824	0.27044	12,877
Y_2243_A		8,201.1	Cts/S	9.1979	0.11215	8,201.1
Y_3600_A		272,980	Cts/S	2,103.4	0.77054	272,980

SI2319-004

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:33:18PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2.052	ug/L	1.229	59.86	-1,773
Al3961_R	W	173,900	ug/L	1,028	0.5913	49,600
As1891_A		139.6	ug/L	0.7932	0.5680	11.16
Au2427_A		21.41	ug/L	0.3152	1.472	163.7
B_2089_A		38.98	ug/L	0.2621	0.6724	15.76
Ba4554_R		504.4	ug/L	4.275	0.8476	9,228
Be3130_R		6.677	ug/L	0.07408	1.109	105.8
Ca3158_R		16,290	ug/L	103.1	0.6327	6,000
Cd2265_A		-0.8588	ug/L	0.1303	15.17	156.0
Co2286_A		118.8	ug/L	0.7549	0.6354	230.6
Cr2677_A		327.9	ug/L	0.7896	0.2408	3,026
Cu3273_A		186.2	ug/L	0.3508	0.1885	1,443
Fe2599_R	W	265,400	ug/L	1,965	0.7404	56,690
K_7664_R		22,420	ug/L	263.5	1.175	5,354
Li6707_R		270.5	ug/L	1.028	0.3799	1,260
Mg2025_A	W	68,740	ug/L	445.2	0.6477	5,098
Mn2576_R	W	5,027	ug/L	35.84	0.7129	6,893
Mo2020_A		2.599	ug/L	0.7417	28.54	2.014

SI2319-004

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:33:18PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		3,816	ug/L	42.52	1.114	2,810
Ni2316_A		354.3	ug/L	1.843	0.5203	409.7
Pb2203_A		118.7	ug/L	1.985	1.672	58.22
Sb2068_A		-1.914	ug/L	0.7907	41.30	1.910
Se1960_A		-10.06	ug/L	1.845	18.35	1.292
Si2516_R		5,143	ug/L	144.2	2.803	325.3
Sn1899_A		25.97	ug/L	0.9122	3.513	8.574
Sr4215_R		145.5	ug/L	0.8040	0.5525	3,582
Ti3349_A	W	3,426	ug/L	3.105	0.09062	77,410
Tl1908_A		4.865	ug/L	2.458	50.53	-1.415
V_2924_A		278.8	ug/L	0.3368	0.1208	3,114
Zn2062_A		551.5	ug/L	4.773	0.8655	629.6
Y_3600_R		12,450	Cts/S	145.96	1.1724	12,450
Y_2243_A		8,173.2	Cts/S	17.260	0.21117	8,173.2
Y_3600_A		270,680	Cts/S	547.73	0.20236	270,680

SI2319-005

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:38:00PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.7133	ug/L	0.8818	123.6	-1,657
Al3961_R	W	127,900	ug/L	3,037	2.374	37,670
As1891_A		144.4	ug/L	2.897	2.006	12.07
Au2427_A		20.10	ug/L	0.4722	2.350	144.5
B_2089_A		35.55	ug/L	1.059	2.980	14.58
Ba4554_R		338.8	ug/L	8.409	2.482	6,432
Be3130_R		5.223	ug/L	0.06790	1.300	85.83
Ca3158_R		19,190	ug/L	481.3	2.508	7,303
Cd2265_A		0.6349	ug/L	0.1759	27.70	153.8
Co2286_A		102.1	ug/L	2.399	2.350	198.1
Cr2677_A		275.5	ug/L	3.960	1.437	2,583
Cu3273_A		172.5	ug/L	2.557	1.483	1,358
Fe2599_R	W	241,900	ug/L	5,612	2.320	53,380
K_7664_R		19,280	ug/L	442.6	2.295	4,749
Li6707_R		201.5	ug/L	2.185	1.084	976.7
Mg2025_A	W	57,660	ug/L	1,592	2.761	4,288
Mn2576_R	W	3,855	ug/L	76.02	1.972	5,461
Mo2020_A		4.019	ug/L	0.7930	19.73	3.097
Na5895_R		1,150	ug/L	29.97	2.605	815.6
Ni2316_A		301.1	ug/L	8.011	2.661	348.2
Pb2203_A		104.1	ug/L	0.5910	0.5677	52.99
Sb2068_A		1.766	ug/L	3.230	182.9	2.217
Se1960_A		-13.60	ug/L	3.821	28.10	0.9721
Si2516_R		2,806	ug/L	51.83	1.847	185.5
Sn1899_A		27.17	ug/L	0.2440	0.8980	8.835
Sr4215_R		169.1	ug/L	4.441	2.627	4,301
Ti3349_A	W	2,699	ug/L	43.16	1.599	61,950
Tl1908_A		-0.7183	ug/L	1.923	267.7	-1.683
V_2924_A		224.6	ug/L	3.400	1.514	2,548
Zn2062_A		529.9	ug/L	12.73	2.402	606.7
Y_3600_R		12,860	Cts/S	93.644	0.72820	12,860
Y_2243_A		8,195.9	Cts/S	6.7660	0.082554	8,195.9
Y_3600_A		275,000	Cts/S	1,831.9	0.66614	275,000

SI2319-006

Method Name: K6010-2011 Method Revision: 1,747

SI2319-006

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:42:40PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		5.255	ug/L	1.710	32.55	-1,443
Al3961_R	W	150,300	ug/L	3,812	2.537	42,340
As1891_A		98.80	ug/L	5.424	5.490	7.209
Au2427_A		14.72	ug/L	4.869	33.07	129.0
B_2089_A		37.16	ug/L	2.494	6.711	15.14
Ba4554_R		392.0	ug/L	6.973	1.779	7,104
Be3130_R		5.788	ug/L	0.02409	0.4162	83.21
Ca3158_R		22,240	ug/L	593.3	2.668	8,098
Cd2265_A		-0.2954	ug/L	0.3015	102.1	134.8
Co2286_A		92.69	ug/L	1.298	1.400	185.0
Cr2677_A		267.7	ug/L	1.459	0.5450	2,499
Cu3273_A		145.9	ug/L	0.8565	0.5872	1,143
Fe2599_R	W	222,700	ug/L	5,749	2.581	47,010
K_7664_R		21,710	ug/L	404.5	1.864	5,120
Li6707_R		239.5	ug/L	5.019	2.096	1,105
Mg2025_A	W	58,960	ug/L	882.2	1.496	4,383
Mn2576_R	W	3,945	ug/L	126.6	3.208	5,344
Mo2020_A		2.385	ug/L	0.3804	15.95	1.851
Na5895_R		1,451	ug/L	14.00	0.9646	1,006
Ni2316_A		302.1	ug/L	2.730	0.9037	350.2
Pb2203_A		95.22	ug/L	2.292	2.407	45.95
Sb2068_A		4.296	ug/L	3.102	72.22	2.482
Se1960_A		-14.95	ug/L	4.950	33.10	0.9009
Si2516_R		4,027	ug/L	268.8	6.676	252.6
Sn1899_A		27.41	ug/L	0.3710	1.353	8.881
Sr4215_R		172.0	ug/L	5.014	2.915	4,185
Ti3349_A	W	3,426	ug/L	14.63	0.4268	78,310
Tl1908_A		1.293	ug/L	0.7641	59.09	-1.591
V_2924_A		241.9	ug/L	0.4990	0.2063	2,738
Zn2062_A		590.0	ug/L	7.384	1.251	675.4
Y_3600_R		12,301	Cts/S	70.160	0.57035	12,301
Y_2243_A		8,193.8	Cts/S	33.865	0.41330	8,193.8
Y_3600_A		273,810	Cts/S	2,322.5	0.84822	273,810

SI2319-007

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:47:22PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-4.253	ug/L	6.027	141.7	-2,200
Al3961_R	W	200,200	ug/L	9,783	4.886	59,680
As1891_A		176.5	ug/L	3.708	2.101	14.79
Au2427_A		27.11	ug/L	3.943	14.54	192.7
B_2089_A		56.52	ug/L	0.004982	0.008815	22.29
Ba4554_R		558.9	ug/L	25.62	4.584	10,680
Be3130_R		8.384	ug/L	0.1607	1.917	132.2
Ca3158_R		28,250	ug/L	1,436	5.083	10,880
Cd2265_A		-0.1586	ug/L	1.159	730.9	190.0
Co2286_A		127.2	ug/L	0.001845	0.001451	253.2
Cr2677_A		399.2	ug/L	0.2243	0.05618	3,710
Cu3273_A		232.5	ug/L	1.027	0.4419	1,812
Fe2599_R	W	309,000	ug/L	14,600	4.726	68,990
K_7664_R		33,930	ug/L	1,533	4.519	8,498
Li6707_R		316.5	ug/L	21.04	6.647	1,535
Mg2025_A	W	81,200	ug/L	89.89	0.1107	6,077
Mn2576_R	W	5,433	ug/L	259.8	4.781	7,786
Mo2020_A		2.445	ug/L	0.6033	24.68	1.909

SI2319-007

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:47:22PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		1,783	ug/L	110.2	6.182	1,326
Ni2316_A		412.6	ug/L	0.2590	0.06277	481.8
Pb2203_A		126.7	ug/L	1.749	1.380	62.29
Sb2068_A		-0.2437	ug/L	2.723	1,118	2.515
Se1960_A		-18.74	ug/L	8.265	44.11	0.8586
Si2516_R		3,962	ug/L	102.5	2.588	263.4
Sn1899_A		29.78	ug/L	0.006654	0.02234	9.410
Sr4215_R		255.0	ug/L	12.69	4.977	6,570
Ti3349_A	W	4,623	ug/L	1.344	0.02907	105,300
Tl1908_A		0.9325	ug/L	0.7555	81.02	-2.286
V_2924_A		365.9	ug/L	1.608	0.4393	4,124
Zn2062_A		683.6	ug/L	0.4092	0.05985	787.5
Y_3600_R		13,017	Cts/S	219.79	1.6884	13,017
Y_2243_A		8,247.1	Cts/S	11.421	0.13849	8,247.1
Y_3600_A		272,770	Cts/S	824.92	0.30242	272,770

CCV

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:52:02PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		499.7	ug/L	3.116	0.6236	16,590
Al3961_R		12,870	ug/L	55.57	0.4319	7,199
As1891_A		496.5	ug/L	0.7768	0.1565	112.0
Au2427_A		494.1	ug/L	16.77	3.394	2,020
B_2089_A		499.2	ug/L	1.221	0.2447	371.2
Ba4554_R	W	528.7	ug/L	3.507	0.6634	18,890
Be3130_R		515.9	ug/L	0.3545	0.06870	24,450
Ca3158_R		12,620	ug/L	82.40	0.6531	9,125
Cd2265_A		496.3	ug/L	0.4463	0.08993	7,864
Co2286_A		499.3	ug/L	0.8354	0.1673	1,779
Cr2677_A		496.3	ug/L	3.809	0.7676	9,186
Cu3273_A		508.1	ug/L	3.877	0.7631	7,966
Fe2599_R		12,720	ug/L	22.16	0.1742	5,337
K_7664_R		12,900	ug/L	113.8	0.8822	6,056
Li6707_R		524.4	ug/L	0.9832	0.1875	4,714
Mg2025_A		12,910	ug/L	9.620	0.07450	1,923
Mn2576_R		511.6	ug/L	5.165	1.010	1,377
Mo2020_A		496.4	ug/L	2.587	0.5211	750.9
Na5895_R	W	13,180	ug/L	101.3	0.7690	19,520
Ni2316_A		501.7	ug/L	0.6735	0.1342	1,194
Pb2203_A		499.2	ug/L	0.3877	0.07766	560.1
Sb2068_A		504.7	ug/L	0.7957	0.1577	147.0
Se1960_A		492.5	ug/L	0.03982	0.008085	60.56
Si2516_R		12,770	ug/L	17.34	0.1358	1,567
Sn1899_A		495.8	ug/L	0.4035	0.08139	198.4
Sr4215_R		524.7	ug/L	1.458	0.2779	25,430
Ti3349_A		487.1	ug/L	2.308	0.4738	22,180
Tl1908_A		503.8	ug/L	1.364	0.2707	136.9
V_2924_A		487.7	ug/L	3.989	0.8180	10,760
Zn2062_A		489.3	ug/L	0.002353	0.0004810	1,113
Y_3600_R		12,217	Cts/S	392.21	3.2104	12,217
Y_2243_A		8,147.7	Cts/S	15.520	0.19048	8,147.7
Y_3600_A		272,740	Cts/S	2,823.5	1.0353	272,740

CCB

Method Name: K6010-2011 Method Revision: 1,747

CCB

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 12:56:40PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3099	ug/L	0.2171	70.06	20.21
Al3961_R		15.92	ug/L	4.312	27.09	-6.043
As1891_A		0.4624	ug/L	0.6061	131.1	-0.4411
Au2427_A		2.452	ug/L	0.09337	3.808	12.10
B_2089_A		1.184	ug/L	0.5366	45.33	2.606
Ba4554_R		0.04978	ug/L	0.02013	40.44	92.23
Be3130_R		0.08939	ug/L	0.1050	117.5	7.597
Ca3158_R		34.53	ug/L	2.294	6.643	15.86
Cd2265_A		0.1624	ug/L	0.04037	24.86	3.050
Co2286_A		-0.008406	ug/L	0.01249	148.5	5.224
Cr2677_A		0.1740	ug/L	0.4960	285.2	4.812
Cu3273_A		0.7146	ug/L	0.2953	41.33	20.21
Fe2599_R		24.38	ug/L	3.033	12.44	14.26
K_7664_R		-97.76	ug/L	9.442	9.658	-105.7
Li6707_R		-2.504	ug/L	1.501	59.96	5.341
Mg2025_A		12.61	ug/L	0.7626	6.049	-1.523
Mn2576_R		0.4096	ug/L	0.2282	55.72	3.020
Mo2020_A		2.425	ug/L	0.2289	9.442	3.747
Na5895_R		21.96	ug/L	9.076	41.33	-50.22
Ni2316_A		0.6057	ug/L	0.08498	14.03	-0.4811
Pb2203_A		0.5179	ug/L	0.4256	82.19	-0.9884
Sb2068_A		0.8671	ug/L	1.752	202.0	0.4315
Se1960_A		1.534	ug/L	1.398	91.12	1.503
Si2516_R		14.34	ug/L	13.82	96.37	5.884
Sn1899_A		0.2233	ug/L	0.5738	257.0	3.578
Sr4215_R		0.2551	ug/L	0.02811	11.02	-2.052
Ti3349_A		1.027	ug/L	0.1994	19.42	16.25
Tl1908_A		-1.707	ug/L	1.371	80.36	-0.6560
V_2924_A		0.1489	ug/L	0.02653	17.82	-9.436
Zn2062_A		1.633	ug/L	0.1259	7.709	3.768
Y_3600_R		12,708	Cts/S	276.87	2.1786	12,708
Y_2243_A		8,258.4	Cts/S	5.4378	0.065846	8,258.4
Y_3600_A		280,920	Cts/S	1,866.1	0.66429	280,920

SI2319-008

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:01:27PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-4.592	ug/L	1.592	34.66	-2,633
Al3961_R	W	246,300	ug/L	7,049	2.862	73,760
As1891_A		195.9	ug/L	8.336	4.254	16.14
Au2427_A		50.01	ug/L	1.158	2.315	298.4
B_2089_A		47.04	ug/L	1.182	2.513	18.80
Ba4554_R		669.9	ug/L	22.30	3.329	12,840
Be3130_R		9.516	ug/L	0.04620	0.4855	165.8
Ca3158_R		36,060	ug/L	1,049	2.909	13,960
Cd2265_A		4.004	ug/L	0.3628	9.063	255.3
Co2286_A		180.6	ug/L	3.254	1.802	346.2
Cr2677_A		467.4	ug/L	8.939	1.913	4,456
Cu3273_A		250.8	ug/L	6.863	2.737	2,003
Fe2599_R	W	362,400	ug/L	11,240	3.102	81,300
K_7664_R		28,890	ug/L	1,027	3.553	7,263
Li6707_R		401.1	ug/L	18.64	4.648	1,947
Mg2025_A	W	104,900	ug/L	2,236	2.131	7,825
Mn2576_R	W	10,470	ug/L	335.3	3.202	15,070
Mo2020_A		4.963	ug/L	1.077	21.70	3.849

SI2319-008

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:01:27PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		2,164	ug/L	48.51	2.241	1,636
Ni2316_A		556.8	ug/L	13.18	2.367	651.4
Pb2203_A		189.4	ug/L	6.086	3.213	95.44
Sb2068_A		0.01104	ug/L	4.146	37,550	2.958
Se1960_A		-14.89	ug/L	1.023	6.866	1.341
Si2516_R		3,409	ug/L	72.37	2.123	228.6
Sn1899_A		29.38	ug/L	1.246	4.239	9.301
Sr4215_R		318.0	ug/L	10.80	3.396	8,236
Ti3349_A	W	4,394	ug/L	106.1	2.415	102,300
Tl1908_A		6.366	ug/L	0.05360	0.8419	-3.252
V_2924_A		415.8	ug/L	9.782	2.353	4,773
Zn2062_A		948.8	ug/L	20.15	2.124	1,090
Y_3600_R		13,075	Cts/S	87.640	0.67028	13,075
Y_2243_A		8,220.3	Cts/S	0.62384	0.0075890	8,220.3
Y_3600_A		279,030	Cts/S	2.2713	0.00081400	279,030

SI2008-001R

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:06:09PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.7097	ug/L	0.2419	34.09	5.213
Al3961_R		99.73	ug/L	12.43	12.47	45.33
As1891_A		-0.008005	ug/L	0.9056	11,310	-0.5461
Au2427_A		0.6653	ug/L	0.4050	60.87	4.775
B_2089_A		20.68	ug/L	0.1792	0.8663	16.62
Ba4554_R		35.18	ug/L	1.780	5.061	1,386
Be3130_R		-0.03440	ug/L	0.03566	103.7	1.484
Ca3158_R		13,110	ug/L	629.3	4.800	9,822
Cd2265_A		22.90	ug/L	0.003433	0.01500	364.0
Co2286_A		-0.08752	ug/L	0.06776	77.42	4.909
Cr2677_A		9.493	ug/L	0.03248	0.3421	180.4
Cu3273_A		0.1455	ug/L	0.2709	186.2	10.89
Fe2599_R		101.3	ug/L	5.624	5.551	47.61
K_7664_R		2,005	ug/L	30.37	1.514	926.6
Li6707_R		0.3119	ug/L	1.341	430.1	31.18
Mg2025_A		2,441	ug/L	15.87	0.6501	359.0
Mn2576_R		1.193	ug/L	0.9831	82.41	5.210
Mo2020_A		0.5270	ug/L	0.1638	31.07	0.8305
Na5895_R	W	27,020	ug/L	1,158	4.284	41,550
Ni2316_A		1.084	ug/L	0.1284	11.84	0.6576
Pb2203_A		0.2041	ug/L	0.5170	253.3	-1.349
Sb2068_A		-0.02492	ug/L	0.9192	3,689	0.1921
Se1960_A		-3.488	ug/L	1.489	42.68	0.8835
Si2516_R		3,540	ug/L	149.5	4.223	452.5
Sn1899_A		-2.006	ug/L	0.5555	27.69	2.664
Sr4215_R		86.24	ug/L	3.699	4.289	4,317
Ti3349_A		2.922	ug/L	1.103	37.75	104.0
Tl1908_A		-2.301	ug/L	0.9255	40.22	-0.8148
V_2924_A		0.3369	ug/L	0.2695	80.00	-5.597
Zn2062_A		28.00	ug/L	0.09277	0.3314	63.99
Y_3600_R		12,655	Cts/S	111.40	0.88025	12,655
Y_2243_A		8,180.0	Cts/S	9.5025	0.11617	8,180.0
Y_3600_A		277,860	Cts/S	344.89	0.12412	277,860

SI2008-001RA

Method Name: K6010-2011 Method Revision: 1,747

SI2008-001RA

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:10:57PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		622.5	ug/L	3.271	0.5254	20,950
Al3961_R		8,709	ug/L	409.4	4.702	5,087
As1891_A		665.3	ug/L	1.382	0.2077	149.7
Au2427_A		2.540	ug/L	0.2095	8.247	27.29
B_2089_A		707.9	ug/L	1.439	0.2032	521.9
Ba4554_R		694.5	ug/L	37.32	5.373	25,860
Be3130_R		694.4	ug/L	33.79	4.865	34,330
Ca3158_R		18,730	ug/L	870.6	4.647	14,140
Cd2265_A		709.5	ug/L	0.3948	0.05564	11,160
Co2286_A		699.5	ug/L	0.8762	0.1253	2,475
Cr2677_A		678.6	ug/L	4.102	0.6046	12,650
Cu3273_A		691.2	ug/L	4.592	0.6643	10,910
Fe2599_R		6,163	ug/L	304.5	4.941	2,700
K_7664_R		14,240	ug/L	644.1	4.522	6,982
Li6707_R		691.6	ug/L	31.43	4.545	6,479
Mg2025_A		8,693	ug/L	0.09231	0.001062	1,298
Mn2576_R		668.8	ug/L	34.92	5.221	1,878
Mo2020_A		670.2	ug/L	3.668	0.5473	1,008
Na5895_R	W	32,650	ug/L	1,627	4.983	50,590
Ni2316_A		701.5	ug/L	0.5043	0.07189	1,661
Pb2203_A		662.7	ug/L	1.729	0.2609	740.4
Sb2068_A		685.9	ug/L	0.5351	0.07801	200.2
Se1960_A		680.1	ug/L	8.151	1.198	82.60
Si2516_R		3,889	ug/L	195.2	5.020	501.4
Sn1899_A		-1.346	ug/L	0.2403	17.85	2.896
Sr4215_R		752.5	ug/L	36.76	4.886	38,060
Ti3349_A		643.0	ug/L	3.559	0.5535	29,510
Tl1908_A		714.4	ug/L	0.1511	0.02115	193.1
V_2924_A		676.8	ug/L	2.033	0.3004	15,040
Zn2062_A		744.3	ug/L	0.7561	0.1016	1,683
Y_3600_R		12,751	Cts/S	115.30	0.90425	12,751
Y_2243_A		8,099.6	Cts/S	6.7355	0.083159	8,099.6
Y_3600_A		274,750	Cts/S	252.58	0.091932	274,750

SI2008-001RL

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:15:36PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.742	ug/L	1.978	113.6	18.63
Al3961_R		121.0	ug/L	123.8	102.3	-0.5391
As1891_A		7.739	ug/L	5.797	74.91	-0.1912
Au2427_A		2.569	ug/L	1.309	50.94	4.137
B_2089_A		24.37	ug/L	0.2632	1.080	5.314
Ba4554_R		36.84	ug/L	0.8928	2.424	360.3
Be3130_R		-0.4100	ug/L	0.8014	195.5	-0.7478
Ca3158_R		13,370	ug/L	494.8	3.701	1,989
Cd2265_A		23.33	ug/L	0.08080	0.3463	75.32
Co2286_A		-1.319	ug/L	1.388	105.2	4.308
Cr2677_A		9.371	ug/L	0.1499	1.600	36.61
Cu3273_A		1.241	ug/L	2.486	200.3	12.50
Fe2599_R		114.4	ug/L	18.25	15.95	13.50
K_7664_R		1,970	ug/L	67.19	3.410	135.7
Li6707_R		3.976	ug/L	4.295	108.0	35.63
Mg2025_A		2,473	ug/L	4.250	0.1718	70.80
Mn2576_R		-0.3301	ug/L	0.1262	38.23	1.684
Mo2020_A		14.80	ug/L	1.733	11.71	4.573

SI2008-001RL

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:15:36PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		27,550	ug/L	1,260	4.574	8,376
Ni2316_A		1.049	ug/L	0.2853	27.21	-1.438
Pb2203_A		-2.890	ug/L	2.121	73.41	-2.247
Sb2068_A		4.426	ug/L	4.259	96.23	0.4402
Se1960_A		-17.14	ug/L	8.550	49.88	0.8999
Si2516_R		3,572	ug/L	62.99	1.763	94.29
Sn1899_A		1.482	ug/L	1.396	94.20	3.611
Sr4215_R		86.98	ug/L	4.814	5.535	856.1
Ti3349_A		3.998	ug/L	0.2483	6.210	5.525
Tl1908_A		-6.125	ug/L	4.110	67.11	-0.5221
V_2924_A		1.123	ug/L	0.08623	7.677	-7.815
Zn2062_A		28.79	ug/L	0.3587	1.246	13.30
Y_3600_R		12,615	Cts/S	119.68	0.94869	12,615
Y_2243_A		8,267.5	Cts/S	0.0087480	0.00010600	8,267.5
Y_3600_A		276,640	Cts/S	1,126.9	0.40736	276,640

SI2008-001P

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:20:22PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.99	ug/L	0.04643	0.09289	1,668
Al3961_R		2,289	ug/L	22.47	0.9817	1,260
As1891_A		106.3	ug/L	0.4032	0.3794	23.48
Au2427_A		2.841	ug/L	1.218	42.88	23.35
B_2089_A		532.3	ug/L	2.029	0.3812	384.6
Ba4554_R	W	2,198	ug/L	25.46	1.159	77,510
Be3130_R		55.01	ug/L	0.2729	0.4961	2,571
Ca3158_R		16,130	ug/L	196.9	1.221	11,560
Cd2265_A		280.0	ug/L	0.1948	0.06956	4,405
Co2286_A		515.2	ug/L	0.8546	0.1659	1,826
Cr2677_A		213.4	ug/L	1.406	0.6586	3,914
Cu3273_A		259.5	ug/L	1.362	0.5250	4,030
Fe2599_R		1,145	ug/L	6.348	0.5543	478.9
K_7664_R		12,760	ug/L	198.3	1.553	5,934
Li6707_R		548.3	ug/L	4.438	0.8093	4,881
Mg2025_A		7,622	ug/L	8.048	0.1056	1,133
Mn2576_R		532.3	ug/L	3.122	0.5864	1,420
Mo2020_A		102.7	ug/L	0.6429	0.6260	154.4
Na5895_R	W	35,840	ug/L	399.2	1.114	52,730
Ni2316_A		515.7	ug/L	0.4490	0.08706	1,221
Pb2203_A		101.0	ug/L	0.9941	0.9838	111.6
Sb2068_A		106.3	ug/L	2.203	2.071	29.72
Se1960_A		107.2	ug/L	2.358	2.199	14.14
Si2516_R		4,815	ug/L	44.49	0.9240	587.5
Sn1899_A		510.6	ug/L	2.034	0.3985	203.1
Sr4215_R		638.3	ug/L	6.633	1.039	30,650
Ti3349_A		501.8	ug/L	2.071	0.4127	22,600
Tl1908_A		122.1	ug/L	2.582	2.115	31.66
V_2924_A		505.2	ug/L	2.835	0.5612	11,110
Zn2062_A		535.0	ug/L	0.6643	0.1242	1,211
Y_3600_R		12,101	Cts/S	69.476	0.57412	12,101
Y_2243_A		8,102.7	Cts/S	0.27290	0.0033680	8,102.7
Y_3600_A		269,970	Cts/S	1,763.2	0.65310	269,970

SI2008-001S

Method Name: K6010-2011 Method Revision: 1,747

SI2008-001S

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:25:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.51	ug/L	0.5730	1.157	1,644
Al3961_R		2,259	ug/L	12.59	0.5574	1,232
As1891_A		104.7	ug/L	3.341	3.189	23.11
Au2427_A		3.169	ug/L	0.7230	22.82	24.49
B_2089_A		524.5	ug/L	2.184	0.4163	378.5
Ba4554_R	W	2,173	ug/L	15.09	0.6942	75,970
Be3130_R		54.52	ug/L	0.2325	0.4264	2,526
Ca3158_R		15,960	ug/L	53.12	0.3329	11,340
Cd2265_A		275.1	ug/L	0.01979	0.007193	4,323
Co2286_A		509.3	ug/L	0.2453	0.04816	1,803
Cr2677_A		210.4	ug/L	2.216	1.053	3,839
Cu3273_A		258.6	ug/L	3.393	1.312	3,997
Fe2599_R		1,118	ug/L	8.024	0.7179	463.5
K_7664_R		12,600	ug/L	96.62	0.7670	5,805
Li6707_R		544.8	ug/L	2.925	0.5369	4,808
Mg2025_A		7,491	ug/L	24.07	0.3212	1,113
Mn2576_R		524.9	ug/L	0.9718	0.1852	1,388
Mo2020_A		101.6	ug/L	0.1688	0.1661	152.6
Na5895_R	W	35,340	ug/L	170.6	0.4828	51,530
Ni2316_A		508.5	ug/L	0.2652	0.05215	1,202
Pb2203_A		100.9	ug/L	0.6958	0.6895	111.3
Sb2068_A		103.4	ug/L	0.8416	0.8140	28.84
Se1960_A		102.9	ug/L	3.744	3.638	13.60
Si2516_R		4,742	ug/L	34.75	0.7328	573.7
Sn1899_A		503.4	ug/L	0.5492	0.1091	200.0
Sr4215_R		628.0	ug/L	1.649	0.2626	29,890
Ti3349_A		500.0	ug/L	5.622	1.124	22,410
Tl1908_A		120.8	ug/L	2.125	1.759	31.28
V_2924_A		502.0	ug/L	5.566	1.109	10,990
Zn2062_A		527.8	ug/L	1.025	0.1943	1,194
Y_3600_R		11,996	Cts/S	250.55	2.0887	11,996
Y_2243_A		8,093.4	Cts/S	5.4811	0.067723	8,093.4
Y_3600_A		268,690	Cts/S	2,965.7	1.1038	268,690

CCV

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:29:41PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		498.2	ug/L	1.838	0.3688	16,500
Al3961_R		12,860	ug/L	195.0	1.516	7,200
As1891_A		495.3	ug/L	0.1970	0.03978	111.5
Au2427_A		489.0	ug/L	19.03	3.892	1,996
B_2089_A		499.1	ug/L	0.5525	0.1107	370.5
Ba4554_R		526.3	ug/L	10.33	1.963	18,810
Be3130_R		518.0	ug/L	8.731	1.686	24,550
Ca3158_R		12,620	ug/L	153.6	1.217	9,133
Cd2265_A		492.1	ug/L	0.1610	0.03272	7,786
Co2286_A		499.5	ug/L	0.3794	0.07596	1,777
Cr2677_A		491.0	ug/L	0.9208	0.1875	9,064
Cu3273_A		507.4	ug/L	5.060	0.9972	7,934
Fe2599_R		12,760	ug/L	238.4	1.868	5,356
K_7664_R		12,840	ug/L	281.9	2.195	6,031
Li6707_R		526.1	ug/L	10.59	2.013	4,731
Mg2025_A		12,770	ug/L	0.9217	0.007216	1,900
Mn2576_R		510.9	ug/L	4.751	0.9300	1,376
Mo2020_A		494.2	ug/L	2.015	0.4077	746.5

CCV

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:29:41PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		13,130	ug/L	218.2	1.661	19,460
Ni2316_A		499.5	ug/L	0.6602	0.1322	1,187
Pb2203_A		495.7	ug/L	1.234	0.2488	555.3
Sb2068_A		499.2	ug/L	0.2181	0.04368	145.2
Se1960_A		500.9	ug/L	4.656	0.9296	61.46
Si2516_R		12,720	ug/L	250.9	1.973	1,561
Sn1899_A		492.4	ug/L	2.343	0.4757	196.7
Sr4215_R		523.6	ug/L	8.624	1.647	25,390
Ti3349_A		489.2	ug/L	1.150	0.2351	22,220
Tl1908_A		508.1	ug/L	2.365	0.4656	137.9
V_2924_A		489.4	ug/L	2.012	0.4112	10,760
Zn2062_A		491.2	ug/L	0.6612	0.1346	1,116
Y_3600_R		12,220	Cts/S	186.43	1.5257	12,220
Y_2243_A		8,135.1	Cts/S	15.724	0.19329	8,135.1
Y_3600_A		271,950	Cts/S	722.77	0.26578	271,950

CCB

Method Name: K6010-2011 Method Revision: 1,747
Analyst Name: GEJ
Acquire Date: 4/21/2015 1:34:17PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3119	ug/L	0.1601	51.33	19.86
Al3961_R		24.54	ug/L	6.950	28.32	-0.9226
As1891_A		1.162	ug/L	1.722	148.2	-0.2812
Au2427_A		1.633	ug/L	0.8550	52.35	8.762
B_2089_A		0.4472	ug/L	0.4426	98.96	2.080
Ba4554_R		-0.09714	ug/L	0.2745	282.5	86.64
Be3130_R		0.2207	ug/L	0.08367	37.92	14.06
Ca3158_R		32.39	ug/L	10.55	32.56	14.36
Cd2265_A		0.1905	ug/L	0.02269	11.91	3.505
Co2286_A		-0.1353	ug/L	0.1227	90.68	4.780
Cr2677_A		-0.1069	ug/L	0.04409	41.23	-0.5580
Cu3273_A		1.145	ug/L	0.3278	28.63	26.70
Fe2599_R		21.39	ug/L	3.613	16.89	12.97
K_7664_R		-26.47	ug/L	29.13	110.0	-70.72
Li6707_R		-1.873	ug/L	1.546	82.51	10.82
Mg2025_A		13.43	ug/L	0.6223	4.634	-1.406
Mn2576_R		0.7770	ug/L	0.6647	85.55	4.085
Mo2020_A		2.658	ug/L	0.4594	17.28	4.115
Na5895_R		10.50	ug/L	4.707	44.81	-67.91
Ni2316_A		0.5957	ug/L	0.3012	50.55	-0.5063
Pb2203_A		-0.6532	ug/L	0.5130	78.55	-2.336
Sb2068_A		1.061	ug/L	0.3599	33.93	0.4894
Se1960_A		1.101	ug/L	0.8472	76.97	1.455
Si2516_R		24.18	ug/L	9.691	40.08	7.137
Sn1899_A		0.1212	ug/L	0.4583	378.1	3.546
Sr4215_R		0.5651	ug/L	0.1720	30.43	13.71
Ti3349_A		0.9512	ug/L	0.3444	36.21	12.54
Tl1908_A		-0.3926	ug/L	1.431	364.6	-0.2915
V_2924_A		0.3296	ug/L	0.05308	16.10	-5.216
Zn2062_A		1.633	ug/L	0.1733	10.62	3.777
Y_3600_R		12,709	Cts/S	413.34	3.2522	12,709
Y_2243_A		8,280.0	Cts/S	14.774	0.17843	8,280.0
Y_3600_A		276,500	Cts/S	1,573.3	0.56901	276,500

PQL

Method Name: K6010-2011 Method Revision: 1,747

Logbooks and Supporting Documents

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 102053 HCL: NA H2SO4: 71333 **Method:** 7470

KMNO4: MR1495 K2S2O8: MR1429 NH2OH-HCl: MR1441

Standards/Spiking Information:

1ppm A : MW15421

1ppm B : MW15410

LCSW = 125uL of 1ppm A to 25mL

Spike(S/P) = 25uL of 1ppm A to 25mL

ICV = 600uL of 1ppm B to 100 mL

S0.2 = 20uL of 1ppm A to 100 mL

S0.5 = 50uL of 1ppm A to 100 mL

S1.0 = 100uL of 1ppm A to 100 mL

S5.0 = 500uL of 1ppm A to 100 mL

S10.0 = 1000uL of 1ppm A to 100 mL

REVIEWED
HMM 4-3-15
KATAHDIN ANALYTICAL
METALS SECTION

Water Bath ID : A

Thermometer ID : DIG60

Digestion Start Time (@ 14:20 C): 90°

Digestion End Time(@ 16:20 °C): 96.7°

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWID02HGW2	ID02HGW2	0.025	L	0.025	L	AQ	HG	TCS	04/02/2015	N/A	N/A	N/A	N/A		
PBT1236A	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						
PBWID02HGW2	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015	N/A	N/A	N/A	N/A		
SI1693-001	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						AB
SI1978-001	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						A
SI1979-001	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						A
SI2006-023	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						A
SI2008-001	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						P
SI2008-001P	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						P
SI2008-001S	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						P
SI2008-002	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						F
SI2008-003	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						F
SI2008-004	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						F
SI2008-007	ID02HGW2		L		L	AQ	HG	TCS	04/02/2015						F

HMM 4-3-15

Digestion performed by: TZS On: 4/2/15

0008038

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 102053 HCL: 93325 H2O2: N/A **Method:** 3010

LCS / Spike		LCS/Spiking Information:		
☑	☑	CLPP-SPK-1 (ID/Vol): MS1928	0.05	mL
☑	☑	CLPP-SPK-INT1 (ID/Vol): MW15396	0.5	mL
☑	☑	CLPP-SPK-INT2 (ID/Vol): MW15407	0.5	mL
☐	☐	Gold Spike ID/Vol): N/A		mL
☐	☐	CLPP-SPK-4 (ID/Vol): N/A		mL

Hot Plate/Block ID : B

Start Time: 9:36 /Temp.(90-95°C) : 92°

End Time: 16:27 /Temp.(90-95°C) : 94°

Thermometer ID/Pos.: N/A / 4:6

Filter Paper: N/A

REVIEWED
04-03-15
KATAHDIN ANALYTICAL
METALS SECTION

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWID02ICW2	ID02ICW2	0.05	L	0.05	L	AQ	IC	TCS	04/02/2015	N/A	N/A	N/A	N/A		
PBWID02ICW2	ID02ICW2		L		L	AQ	IC	TCS	04/02/2015	N/A	N/A	N/A	N/A		
SI2006-023	ID02ICW2		L		L	AQ	IC	TCS	04/02/2015						A
SI2008-001	ID02ICW2		L		L	AQ	IC	TCS	04/02/2015						P
SI2008-001P	ID02ICW2		L		L	AQ	IC	TCS	04/02/2015						P
SI2008-001S	ID02ICW2		L		L	AQ	IC	TCS	04/02/2015						P
SI2008-002	ID02ICW2		L		L	AQ	IC	TCS	04/02/2015						F
SI2008-003	ID02ICW2		L		L	AQ	IC	TCS	04/02/2015						F
SI2008-004	ID02ICW2		L		L	AQ	IC	TCS	04/02/2015						F
SI2008-007	ID02ICW2		L		L	AQ	IC	TCS	04/02/2015						F

TRS 4/2/15

Digestion performed by: TRS **On:** 4/2/15

0000839

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 102053 HCL: 97264 H2O2: N/A **Method:** 3010

LCS / Spike **LCS/Spiking Information:**

- ☐ ☐ CLPP-SPK-1 (ID/Vol): MS1928 / 0.05 mL
- ☐ ☐ CLPP-SPK-INT1 (ID/Vol): MW1524 / 0.5 mL
- ☐ ☐ CLPP-SPK-INT2 (ID/Vol): MW15432 / 0.5 mL
- ☐ ☐ Gold Spike ID/Vol): N/A / mL
- ☐ ☐ CLPP-SPK-4 (ID/Vol): N/A / mL

Hot Plate/Block ID : B

Start Time: 9:57 /Temp.(90-95°C) : 92°

End Time: 10:49 /Temp.(90-95°C) : 95°

Thermometer ID/Pos.: ALC 24 / 41

Filter Paper: N/A

REVIEWED
[illegible] 04-20-15
KATAHDIN ANALYTICAL
METALS SECTION

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWID17ICW1	ID17ICW1	0.05	L	0.05	L	AQ	IC	TCS	04/17/2015	N/A	N/A	N/A	N/A		
PBWID17ICW1	ID17ICW1	↓	L		L	AQ	IC	TCS	04/17/2015	N/A	N/A	N/A	N/A		
SI2291-006	ID17ICW1	0.01	L 0.01		L	AQ	IC	TCS	04/17/2015						C
SI2313-004	ID17ICW1	0.01	L 0.01		L	AQ	IC	TCS	04/17/2015						G
SI2357-001	ID17ICW1	0.05	L		L	AQ	IC	TCS	04/17/2015						F
SI2361-001	ID17ICW1		L		L	AQ	IC	TCS	04/17/2015						D
SI2361-002	ID17ICW1		L		L	AQ	IC	TCS	04/17/2015						A
SI2361-003	ID17ICW1		L		L	AQ	IC	TCS	04/17/2015						D
SI2361-004	ID17ICW1		L		L	AQ	IC	TCS	04/17/2015						A
SI2361-005	ID17ICW1		L		L	AQ	IC	TCS	04/17/2015						D
SI2403-001	ID17ICW1		L		L	AQ	IC	TCS	04/17/2015						A
SI 2008-001R	↓	↓		↓		↓	↓	↓	↓						

RS 4/17/15

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, Maine

CASE NO. WE15 SDG NO. 812069 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

CONTRACT NO. _____
SOW NO. _____

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. **Inventory Sheet** (Form DC-2) (Do not Number)	0000001	0000008	✓	
2. **SDG Case Narrative**	0000011	0000014	✓	
3. **SDG Cover Sheet/Traffic Report**	0000009	0000010	✓	
4. **Volatiles Data**				
a. QC Summary				
System Monitoring Compound Summary (Form II	0000023	0000025	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	N/A	N/A	✓	
Method Blank Summary (Form IV VOA)	0000026	0000026	✓	
GC/MS Instrument Performance Check (Form V VOA)	0000027	0000027	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	0000028	0000029	✓	
b. Sample Data	0000030	0000061		
TCL Results - (Form I VOA-1, VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	0000040	0000133		
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB	0000134	0000136	✓	
Blank Data	0000137	0000141	✓	
Martix Spike/Matrix Spike Duplicate Data	0000142	0000147	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. 812069 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000150	0000152	✓	
MS/MSD Summary (Form III SV)	NA	NA	✓	
Method Blank Summary (Form IV SV)	0000153	0000154	✓	
GC/MS Instrument Performance Check (Form V SV)	0000155	0000157	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000158	0000159	✓	
b. Sample Data	0000160	0000184		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000185	0000261		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	0000262	0000282	✓	
Blank Data	0000283	0000293	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000294	0000315	✓	
e. Raw GPC Data	0000316	0000321	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	✓	
MS/MSD Duplicate Summary (Form III PEST)	NA	NA	✓	
Method Blank Summary (Form IV PEST)	NA	NA	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. S12069 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. **Pesticides Data** (Cont.)				
e. Raw GPC Data	NA	NA	✓	
f. Raw Florisil Data	NA	NA	✓	
7. **Miscellaneous Data**				
Original preparation and analysis forms or of preparation and analysis logbook pages -VOA	0000148	0000149	✓	
Internal sample and sample extract transfer chain-of-custody records	0000020	0000022A	✓	
Screening records	NA	NA	✓	
All instrument output, including strip charts from screening activities (describe or list)				
	NA	NA	✓	
	NA	NA	✓	
8. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments _____)	NA	NA	✓	
Chain-of-Custody Records	0000017	0000017	✓	
Sample Tags			✓	
Sample Log-in Sheet (Lab & DC1)	NA	NA	✓	
Miscellaneous Shipping/Receiving Records (describe or list)				
Sample Receipt Condition Report	0000015	0000016	✓	
Login Chain of Custody	0000018	0000019	✓	
9. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
	NA	NA	✓	
	NA	NA	✓	
10. **Other Records** (describe or list)				
Telephone Communication Log	NA	NA	✓	
	NA	NA	✓	
	NA	NA	✓	

11. **Comments:** _____

FORM DC-2-4 OLM04.2

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. S12069 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

Completed by: (CLP Lab)	[signature] (Signature)	Melanie Brown/DM (Printed Name/Title)	4-24-S (Date)
Verified by: (CLP Lab)	(Signature)	(Printed Name/Title)	(Date)
Audited by: (EPA)	(Signature)	(Printed Name/Title)	(Date)

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, ME
CASE NO. WE15 SDG NO. S12069 SDG NOS. TO FOLLOW
CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - ILM05.4, Exhibit B Section 2.6)

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1. Cover Page	0000009	0000010	✓	
2. SDG Narrative	0000011	0000014	✓	
3. Sample Log-In Sheet (DC-1)	NA	NA	✓	
4. Inventory Sheet (DC-2))	0000001	0000008	✓	
5. Traffic Report/Chain of Custody Record(s)	0000017	0000017	✓	
Inorganic Analysis - Metals				
6. Data Sheet (Form I-IN)	0000322	0000330	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	0000331	0000344	✓	
8. CRQL Standard (Form IIB-IN)	0000345	0000348	✓	
9. Blanks (Form III-IN)	0000349	0000360	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	0000361	0000362	✓	
11. ICP-MS Interference Check Sample (Form IVB-IN)	NA	NA	✓	
12. Matrix Spike Sample Recovery (Form VA-IN)	0000363	0000366	✓	
13. Post-Digestion Spike Sample Recovery (Form VB-IN)	0000367	0000370	✓	
14. Duplicates (Form VI-IN)	NA	NA	✓	
15. Laboratory Control Sample (Form VII-IN)	0000371	0000372	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	0000373	0000374 MMB 4-24-15	✓	
17. Method Detection Limits (Annually) (Form IX-IN)	0000375	0000380	✓	
18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN)	0000381	0000381	✓	
19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN)	NA	NA	✓	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN)	0000382	0000382	✓	
21. Preparation Log (Form XII-IN)	0000383	0000384	✓	
22. Analysis Run Log (Form XIII-IN)	0000385	0000396	✓	

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23. ICP-MS Tune (Form XIV-IN)	NA	NA	✓	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)	NA	NA	✓	
25. ICP-AES Raw Data	0000397	0000534	✓	
26. ICP-MS Raw Data	NA	NA	✓	
27. Mercury Raw Data	NA	NA	✓	
28. Cyanide Raw Data	NA	NA	✓	
29. Preparation Logs Raw Data (Wet Chemistry)	NA	NA	✓	
30. Percent Solids Determination Log	NA	NA	✓	
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)	NA	NA	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	NA	NA	✓	
32. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs	NA	NA	✓	
Sample Receipt Condition Report	0000015	0000016	✓	
Logbooks: Supporting Documents	0000535	0000537	✓	
33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)	NA	NA	✓	
Internal Chain of Custody	0000020	0000022A	✓	
Login Chain of Custody Report	0000018	0000019	✓	
34. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	NA	NA	✓	
Analysis Records	NA	NA	✓	
Description Duplicate Precision Form	NA	NA	✓	
35. Other Records (describe or list)	NA	NA	✓	
Telephone Communications Log				
DAS Specifications	NA	NA	✓	

36. Comments

Completed by:
(CLP Lab) [signature] Melanie Brown IDM 4-24-15
(Signature) (Print Name & Title) (Date)

Audited by:
(USEPA) _____ _____ _____
(Signature) (Print Name & Title) (Date)

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, ME
CASE NO. WE15 SDG NO. SI2069 SDG NOS. TO FOLLOW
CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - ILM05.4, Exhibit B Section 2.6)

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1. Cover Page	0000009	0000010	✓	
2. SDG Narrative	0000011	0000014	✓	
3. Sample Log-In Sheet (DC-1)	NA	NA	✓	
4. Inventory Sheet (DC-2))	0000001	0000008	✓	
5. Traffic Report/Chain of Custody Record(s)	0000017	0000017	✓	
Inorganic Analysis				
6. Data Sheet (Form I-IN)	0000541	0000543	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	NA	NA	✓	
8. CRQL Standard(Form IIB-IN)	NA	NA	✓	
9. Blanks (Form III-IN)	0000537	0000539	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	NA	NA	✓	
11. ICP-MS Interference Check Sample(Form IVB-IN)	NA	NA	✓	
12. Matrix Spike Sample Recovery(Form VA-IN)	NA	NA	✓	
13. Post-Digestion Spike Sample Recovery(Form VB-IN)	NA	NA	✓	
14. Duplicates (Form VI-IN)	NA	NA	✓	
15. Laboratory Control Sample(Form VII-IN)	0000540	0000540	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	NA	NA	✓	
17. Method Detection Limits (Annually) (Form IX-IN)	NA	NA	✓	
18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN)	NA	NA	✓	
19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN)	NA	NA	✓	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN)	NA	NA	✓	
21. Preparation Log (Form XII-IN)	NA	NA	✓	
22. Analysis Run Log (Form XIII-IN)	NA	NA	✓	

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23. ICP-MS Tune (Form XIV-IN)	NA	NA	✓	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)	NA	NA	✓	
25. ICP-AES Raw Data	NA	NA	✓	
26. ICP-MS Raw Data	NA	NA	✓	
27. Mercury Raw Data	NA	NA	✓	
28. Cyanide Raw Data	NA	NA	✓	
29. Preparation Logs Raw Data (Wet Chemistry)	0000544	0000550	✓	
30. Percent Solids Determination Log	NA	NA	✓	
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)	NA	NA	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	NA	NA	✓	
32. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs	NA	NA	✓	
Sample Receipt Condition Report	0000015	0000016	✓	
	NA	NA	✓	
33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)	NA	NA	✓	
Internal Chain of Custody	0000020	0000022A	✓	
Login Chain of Custody Report	0000018	0000019	✓	
34. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	NA	NA	✓	
Analysis Records	NA	NA	✓	
Description Duplicate Precision Form	NA	NA	✓	
35. Other Records (describe or list)				
Telephone Communications Log	NA	NA	✓	
DAS Specifications	NA	NA	✓	

36. Comments

Completed by:
(CLP Lab) [signature] Melanie Brown / DM 4-24-15
(Signature) (Print Name & Title) (Date)

Audited by:
(USEPA) _____ _____ _____
(Signature) (Print Name & Title) (Date)

FORM DC-2-2 M&E DAS

ENSAFE
NAVY CLEAN WE 15-03-06 NWIRP
BETHPAGE, NY
SI2069

KATAHDIN ANALYTICAL SERVICES, INC.
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

SAMPLE DATA PACKAGE

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
ENSAFE
NAVY CLEAN WE15-03-06 NWIRP BETHPAGE, NY
SI2069

Sample Receipt

The following samples were received on April 03, 2015 and were logged in under Katahdin Analytical Services work order number SI2069 for a hardcopy due date of April 22, 2015.

KATAHDIN Sample No.	AECOM Sample Identification
SI2069-1	MW-11-GW-040115
SI2069-2	MW-03-GW-040115
SI2069-3	MW-10-GW-040115
SI2069-4	MW-04-GW-040115
SI2069-5	MW-01-GW-040215

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Jennifer Obrin.** This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SI2069 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

8270D Analysis

The initial calibration analyzed on the U instrument on 03/23/2015 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analytes 3&4-methylphenol, N-nitroso-di-n-propylamine, 4-nitrophenol, hexachlorobenzene,

anthracene, and di-n-butylphthalate failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model. The corresponding independent check standard (file U9727) had a high concentration for the target analyte bis(2-chloroethyl)ether and low concentrations for hexachlorocyclopentadiene and 3,3'-dichlorobenzidine, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The CV (file U9932) had low responses for the target analytes 4-nitrophenol and pentachlorophenol. The CV (file U9982) had a low response for the target analyte 2-nitroaniline. These responses resulted in %D's that were greater than the DoD QSM acceptance limit of 20%.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on the DoD QSM for the full list of spiked compounds and all additional compounds are statistically derived. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable.

8260B Analysis

Samples SI2069-1 and 5 were manually integrated for the target analyte acetone. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The independent check standard (file C2186A), associated with the initial calibration analyzed on the C instrument on 04/08/15, had high concentrations for the target analytes acetone and 4-methyl-2-pentanone, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Metals Analysis

The samples of Katahdin Work Order SI2069 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Aqueous-matrix Katahdin Sample Numbers SI2069-(1-5) were digested for ICP analysis on 04/06/15 (QC Batch ID06ICW2) in accordance with USEPA Method 3010A. Katahdin Sample

Number SI2069-1 was prepared with duplicate matrix spiked aliquots.

ICP analyses of Katahdin Work Order SI2069 sample digestates were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010C. All samples were analyzed within holding times and all analytical run QC criteria were met.

Analysis of Mercury by Cold Vapor Atomic Absorption (CVAA)

Aqueous-matrix Katahdin Sample Numbers SI2069-(1-5) were digested for mercury analysis on 04/06/15 (QC Batch ID06HGW2) in accordance with USEPA Method 7470A. Katahdin Sample Number SI2069-2 was prepared with duplicate matrix spiked aliquots.

Mercury analysis of the Katahdin Work Order SI2069 sample digestates were performed using a Cetac M6100 automated mercury analyzer in accordance with USEPA Method 7470A. All analytical run QC criteria were met and all samples were analyzed within holding times.

Matrix QC Summary

The measured recoveries of all analytes in the matrix-spiked aliquots of Katahdin Sample Numbers SI2069-(1 and 2) are within the project's acceptance criteria (80% - 120% recovery of the added element).

The measured recoveries of all analytes in the post-digestion spiked aliquots of Katahdin Sample Numbers SI2069-(1 and 2) are within the project acceptance criteria (75% - 125% recovery of the added element).

The matrix-spike duplicate analyses of Katahdin Sample Numbers SI2069-(1 and 2) are within the laboratory's acceptance limit (<20% relative difference between duplicate matrix-spiked aliquots) for all analytes.

The serial dilution analyses of Katahdin Sample Numbers SI2069-(1 and 2) are within the project acceptance limit (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for all analytes.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I and preparation blanks on Form IIIP have been reported using the laboratory's limits of detection (LOD). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that fall between the MDL and the LOQ are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOD is listed in the concentration column. These LOQs, MDLs, and LODs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

Analytical results on Forms VA, VD, VII, and IX for client samples, matrix QC samples (duplicates and matrix spikes), and laboratory control samples have been reported down to the laboratory's method detection limits (MDLs). Analytical results that are below the MDLs are

flagged with "U" in the C-qualifier column, and the measured concentration is listed in the concentration column.

Analytical results for instrument run QC samples (ICVs, ICBs, etc.) have been reported down to the laboratory's instrument detection limits (IDLs).

IDLs, LODs, MDLs, and LOQs are listed on Form 10 of the accompanying data package.

Wet Chemistry Analysis

The samples of Work Order S12069 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for alkalinity were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times. All quality control criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Jennifer Obringer 04·23·15

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: AECOM		KAS PM: Jo		Sampled By: Client	
Project:		KIMS Entry By: AP		Delivered By: FedEx	
KAS Work Order#: SI2069/SI2070		KIMS Review By:		Received By: GN	
SDG #:	Cooler: 1 of 2			Date/Time Rec.: 4-3-15/09:15	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 2.3
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?	✓				
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

Katahdin Analytical Services, Inc.

Sample Receipt Condition Report

Client: AECOM	KAS PM: JO	Sampled By: Client	
Project:	KIMS Entry By: AP	Delivered By: FedEx	
KAS Work Order#: 512069 / 512070	KIMS Review By:	Received By: GN	
SDG #:	Cooler: 2 of 2	Date/Time Rec.: 4-3-15 / 09:15	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.8
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?	✓				
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

Katahdin
600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Client: Resolution Consultants
Contact: E. Vivaudou
Phone #: (845) 425 4980
Fax #: (845) 425 4989
Address: 100 Red Schoolhouse Rd
City: Chestnut Ridge
State: NY
Zip Code: 10977
Purchase Order #:
Proj. Name / No.: NWIRP - Bethpage - 60266526
Katahdin Quote #:
Bill (if different than above):
Address:
Sampler (Print / Sign): Jim Christopher
Copies To:

LAB USE ONLY
WORK ORDER #: 5I2069
KATAHDIN PROJECT NUMBER:

REMARKS:

SHIPPING INFO: ☒ FED EX ☐ UPS ☐ CLIENT
AIRBILL NO:
TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

ANALYSIS AND CONTAINER TYPE PRESERVATIVES

*	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	VOCs 40 mL VOA - HCl (Filt. ☐Y ☒N)	SVOCs 1 L Amber - None (Filt. ☐Y ☒N)	TAL Metals 250 mL HDPE - HNO_3 (Filt. ☐Y ☒N)	ANC by Alk. (SM2320B) 250 mL HDPE - None (Filt. ☐Y ☒N)	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	MW-11-GW-040115	4/1/15 / 1015	GW	6	3	2	1	/						
	MW-03-GW-040115	4/1/15 / 1100	GW	6	3	2	1	/						
	MW-10-GW-040115	4/1/15 / 1325	GW	6	3	2	1	/						
	MW-04-GW-040115	4/1/15 / 1440	GW	7	3	2	1	1						
	MW-01-GW-040215	4/2/15 / 1055	GW	6	3	2	1	/						
	~~Trip Blank~~ SC	~~4/2/15 / SC~~	~~WQ~~	~~3~~	~~3~~	/	~~SC~~	~~SC~~						
		/												
		/												
		/												
		/												
		/												
		/												
		/												
		/												
		/												
		/												

COMMENTS

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
	4/2/15 1400	4-3-15 / 09:15			
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF SHALL GOVERN SERVICES, EXCEPT WHEN A SIGNED CONTRACTUAL AGREEMENT EXISTS.

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Apr. 03, 2015
03:36 PM

Login Number: SI2069

Account: ENSAFE001
ENSAFE

NoWeb

Quote/Incoming: AECOM-BETHPAGE

Project: AECOM-BETHPAGE
NWIRP Bethpage, NY

Primary Report Address:
Dana Miller
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134
dmiller@Ensafe.com

Primary Invoice Address:
Accounts Payable
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134

Report CC Addresses:
Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	Form 1's due in 48 hrs for VOCs. Follow DoD QSM Version 4.2 using DoD limits. "U" LOD. "J" flag between DL and LOQ.
CHECK NO.	:	
CLIENT PO#	:	16518
CLIENT PROJECT MANAGE	:	Brian Caldwell
CONTRACT	:	
COOLER TEMPERATURE	:	2.3, 0.8
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	KAS135QC-CSV
LOGIN INITIALS	:	AP
PM	:	JO
PROJECT NAME	:	Navy Clean WE15-03-06 NWIRP Bethpage, NY
QC LEVEL	:	IV
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	Send CD only to Dana. Upload to Dropbox. Email invoice to purchasing@ensafe.com.
SDG ID	:	
SDG STATUS	:	

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI2069-1	MW-11-GW-040115	01-APR-15 10:15	03-APR-15		**07-APR-15**	22-APR-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	15-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270BNA	08-APR-15	1L N-Amber Glass		
Aqueous	P	TAL-METALS-SW846				

SW3010-PREP	SW6010-ALUMINUM	SW6010-ANTIMONY
SW6010-ARSENIC	SW6010-BARIUM	SW6010-BERYLLIUM
SW6010-CADMIUM	SW6010-CALCIUM	SW6010-CHROMIUM
SW6010-COBALT	SW6010-COPPER	SW6010-IRON
SW6010-LEAD	SW6010-MAGNESIUM	SW6010-MANGANESE
SW6010-NICKEL	SW6010-POTASSIUM	SW6010-SELENIUM
SW6010-SILVER	SW6010-SODIUM	SW6010-THALLIUM
SW6010-VANADIUM	SW6010-ZINC	SW7470-MERCURY

SI2069-2	MW-03-GW-040115	01-APR-15 11:00	03-APR-15		**07-APR-15**	22-APR-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	15-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270BNA	08-APR-15	1L N-Amber Glass		
Aqueous	P	TAL-METALS-SW846				

SW3010-PREP	SW6010-ALUMINUM	SW6010-ANTIMONY
SW6010-ARSENIC	SW6010-BARIUM	SW6010-BERYLLIUM
SW6010-CADMIUM	SW6010-CALCIUM	SW6010-CHROMIUM
SW6010-COBALT	SW6010-COPPER	SW6010-IRON
SW6010-LEAD	SW6010-MAGNESIUM	SW6010-MANGANESE
SW6010-NICKEL	SW6010-POTASSIUM	SW6010-SELENIUM
SW6010-SILVER	SW6010-SODIUM	SW6010-THALLIUM
SW6010-VANADIUM	SW6010-ZINC	SW7470-MERCURY

AP
04.03.15

0000018

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Apr. 03, 2015
03:36 PM

Login Number: SI2069

Quote/Incoming: AECOM-BETHPAGE

Account: ENSAFE001 NoWeb
ENSAFE

Project: AECOM-BETHPAGE
NWIRP Bethpage, NY

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI2069-3	MW-10-GW-040115	01-APR-15 13:25	03-APR-15		**07-APR-15**	22-APR-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	15-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270BNA	08-APR-15	1L N-Amber Glass		
Aqueous	P	TAL-METALS-SW846				

SW3010-PREP	SW6010-ALUMINUM	SW6010-ANTIMONY
SW6010-ARSENIC	SW6010-BARIUM	SW6010-BERYLLIUM
SW6010-CADMIUM	SW6010-CALCIUM	SW6010-CHROMIUM
SW6010-COBALT	SW6010-COPPER	SW6010-IRON
SW6010-LEAD	SW6010-MAGNESIUM	SW6010-MANGANESE
SW6010-NICKEL	SW6010-POTASSIUM	SW6010-SELENIUM
SW6010-SILVER	SW6010-SODIUM	SW6010-THALLIUM
SW6010-VANADIUM	SW6010-ZINC	SW7470-MERCURY

SI2069-4	MW-04-GW-040115	01-APR-15 14:40	03-APR-15		**07-APR-15**	22-APR-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SM2320B-ALKALINITY	15-APR-15	250mL Plastic		
Aqueous	S	SW8260-S	15-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270BNA	08-APR-15	1L N-Amber Glass		
Aqueous	P	TAL-METALS-SW846				

SW3010-PREP	SW6010-ALUMINUM	SW6010-ANTIMONY
SW6010-ARSENIC	SW6010-BARIUM	SW6010-BERYLLIUM
SW6010-CADMIUM	SW6010-CALCIUM	SW6010-CHROMIUM
SW6010-COBALT	SW6010-COPPER	SW6010-IRON
SW6010-LEAD	SW6010-MAGNESIUM	SW6010-MANGANESE
SW6010-NICKEL	SW6010-POTASSIUM	SW6010-SELENIUM
SW6010-SILVER	SW6010-SODIUM	SW6010-THALLIUM
SW6010-VANADIUM	SW6010-ZINC	SW7470-MERCURY

SI2069-5	MW-01-GW-040215	02-APR-15 10:55	03-APR-15		**07-APR-15**	22-APR-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	16-APR-15	40mL Vial+HCl		
Aqueous	S	SW8270BNA	09-APR-15	1L N-Amber Glass		
Aqueous	P	TAL-METALS-SW846				

SW3010-PREP	SW6010-ALUMINUM	SW6010-ANTIMONY
SW6010-ARSENIC	SW6010-BARIUM	SW6010-BERYLLIUM
SW6010-CADMIUM	SW6010-CALCIUM	SW6010-CHROMIUM
SW6010-COBALT	SW6010-COPPER	SW6010-IRON
SW6010-LEAD	SW6010-MAGNESIUM	SW6010-MANGANESE
SW6010-NICKEL	SW6010-POTASSIUM	SW6010-SELENIUM
SW6010-SILVER	SW6010-SODIUM	SW6010-THALLIUM
SW6010-VANADIUM	SW6010-ZINC	SW7470-MERCURY

Total Samples: *5* ***Total Analyses:*** *16*

04.03.15

0000019

Katahdin Analytical Services, Inc.

Container Transfer History for SI2069

Samplenum SI2069-1

Container Id SI2069-1A **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
06-APR-15 17:50	VOA_WALK-IN	GC/MS	EEVERETT	N	
07-APR-15 10:30	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2069-1B **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
08-APR-15 08:08	GC/MS	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 04/03/15 13:17 .

Container Id SI2069-1C **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
08-APR-15 15:30	VOA_WALK-IN	GC/MS	EEVERETT	N	
09-APR-15 08:59	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2069-1D **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-SELENIUM, SW6010-SILVER, SW6010-SODIUM, SW6010-THALLIUM, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-ZINC, SW6010-VANADIUM*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:33	WALK-IN	METALS PREP	TSWETT	N	
06-APR-15 13:20	METALS PREP	WALK-IN	TSWETT	N	

Container Id SI2069-1E **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
08-APR-15 10:03	WALK-IN	WET CHEMISTRY	HGOULD	N	
08-APR-15 10:04	WET CHEMISTRY	CONSUMED	HGOULD	N	

Container Id SI2069-1F **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Samplenum SI2069-2

Container Id SI2069-2A **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
06-APR-15 17:50	VOA_WALK-IN	GC/MS	EEVERETT	N	
07-APR-15 10:30	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2069-2B **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
08-APR-15 08:08	GC/MS	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 04/03/15 13:17 .

0000020

Katahdin Analytical Services, Inc.

Container Transfer History for SI2069

Samplenum SI2069-2

Container Id SI2069-2C **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
08-APR-15 15:30	VOA_WALK-IN	GC/MS	EEVERETT	N	
09-APR-15 08:59	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2069-2D **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-SELENIUM, SW6010-SILVER, SW6010-SODIUM, SW6010-THALLIUM, SW6010-ZINC, SW6010-VANADIUM*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:33	WALK-IN	METALS PREP	TSWETT	N	
06-APR-15 13:20	METALS PREP	WALK-IN	TSWETT	N	

Container Id SI2069-2E **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
08-APR-15 10:03	WALK-IN	WET CHEMISTRY	HGOULD	N	
08-APR-15 10:04	WET CHEMISTRY	CONSUMED	HGOULD	N	

Container Id SI2069-2F **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Samplenum SI2069-3

Container Id SI2069-3A **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
06-APR-15 17:50	VOA_WALK-IN	GC/MS	EEVERETT	N	
07-APR-15 10:30	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2069-3B **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
08-APR-15 08:08	GC/MS	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 04/03/15 13:17 .

Container Id SI2069-3C **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
08-APR-15 15:30	VOA_WALK-IN	GC/MS	EEVERETT	N	
09-APR-15 08:59	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2069-3D **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-SELENIUM, SW6010-SILVER, SW6010-SODIUM, SW6010-THALLIUM, SW6010-ZINC, SW6010-VANADIUM*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:33	WALK-IN	METALS PREP	TSWETT	N	
06-APR-15 13:20	METALS PREP	WALK-IN	TSWETT	N	

000021

Katahdin Analytical Services, Inc.

Container Transfer History for SI2069

Samplenum SI2069-3

Container Id SI2069-3E **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	

Container Id SI2069-3F **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Samplenum SI2069-4

Container Id SI2069-4A **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
06-APR-15 17:50	VOA_WALK-IN	GC/MS	EEVERETT	N	
07-APR-15 10:30	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2069-4B **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
08-APR-15 08:08	GC/MS	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 04/03/15 13:17 .

Container Id SI2069-4C **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
08-APR-15 15:30	VOA_WALK-IN	GC/MS	EEVERETT	N	
09-APR-15 08:59	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2069-4D **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-VANADIUM, SW6010-SODIUM, SW6010-SELENIUM, SW6010-NICKEL, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-POTASSIUM, SW6010-SILVER, SW6010-THALLIUM, SW6010-ZINC*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:33	WALK-IN	METALS PREP	TSWETT	N	
06-APR-15 13:20	METALS PREP	WALK-IN	TSWETT	N	

Container Id SI2069-4E **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

Container Id SI2069-4F **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
08-APR-15 10:03	WALK-IN	WET CHEMISTRY	HGOULD	N	
08-APR-15 10:04	WET CHEMISTRY	CONSUMED	HGOULD	N	

Container Id SI2069-4G **Containertype** **250mL Plastic** **Matrix AQ**

Product *SM2320B-ALKALINITY*

Transferdate	From	To	Analyst	Custody Break	Comments

0000022

Katahdin Analytical Services, Inc.

Container Transfer History for SI2069

Samplenum SI2069-4

Container Id SI2069-4G **Containertype 250mL Plastic** **Matrix AQ**

Product *SM2320B-ALKALINITY*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	

Samplenum SI2069-5

Container Id SI2069-5A **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
06-APR-15 17:50	VOA_WALK-IN	GC/MS	EEVERETT	N	
07-APR-15 10:30	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2069-5B **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:17	LOGIN	VOA_WALK-IN	APIMENTEL	N	
08-APR-15 08:08	GC/MS	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 04/03/15 13:17 .

Container Id SI2069-5C **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
08-APR-15 15:30	VOA_WALK-IN	GC/MS	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department LOGIN on 04/03/15 11:50 .
09-APR-15 08:59	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI2069-5D **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW7470-MERCURY, SW6010-ALUMINUM, SW6010-ANTIMONY, SW6010-ARSENIC, SW6010-BARIUM, SW6010-BERYLLIUM, SW6010-CADMIUM, SW6010-CALCIUM, SW6010-CHROMIUM, SW6010-COBALT, SW6010-COPPER, SW6010-IRON, SW6010-LEAD, SW6010-MAGNESIUM, SW6010-MANGANESE, SW6010-NICKEL, SW6010-POTASSIUM, SW6010-VANADIUM, SW6010-THALLIUM, SW6010-SODIUM, SW6010-SELENIUM, SW6010-SILVER, SW6010-ZINC*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:33	WALK-IN	METALS PREP	TSWETT	N	
06-APR-15 13:20	METALS PREP	WALK-IN	TSWETT	N	

Container Id SI2069-5E **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	

Container Id SI2069-5F **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270BNA*

Transferdate	From	To	Analyst	Custody Break	Comments
03-APR-15 13:22	LOGIN	WALK-IN	APIMENTEL	N	
06-APR-15 08:51	WALK-IN	ORGANIC PREP	WSTONE	N	
06-APR-15 08:52	ORGANIC PREP	CONSUMED	WSTONE	N	

0000022A

VOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE15-03-06 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI2069

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
MW-11-GW-040115	SI2069-1		93.0		95.0		104.		104.	
MW-03-GW-040115	SI2069-2		95.1		98.3		105.		108.	
MW-10-GW-040115	SI2069-3		91.1		95.1		105.		104.	
MW-04-GW-040115	SI2069-4		95.2		99.2		106.		109.	
MW-01-GW-040215	SI2069-5		94.5		98.1		109.		106.	
Laboratory Control S	WG160924-8		105.		104.		106.		119.	
Method Blank Sample	WG160924-9		93.2		93.9		99.7		108.	

		QC Limits
DCA	1,2-DICHLOROETHANE-D4	70-120
BFB	P-BROMOFLUOROBENZENE	75-120
DBF	DIBROMOFLUOROMETHANE	85-115
TOL	TOLUENE-D8	85-120

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
SDG : SI2069
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab Sample ID : WG160924-9
Lab File ID : C2186.D
Date Analyzed : 08-APR-15
Instrument ID : GCMS-C
Time Analyzed : 17:15
Heated Purge : No

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG160924-8	C2182.D	04/08/15	14:53
MW-11-GW-040115	SI2069-1	C2188.D	04/08/15	18:21
MW-03-GW-040115	SI2069-2	C2189.D	04/08/15	18:54
MW-10-GW-040115	SI2069-3	C2190.D	04/08/15	19:28
MW-04-GW-040115	SI2069-4	C2191.D	04/08/15	20:02
MW-01-GW-040215	SI2069-5	C2192.D	04/08/15	20:36

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : CB057.D
Instrument ID : GCMS-C

SDG : SI2069
Date Analyzed : 08-APR-15
Time Analyzed : 10:19
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	21.9		
75	30.0 - 60.0% of mass 95	48.0		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	5.9		
173	Less than 2.0% of mass 174	0.6	0.94	1
174	Greater than 50.0% of mass 95	61.7		
175	5.0 - 9.0% of mass 174	4.3	6.99	1
176	95.0 - 101.0% of mass 174	60.0	97.33	1
177	5.0 - 9.0% of mass 176	4.3	7.16	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG160924-4	C2176.D	04/08/15	10:49
Initial Calibration	WG160924-3	C2177.D	04/08/15	11:59
Initial Calibration	WG160924-2	C2178.D	04/08/15	12:31
Initial Calibration	WG160924-1	C2179.D	04/08/15	13:02
Initial Calibration	WG160924-6	C2180.D	04/08/15	13:34
Initial Calibration	WG160924-5	C2181.D	04/08/15	14:06
Laboratory Control S	WG160924-8	C2182.D	04/08/15	14:53
Independent Source	WG160924-7	C2182A.D	04/08/15	14:53
Method Blank Sample	WG160924-9	C2186.D	04/08/15	17:15
MW-11-GW-040115	SI2069-1	C2188.D	04/08/15	18:21
MW-03-GW-040115	SI2069-2	C2189.D	04/08/15	18:54
MW-10-GW-040115	SI2069-3	C2190.D	04/08/15	19:28
MW-04-GW-040115	SI2069-4	C2191.D	04/08/15	20:02
MW-01-GW-040215	SI2069-5	C2192.D	04/08/15	20:36

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160924-4
Lab File ID : C2176.D

SDG: SI2069
Analytical Date: 04/08/15 10:49
Instrument ID: GCMS-C

		PENTAFLUOROBENZENE			1,4-DIFLUOROBENZENE			CHLOROBENZENE-D5		
		Area	#	RT	Area	#	RT	Area	#	RT
	Std .	332115		8.04	559910		8.70	542634		12.19
	Upper Limit	664230		8.54	1119820		9.20	1085268		12.69
	Lower Limit	166057.5		7.54	279955		8.20	271317		11.69
Client Sample ID	Lab Sample ID									
Laboratory Control S	WG160924-8	375671		8.04	629003		8.70	601919		12.19
Method Blank Sample	WG160924-9	331637		8.04	553194		8.70	548098		12.19
MW-11-GW-040115	SI2069-1	320518		8.04	554921		8.70	547024		12.19
MW-03-GW-040115	SI2069-2	325993		8.04	545215		8.70	539384		12.19
MW-10-GW-040115	SI2069-3	299780		8.04	512312		8.70	507342		12.19
MW-04-GW-040115	SI2069-4	295451		8.03	494184		8.70	491686		12.19
MW-01-GW-040215	SI2069-5	292508		8.04	496104		8.70	497775		12.19

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160924-4
Lab File ID : C2176.D

SDG: SI2069
Analytical Date: 04/08/15 10:49
Instrument ID: GCMS-C

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	329788		15.52	
	Upper Limit	659576		16.02	
	Lower Limit	164894		15.02	
Client Sample ID	Lab Sample ID				
Laboratory Control S	WG160924-8	368395		15.52	
Method Blank Sample	WG160924-9	316723		15.52	
MW-11-GW-040115	SI2069-1	315093		15.52	
MW-03-GW-040115	SI2069-2	318220		15.51	
MW-10-GW-040115	SI2069-3	296548		15.52	
MW-04-GW-040115	SI2069-4	280390		15.52	
MW-01-GW-040215	SI2069-5	295812		15.51	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-1
Client ID: MW-11-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: C2188.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	J	4.8	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-1
Client ID: MW-11-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: C2188.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		93.0	%					
Toluene-d8		104.	%					
1,2-Dichloroethane-d4		104.	%					
Dibromofluoromethane		95.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2188.D
Report Date: 09-Apr-2015 08:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2188.D
Lab Smp Id: SI2069-1 Client Smp ID: MW-11-GW-040115
Inj Date : 08-APR-2015 18:21 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2069-1
Misc Info : WG160924,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

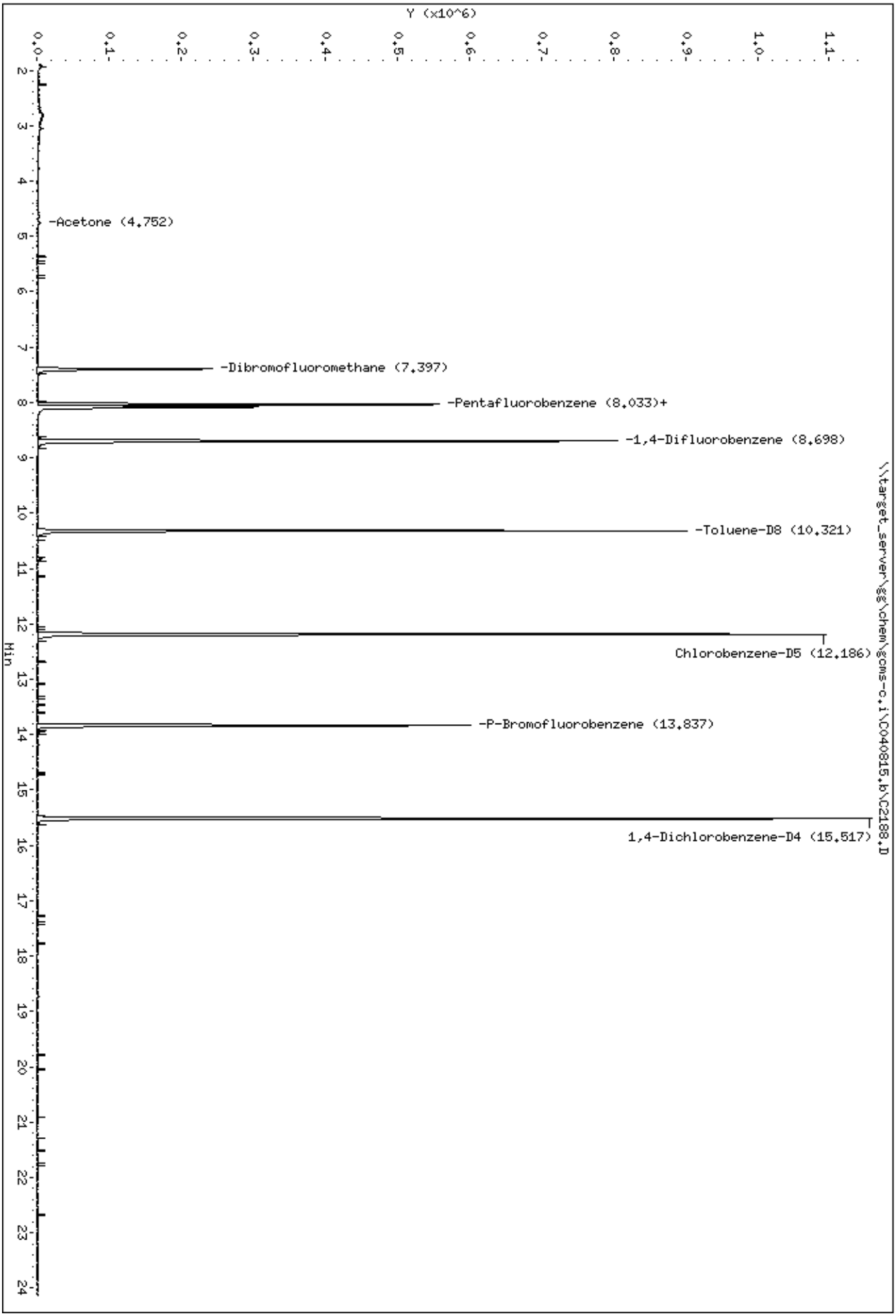
Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
15 Acetone	43	4.752	4.753	(0.591)	6525	4.79868	4.8(aM)	M9
$ 37 Dibromofluoromethane	113	7.397	7.405	(0.920)	152827	47.5297	47.5	
* 42 Pentafluorobenzene	168	8.040	8.041	(1.000)	320518	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.083	8.090	(1.005)	223403	51.9294	51.9	
* 49 1,4-Difluorobenzene	114	8.698	8.698	(1.000)	554921	50.0000		
$ 55 Toluene-D8	98	10.320	10.321	(1.187)	530434	52.1243	52.1	
* 66 Chlorobenzene-D5	117	12.186	12.187	(1.000)	547024	50.0000		
$ 76 P-Bromofluorobenzene	95	13.837	13.838	(1.591)	248872	46.4788	46.5	
* 91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	315093	50.0000		

WAS
11:36 am, Apr 15, 2015

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2188.D
Date : 08-APR-2015 18:21
Client ID: MW-11-GW-040115
Sample Info: SI2069-1
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C040815.b\C2188.D
Y (x10^6)
Min
-Acetone (4.752)
-Dibromofluoromethane (7.397)
-Pentafluorobenzene (8.033)+
-1,4-Difluorobenzene (8.698)
-Toluene-D8 (10.321)
Chlorobenzene-D5 (12.186)
-P-Bromofluorobenzene (13.837)
1,4-Dichlorobenzene-D4 (15.517)

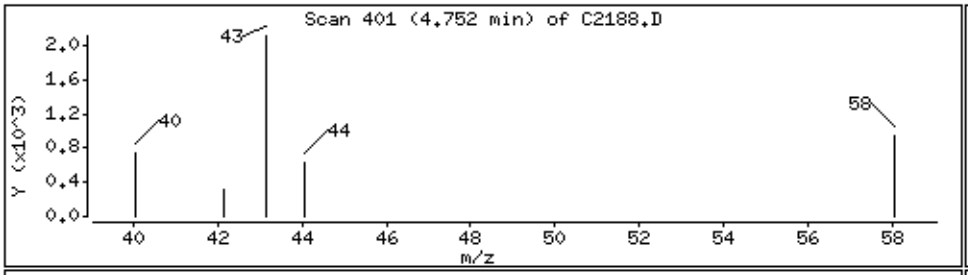
Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2188.D

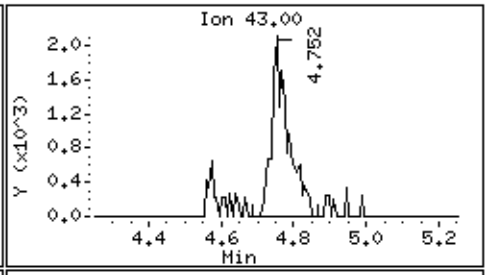
Date : 08-APR-2015 18:21

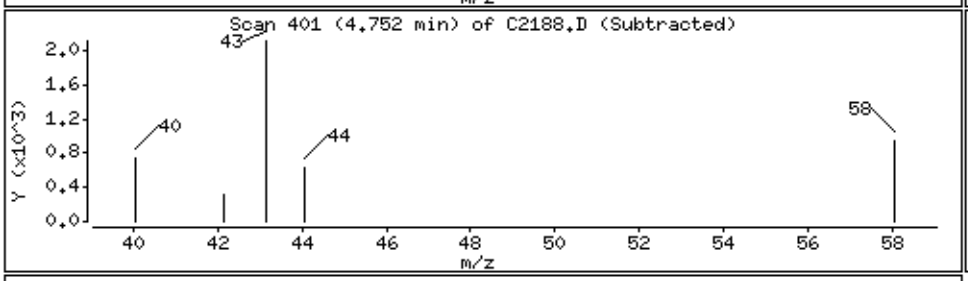
Client ID: MW-11-GW-040115 Instrument: gcms-c.i

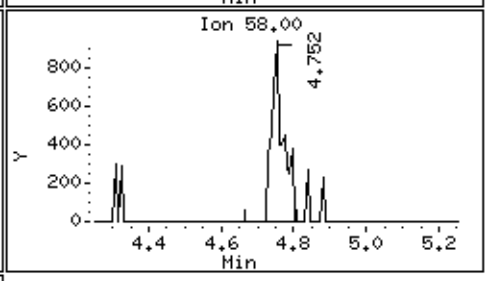
Sample Info: SI2069-1

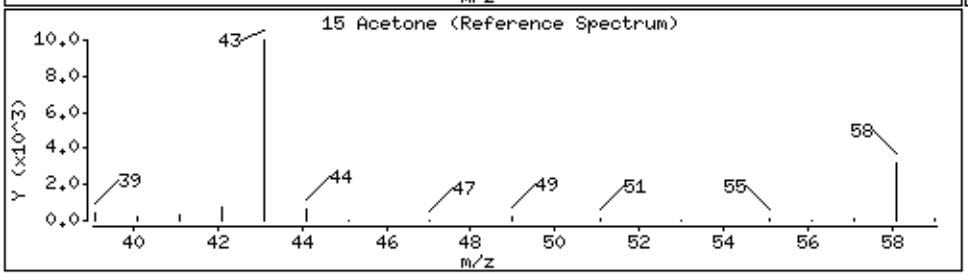
15 Acetone Concentration: 4.8 ug/l







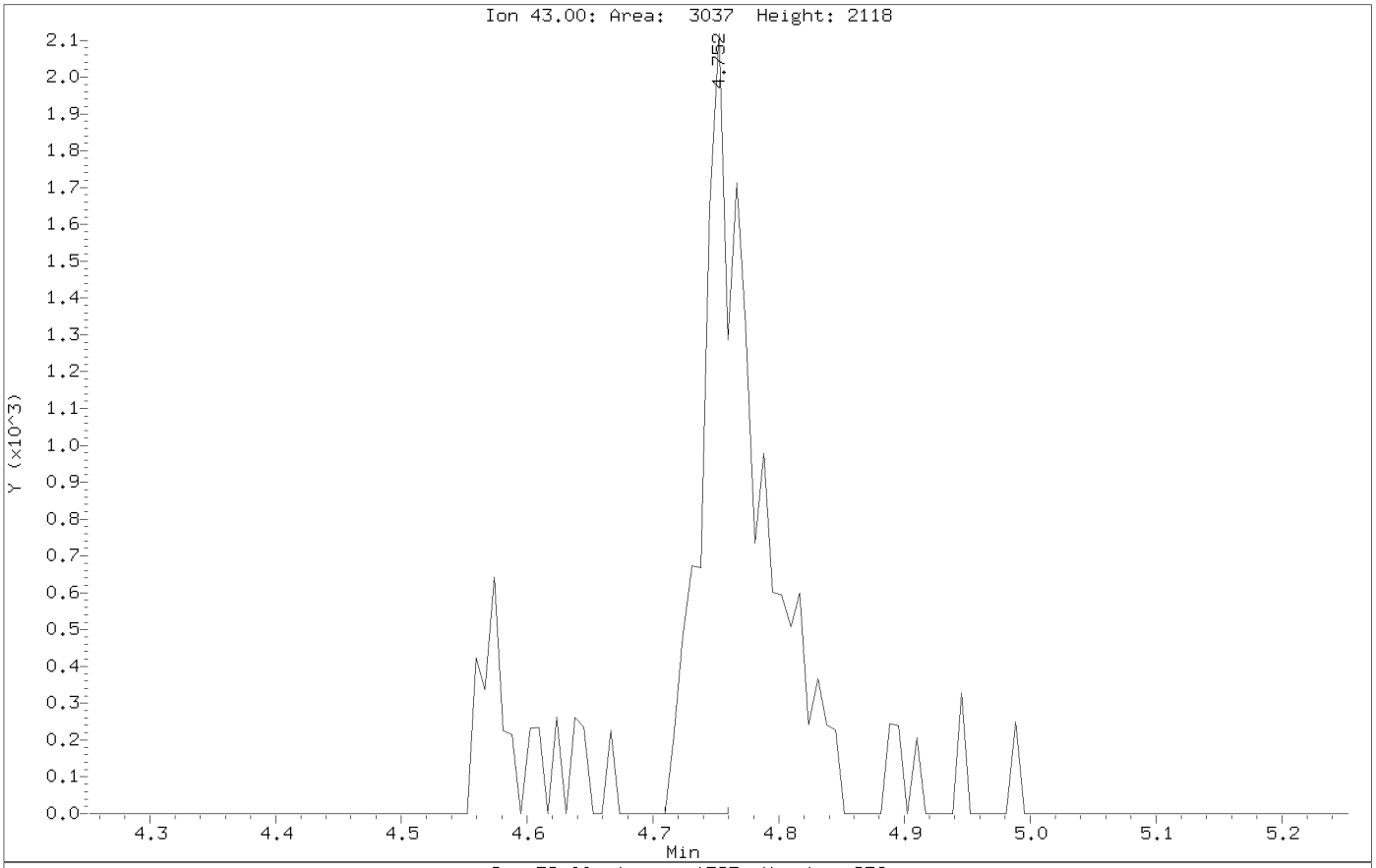


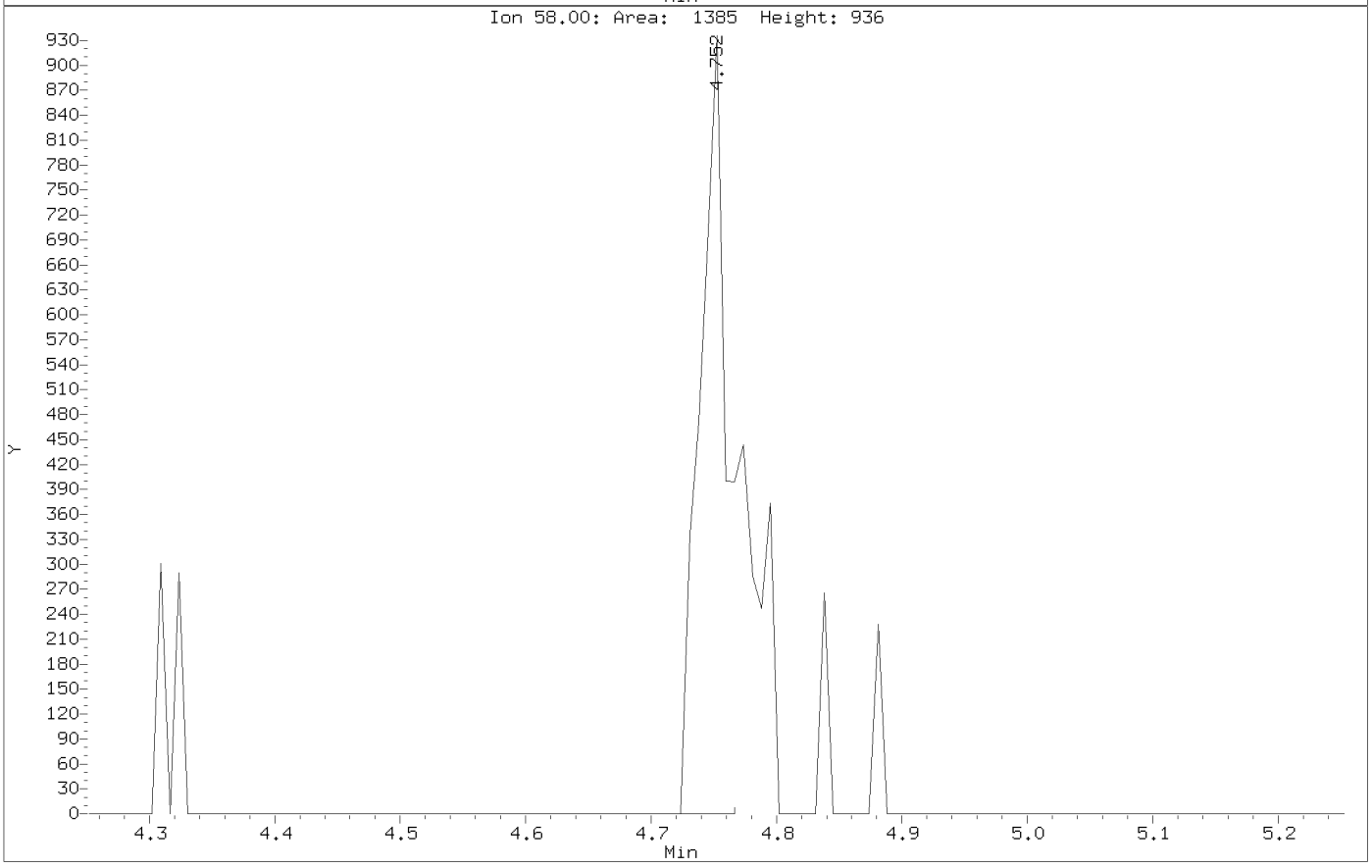


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2188.D
Injection Date: 08-APR-2015 18:21
Instrument: gcms-c.i
Client Sample ID: MW-11-GW-040115

Compound: Acetone
CAS Number: 67-64-1

BEFORE MANUAL INTEGRATION

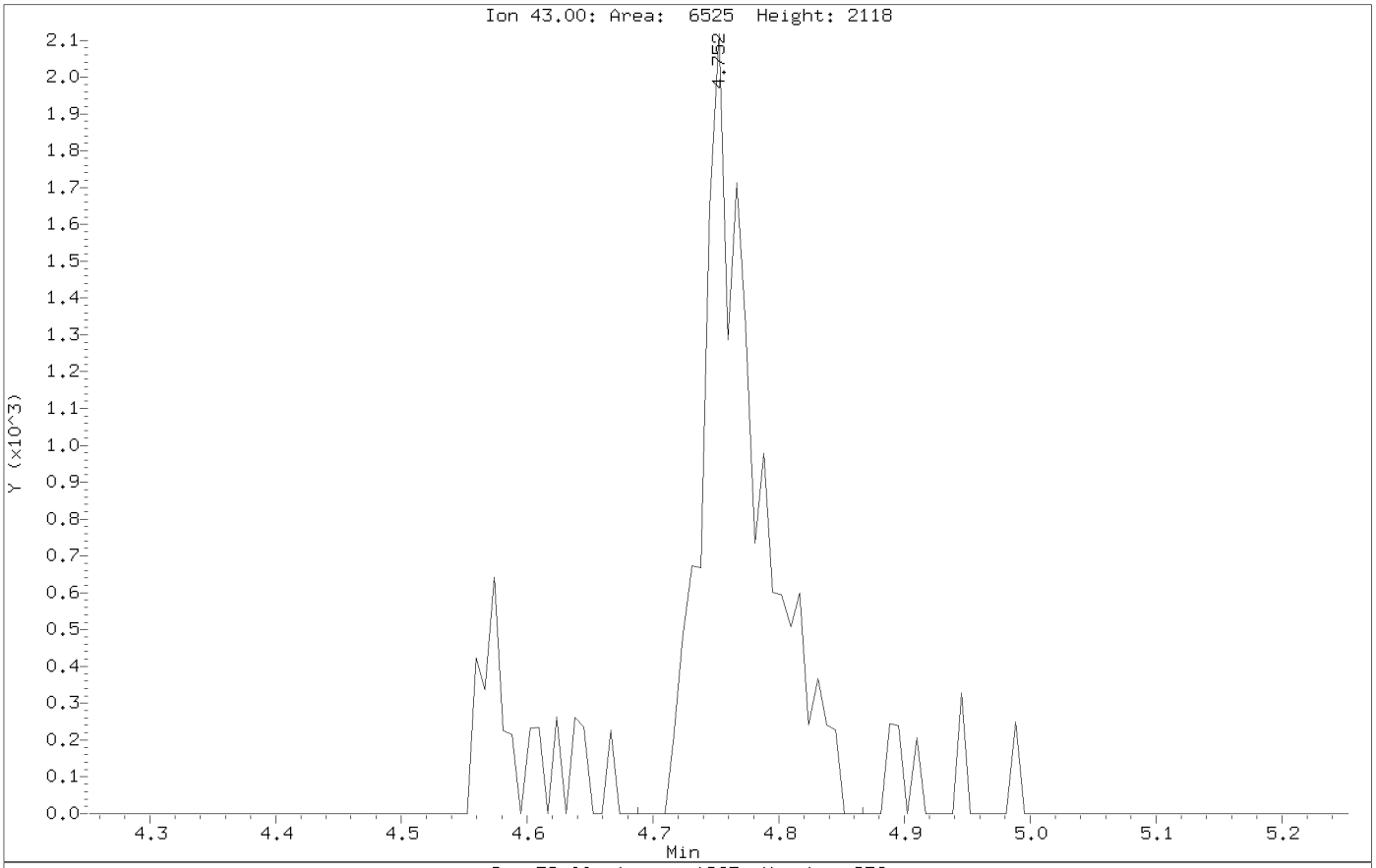


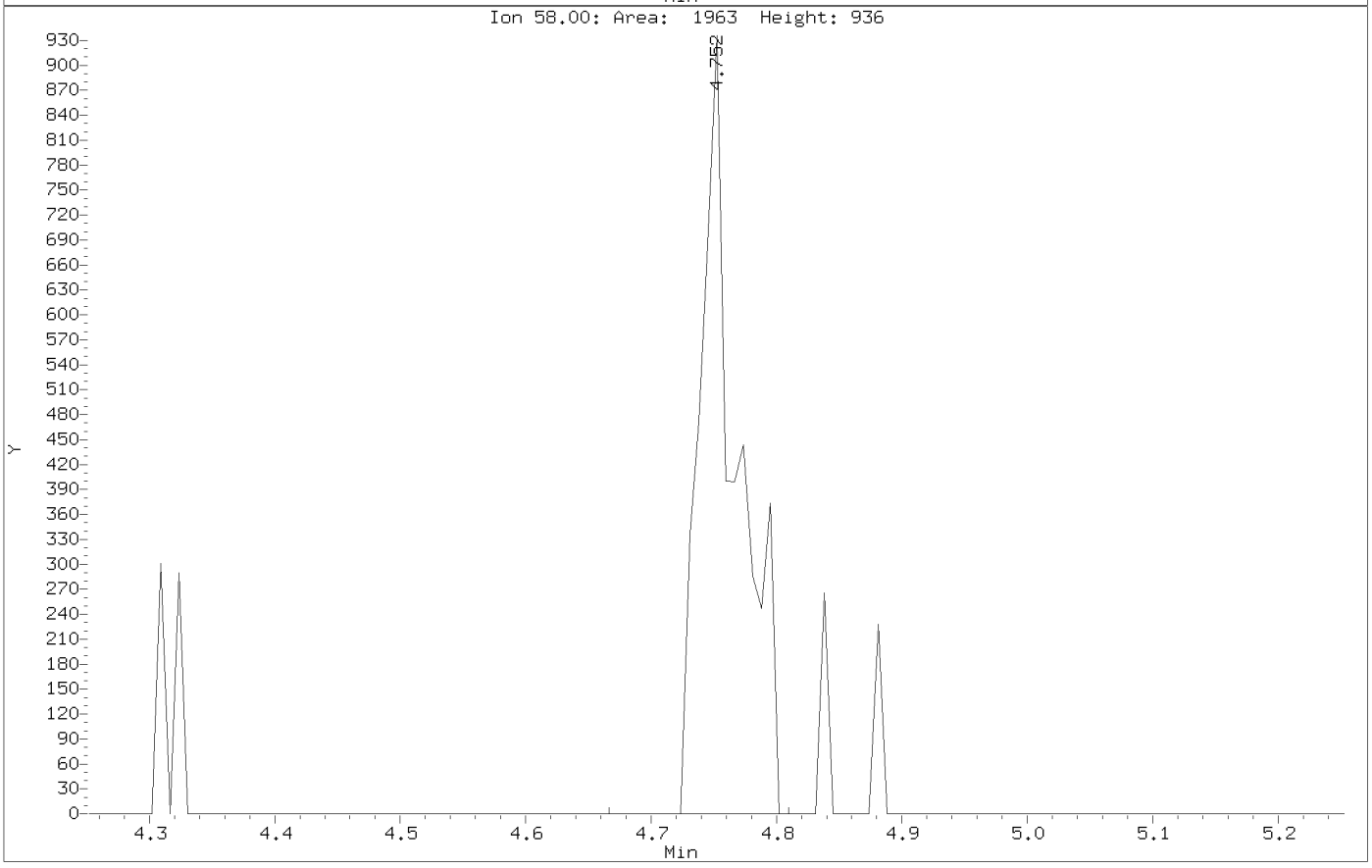


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2188.D
Injection Date: 08-APR-2015 18:21
Instrument: gcms-c.i
Client Sample ID: MW-11-GW-040115

Compound: Acetone
CAS Number: 67-64-1

AFTER MANUAL INTEGRATION





Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-2
Client ID: MW-03-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: C2189.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	J	0.22	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene		1.3	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-2
Client ID: MW-03-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: C2189.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	J	0.22	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		95.1	%					
Toluene-d8		108.	%					
1,2-Dichloroethane-d4		105.	%					
Dibromofluoromethane		98.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2189.D
Report Date: 09-Apr-2015 08:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2189.D
Lab Smp Id: SI2069-2 Client Smp ID: MW-03-GW-040115
Inj Date : 08-APR-2015 18:54 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2069-2
Misc Info : WG160924,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

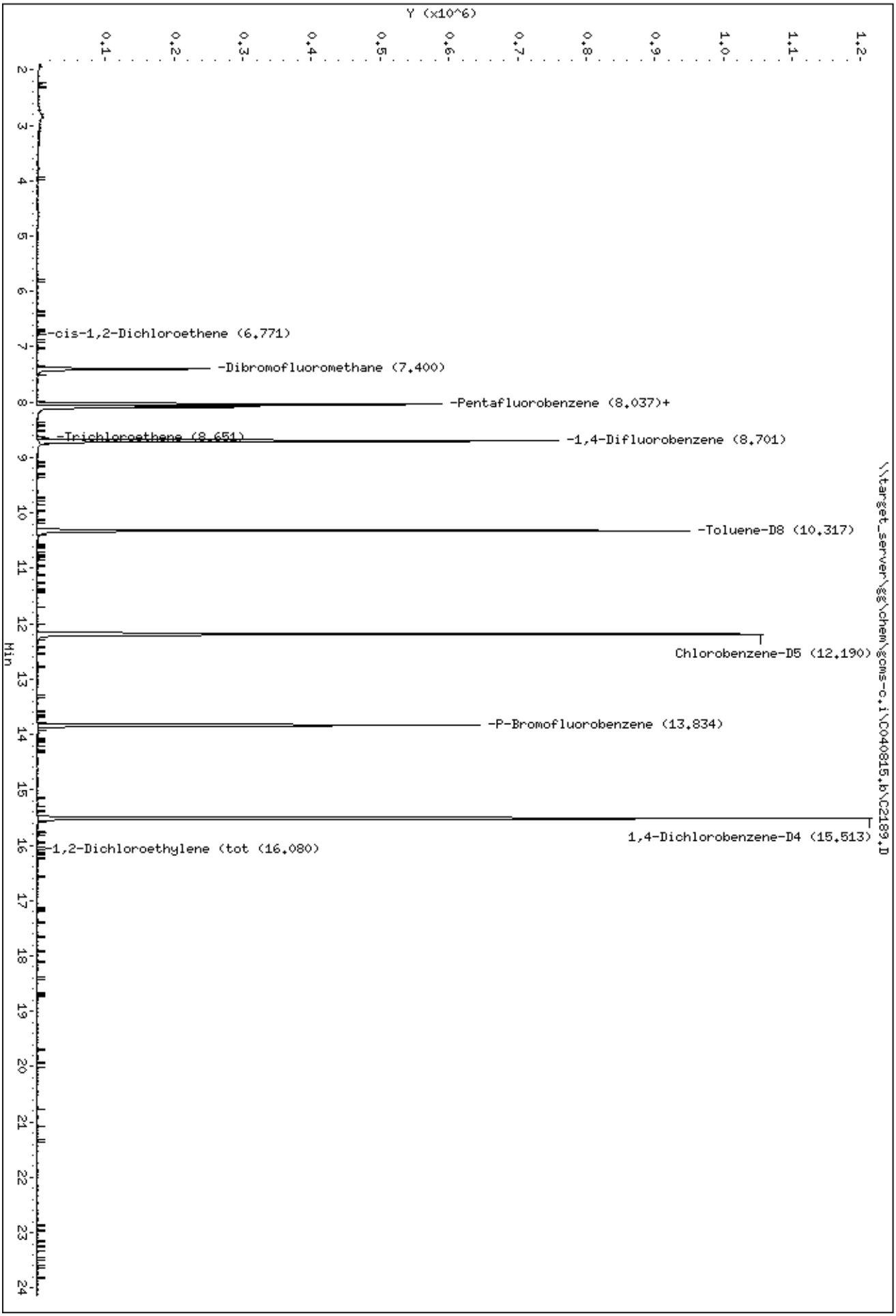
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	29 cis-1,2-Dichloroethene	96	6.764	6.761	(0.842)	991	0.22171	0.22(a)	
M	30 1,2-Dichloroethylene (total)	96				991	0.22171	0.22(a)	
$	37 Dibromofluoromethane	113	7.400	7.405	(0.921)	160797	49.1685	49.2	
*	42 Pentafluorobenzene	168	8.036	8.041	(1.000)	325993	50.0000		
$	45 1,2-Dichloroethane-D4	65	8.086	8.090	(1.006)	230286	52.6304	52.6	
	48 Trichloroethene	95	8.651	8.648	(0.994)	6066	1.29744	1.3	
*	49 1,4-Difluorobenzene	114	8.701	8.698	(1.000)	545215	50.0000		
$	55 Toluene-D8	98	10.316	10.321	(1.186)	540993	54.1083	54.1	
*	66 Chlorobenzene-D5	117	12.189	12.187	(1.000)	539384	50.0000		
$	76 P-Bromofluorobenzene	95	13.833	13.838	(1.590)	250144	47.5480	47.5	
*	91 1,4-Dichlorobenzene-D4	152	15.513	15.518	(1.000)	318220	50.0000		

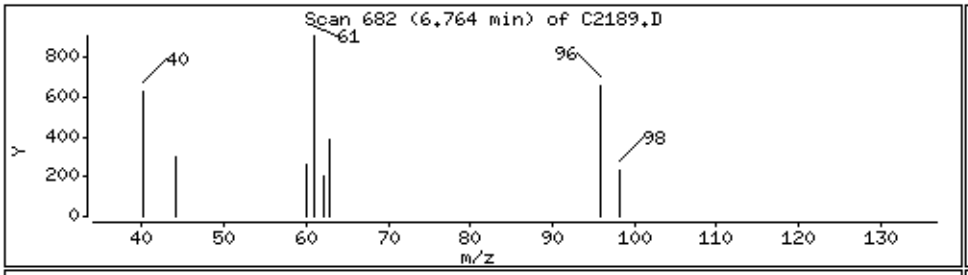
QC Flag Legend

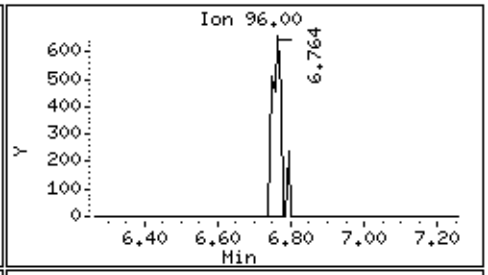
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

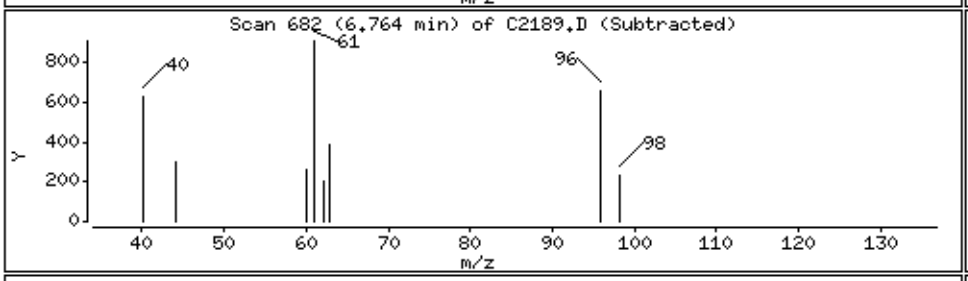

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2189.D
Date : 08-APR-2015 18:54
Client ID: MW-03-GW-040115
Sample Info: SI2069-2
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C040815.b\C2189.D
Y (x10^6)
Min
-cis-1,2-Dichloroethene (6.771)
-Dibromofluoromethane (7.400)
-Pentafluorobenzene (8.037)+
-Trichloroethene (8.651)
-1,4-Difluorobenzene (8.701)
-Toluene-D8 (10.317)
Chlorobenzene-D5 (12.190)
-P-Bromofluorobenzene (13.834)
1,4-Dichlorobenzene-D4 (15.513)
-1,2-Dichloroethylene (tot (16.080)

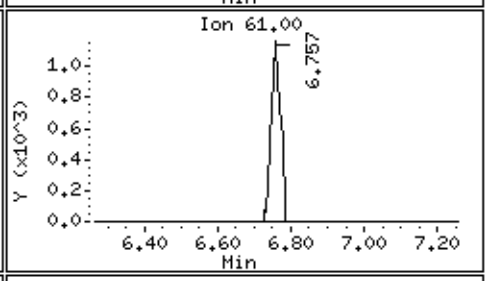
Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2189.D
Date : 08-APR-2015 18:54
Client ID: MW-03-GW-040115 Instrument: gcms-c.i
Sample Info: SI2069-2

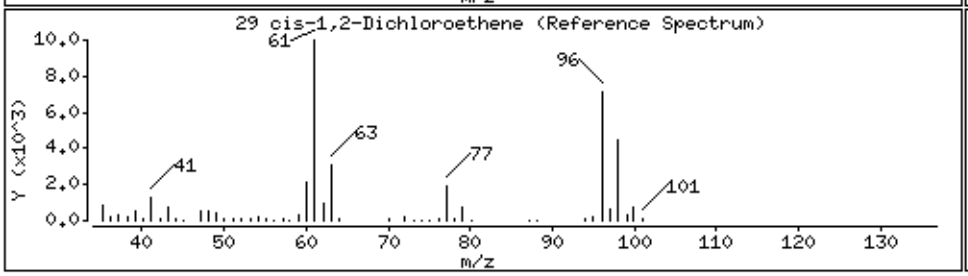
29 cis-1,2-Dichloroethene Concentration: 0.22 ug/l

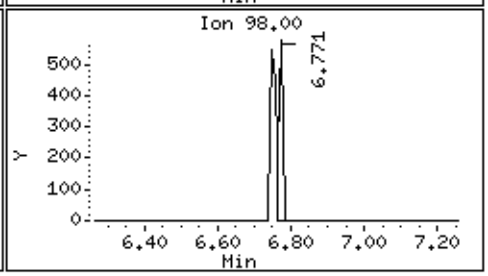




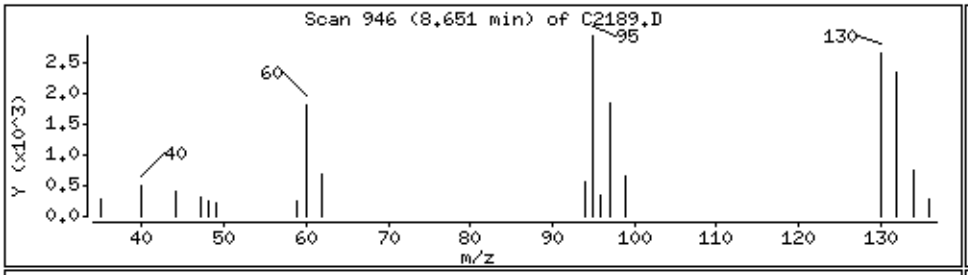


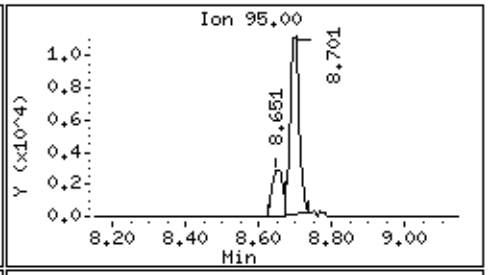


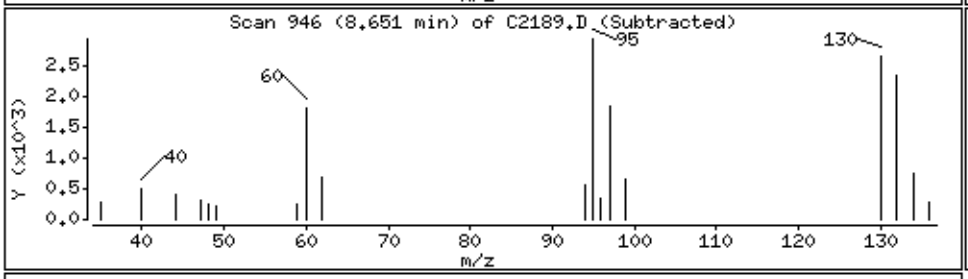


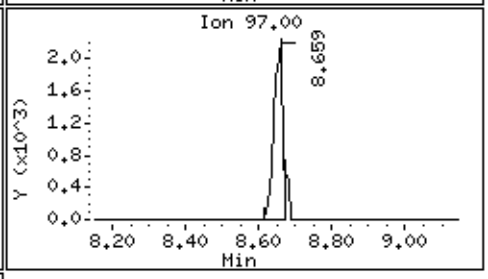


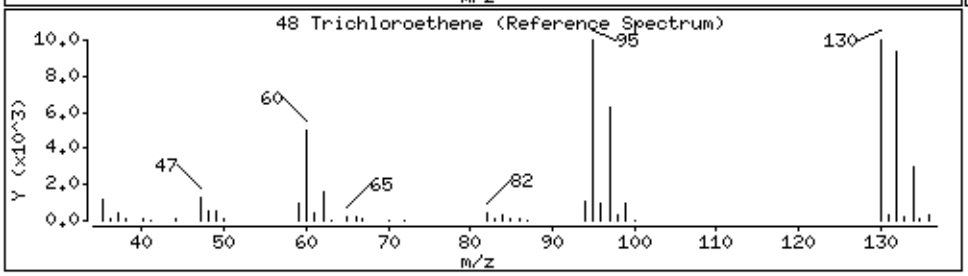
48 Trichloroethene Concentration: 1.3 ug/l











Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-3
Client ID: MW-10-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: C2190.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene		4.1	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	J	0.70	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-3
Client ID: MW-10-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: C2190.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		91.1	%					
Toluene-d8		104.	%					
1,2-Dichloroethane-d4		105.	%					
Dibromofluoromethane		95.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2190.D
Report Date: 09-Apr-2015 08:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2190.D
Lab Smp Id: SI2069-3 Client Smp ID: MW-10-GW-040115
Inj Date : 08-APR-2015 19:28 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2069-3
Misc Info : WG160924,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

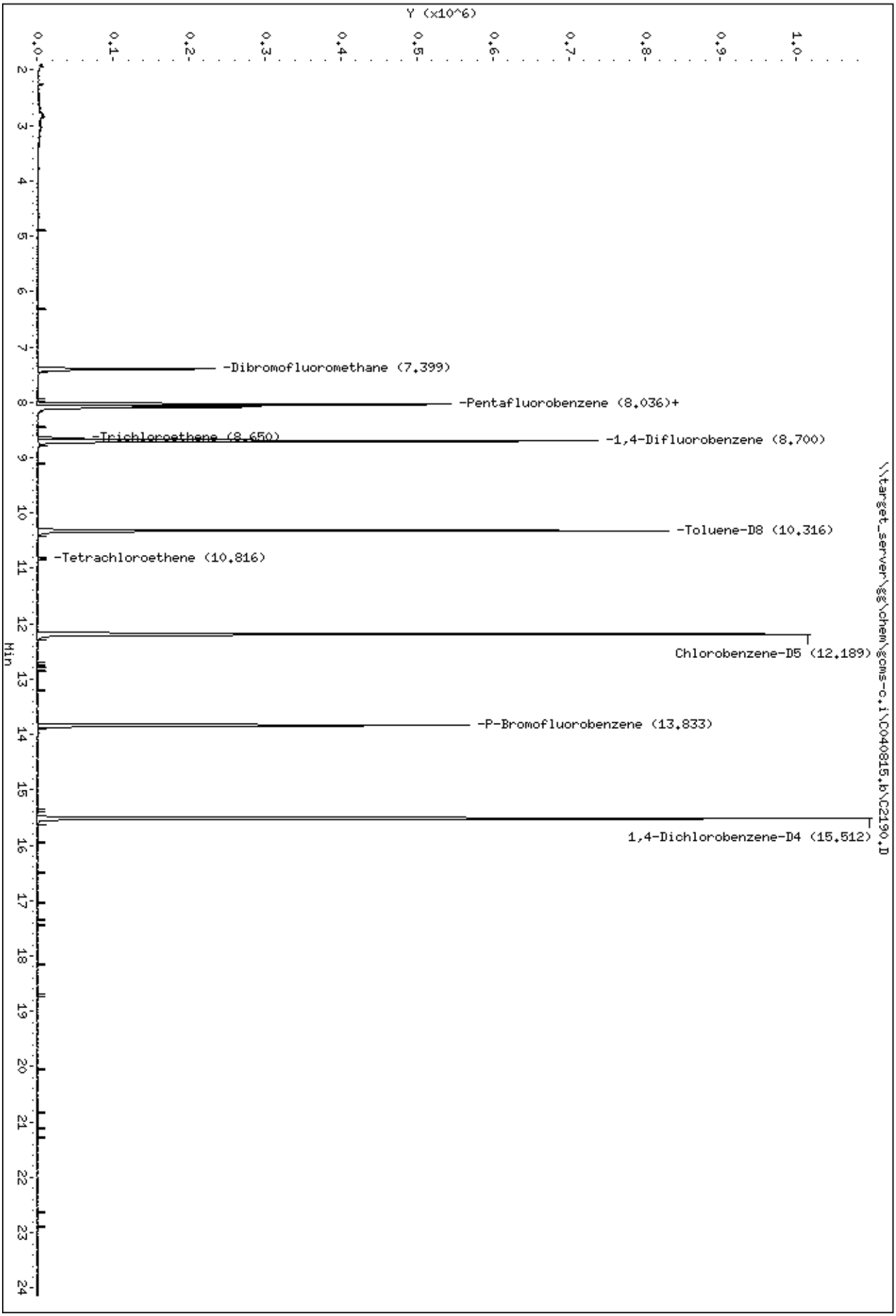
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.399	7.405	(0.921)	142966	47.5387	47.5	
* 42 Pentafluorobenzene	168	8.035	8.041	(1.000)	299780	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.085	8.090	(1.006)	211252	52.5019	52.5	
48 Trichloroethene	95	8.650	8.648	(0.994)	18114	4.12317	4.1	
* 49 1,4-Difluorobenzene	114	8.700	8.698	(1.000)	512312	50.0000		
$ 55 Toluene-D8	98	10.315	10.321	(1.186)	490172	52.1740	52.2	
59 Tetrachloroethene	164	10.823	10.821	(0.888)	2275	0.70244	0.70(a)	
* 66 Chlorobenzene-D5	117	12.188	12.187	(1.000)	507342	50.0000		
$ 76 P-Bromofluorobenzene	95	13.832	13.838	(1.590)	225176	45.5510	45.6	
* 91 1,4-Dichlorobenzene-D4	152	15.519	15.518	(1.000)	296548	50.0000		

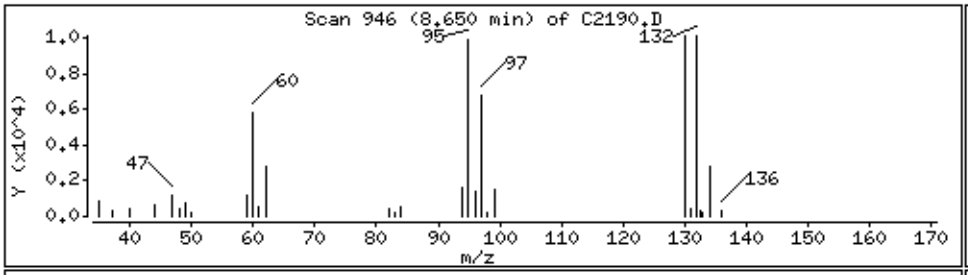
QC Flag Legend

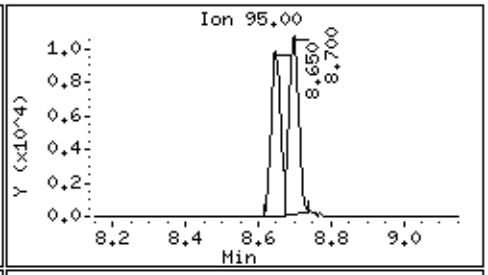
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

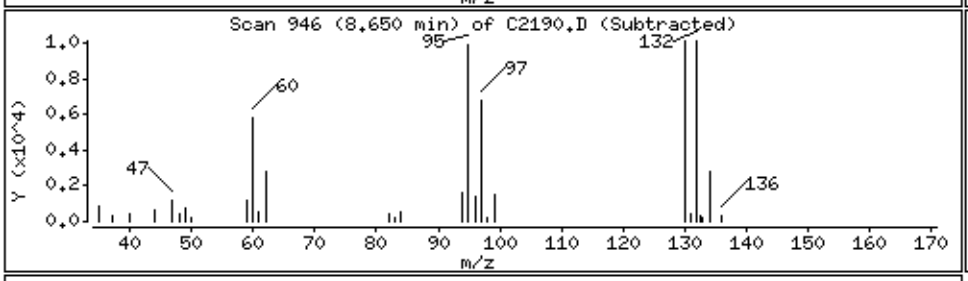

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2190.D
Date : 08-APR-2015 19:28
Client ID: MW-10-GW-040115
Sample Info: S12069-3
Instrument: gcms-c.i
Y (x10^6)
Min
-Dibromofluoromethane (7.399)
-Pentafluorobenzene (8.036)+
-Trichloroethene (8.650)
-1,4-Difluorobenzene (8.700)
-Toluene-D8 (10.316)
-Tetrachloroethene (10.816)
Chlorobenzene-D5 (12.189)
-P-Bromofluorobenzene (13.833)
1,4-Dichlorobenzene-D4 (15.512)
\\target_server\gg\chem\gcms-c.i\C040815.b\C2190.D

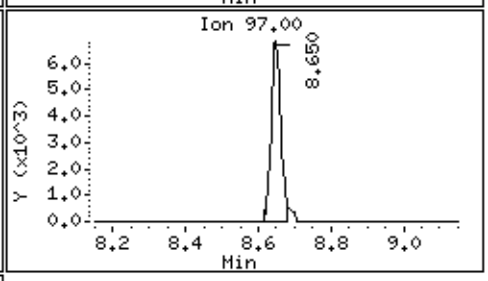
Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2190.D
Date : 08-APR-2015 19:28
Client ID: MW-10-GW-040115 Instrument: gcms-c.i
Sample Info: SI2069-3

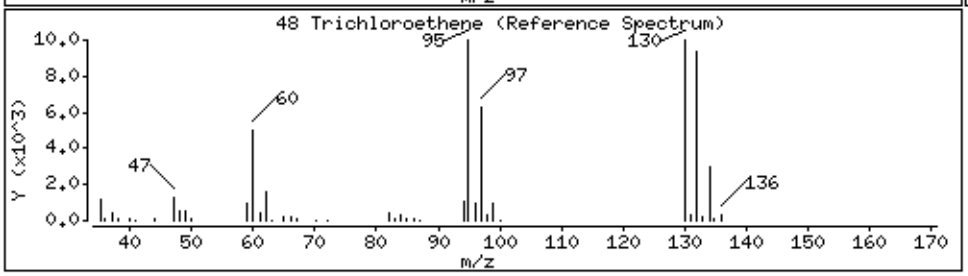
48 Trichloroethene Concentration: 4.1 ug/l



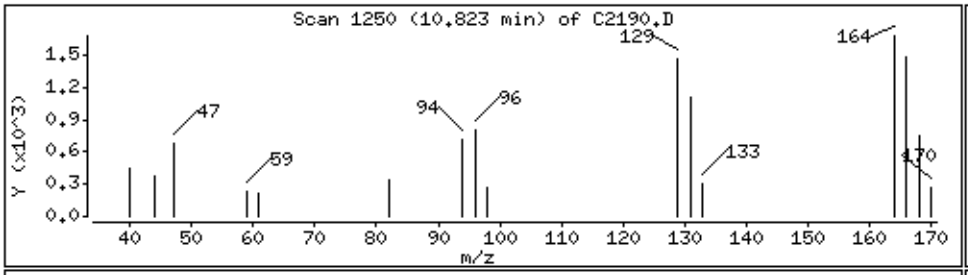


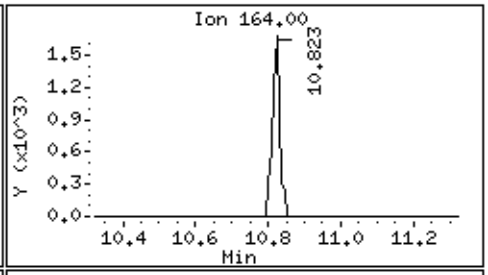


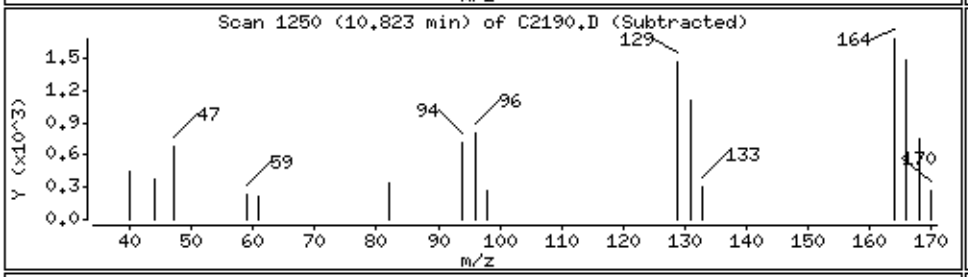


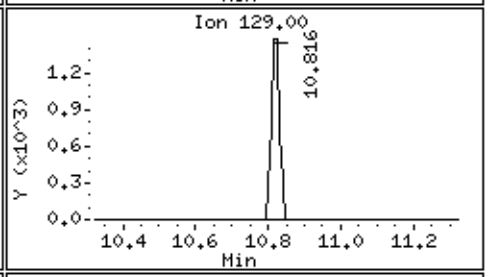


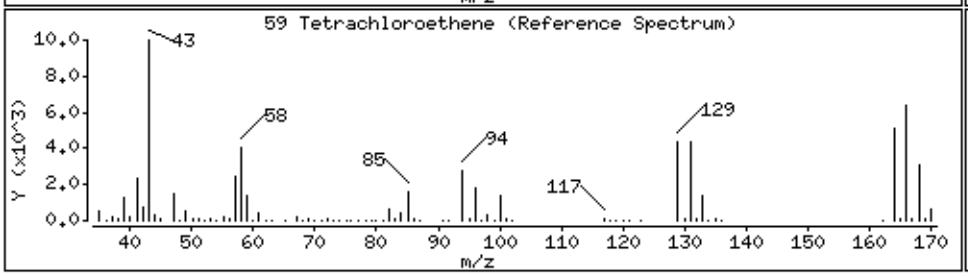
59 Tetrachloroethene Concentration: 0.70 ug/l

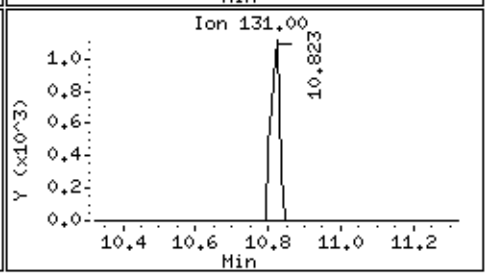












Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-4
Client ID: MW-04-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: C2191.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	J	3.0	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-4
Client ID: MW-04-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: C2191.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		95.2	%					
Toluene-d8		109.	%					
1,2-Dichloroethane-d4		106.	%					
Dibromofluoromethane		99.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2191.D
Report Date: 09-Apr-2015 08:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2191.D
Lab Smp Id: SI2069-4 Client Smp ID: MW-04-GW-040115
Inj Date : 08-APR-2015 20:02 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2069-4
Misc Info : WG160924,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

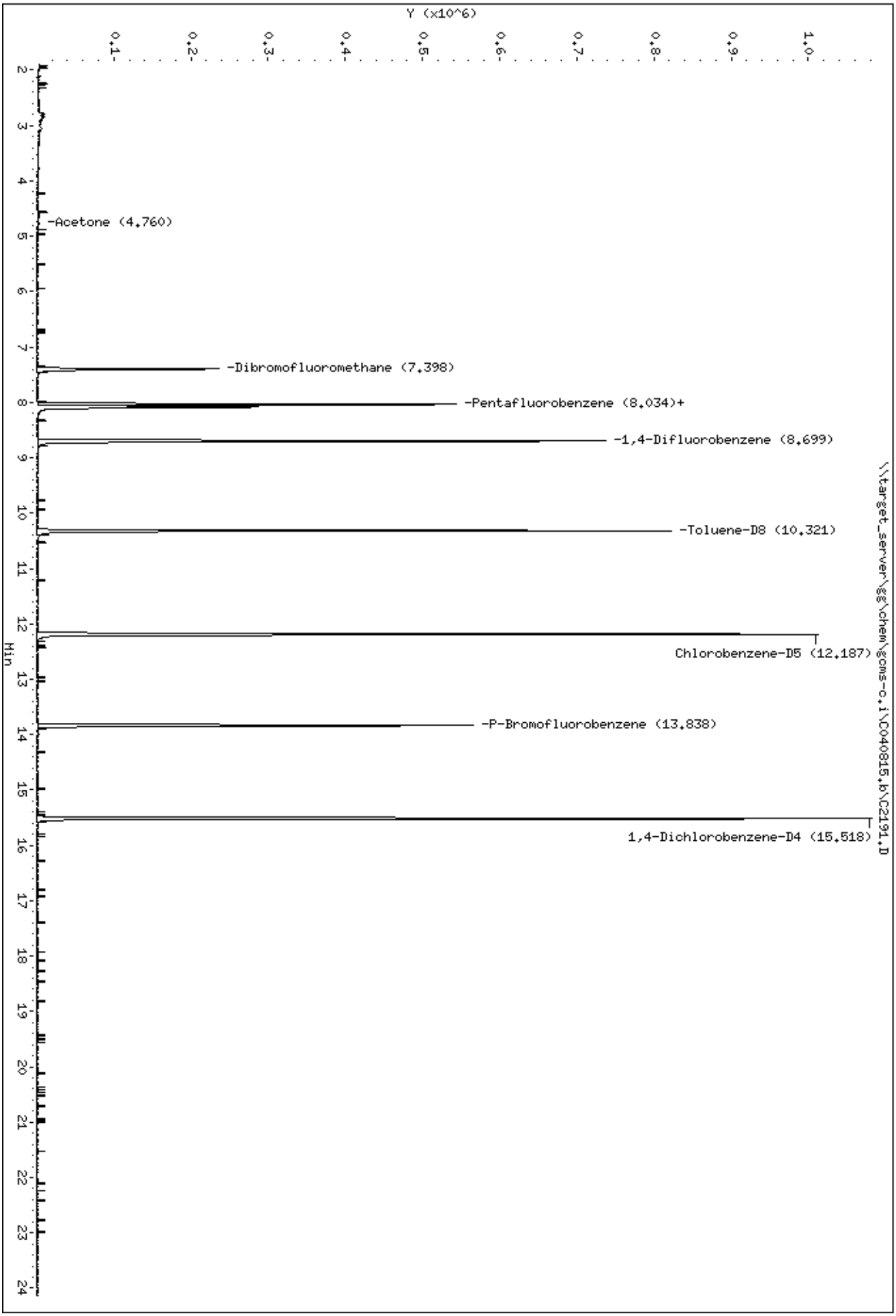
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
15 Acetone	43	4.760	4.753	(0.593)	3752	2.99344	3.0(a)	
$ 37 Dibromofluoromethane	113	7.397	7.405	(0.921)	147025	49.6047	49.6	
* 42 Pentafluorobenzene	168	8.034	8.041	(1.000)	295451	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.084	8.090	(1.006)	211259	53.2730	53.3	
* 49 1,4-Difluorobenzene	114	8.698	8.698	(1.000)	494184	50.0000		
$ 55 Toluene-D8	98	10.321	10.321	(1.187)	495240	54.6471	54.6	
* 66 Chlorobenzene-D5	117	12.187	12.187	(1.000)	491686	50.0000		
$ 76 P-Bromofluorobenzene	95	13.838	13.838	(1.591)	227026	47.6098	47.6	
* 91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	280390	50.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2191.D
Date : 08-APR-2015 20:02
Client ID: MW-04-GW-040115
Sample Info: SI2069-4
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C040815.b\C2191.D
Y (x10^6)
Min
-Acetone (4.760)
-Dibromofluoromethane (7.398)
-Pentafluorobenzene (8.034)+
-1,4-Difluorobenzene (8.699)
-Toluene-D8 (10.321)
Chlorobenzene-D5 (12.187)
-P-Bromofluorobenzene (13.838)
1,4-Dichlorobenzene-D4 (15.518)

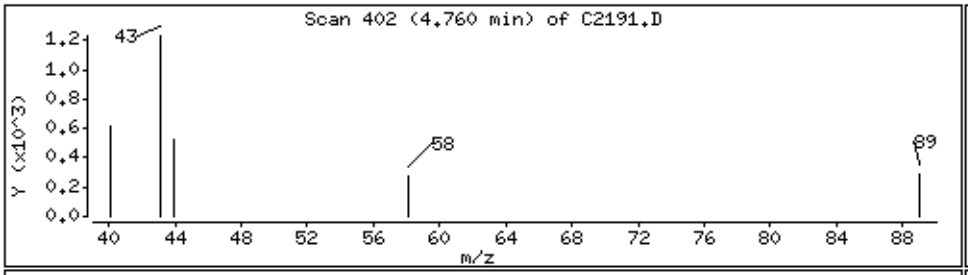
Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2191.D

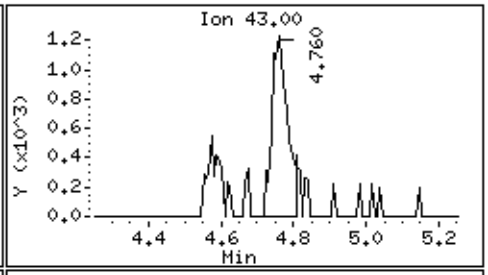
Date : 08-APR-2015 20:02

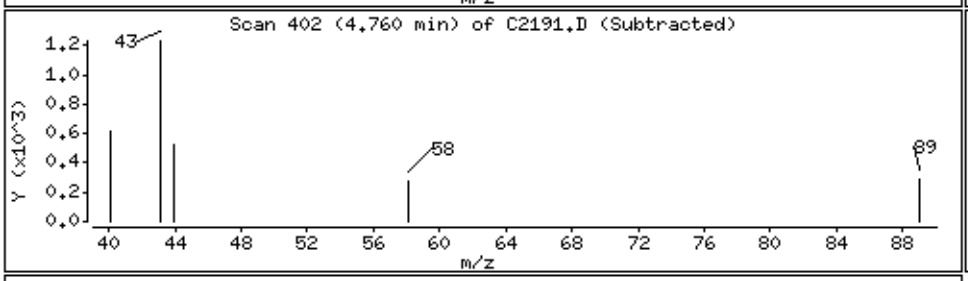
Client ID: MW-04-GW-040115 Instrument: gcms-c.i

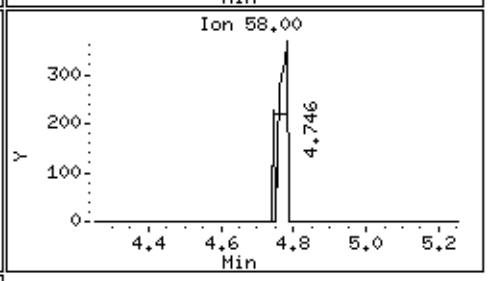
Sample Info: SI2069-4

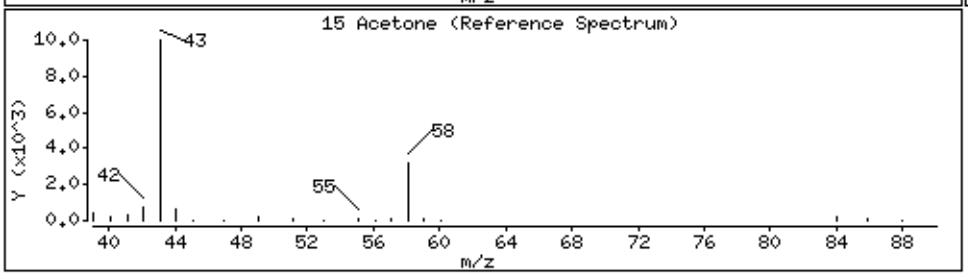
15 Acetone Concentration: 3.0 ug/l











Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-5
Client ID: MW-01-GW-040215
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: C2192.D

Sample Date: 02-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	J	4.3	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-5
Client ID: MW-01-GW-040215
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: C2192.D

Sample Date: 02-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		94.5	%					
Toluene-d8		106.	%					
1,2-Dichloroethane-d4		109.	%					
Dibromofluoromethane		98.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2192.D
Report Date: 09-Apr-2015 08:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2192.D
Lab Smp Id: SI2069-5 Client Smp ID: MW-01-GW-040215
Inj Date : 08-APR-2015 20:36 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : SI2069-5
Misc Info : WG160924,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

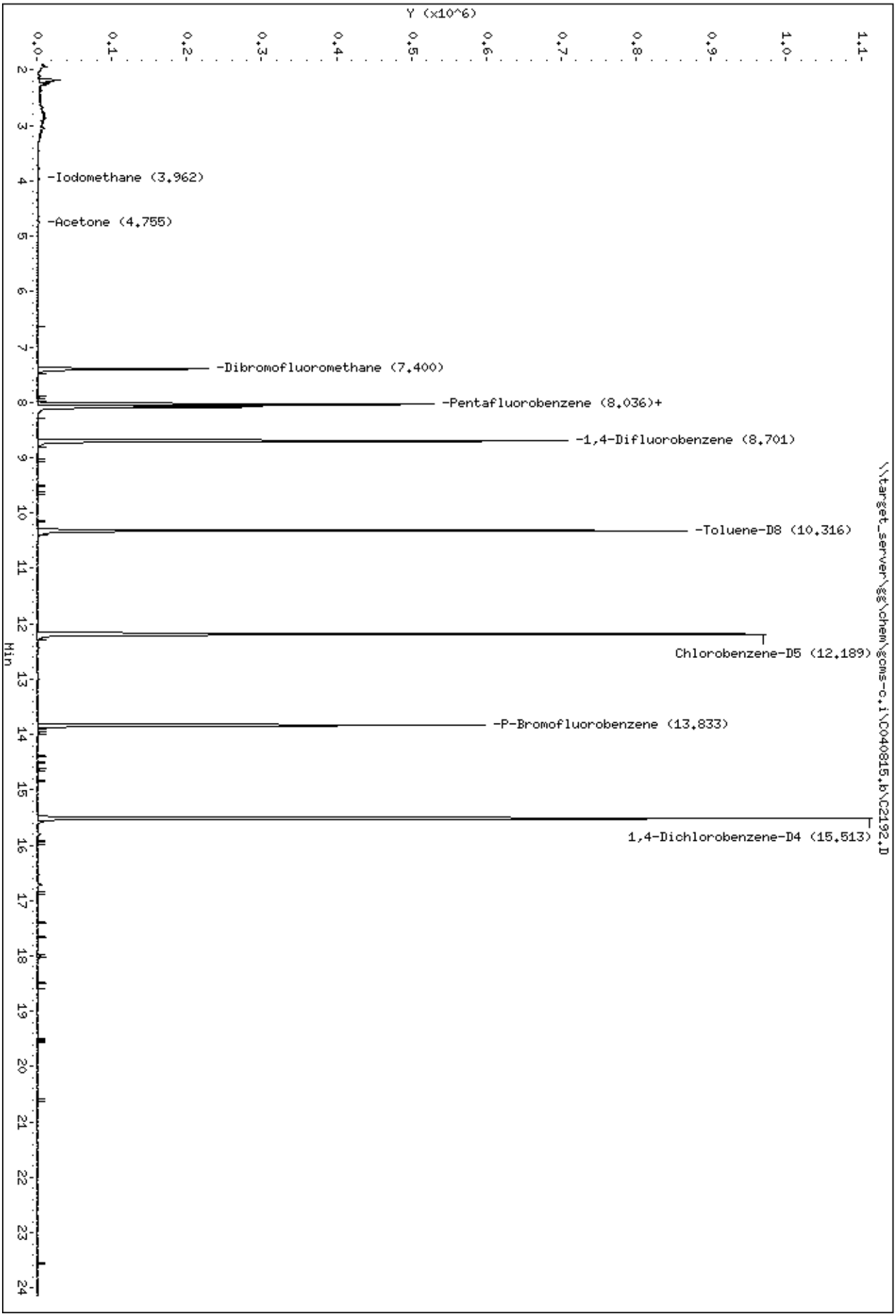
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
12 Iodomethane	142	3.961	3.952	(0.493)	2649	0.67921	0.68(a)	
15 Acetone	43	4.755	4.753	(0.592)	5333	4.29761	4.3(aM)	M9
$ 37 Dibromofluoromethane	113	7.399	7.405	(0.921)	143935	49.0508	49.0	
* 42 Pentafluorobenzene	168	8.036	8.041	(1.000)	292508	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.086	8.090	(1.006)	214411	54.6118	54.6	
* 49 1,4-Difluorobenzene	114	8.700	8.698	(1.000)	496104	50.0000		
$ 55 Toluene-D8	98	10.316	10.321	(1.186)	482607	53.0471	53.0	
* 66 Chlorobenzene-D5	117	12.189	12.187	(1.000)	497775	50.0000		
$ 76 P-Bromofluorobenzene	95	13.833	13.838	(1.590)	226175	47.2478	47.2	
* 91 1,4-Dichlorobenzene-D4	152	15.512	15.518	(1.000)	295812	50.0000		

WAS

11:37 am, Apr 15, 2015

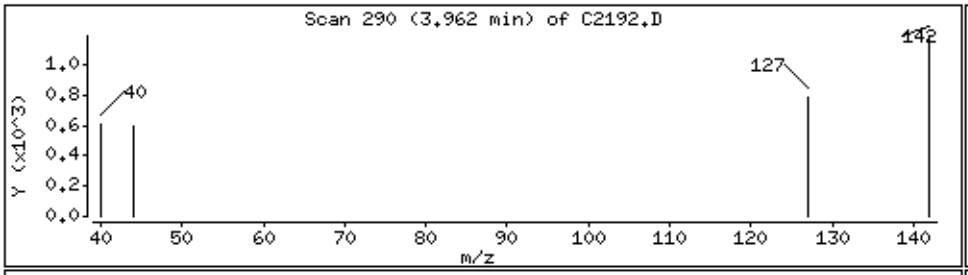
QC Flag Legend

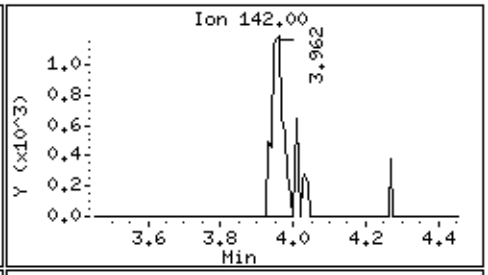
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

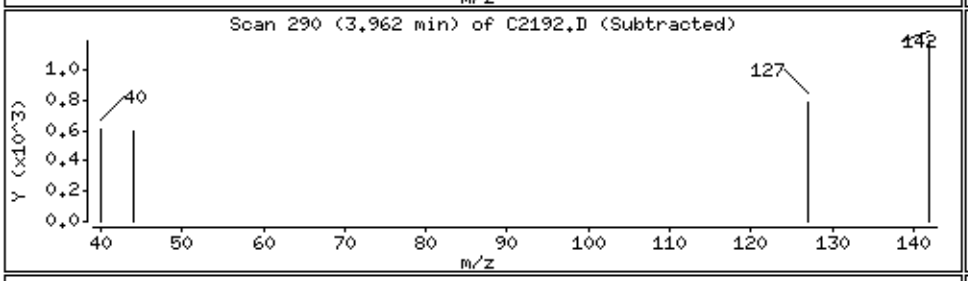

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2192.D
Date : 08-APR-2015 20:36
Client ID: MW-01-GW-040215
Sample Info: SI2069-5
Instrument: gcms-c.i
\\target_server\gg\chem\gcms-c.i\C040815.b\C2192.D
Y (x10^6)
Min
-Iodomethane (3.962)
-Acetone (4.755)
-Dibromofluoromethane (7.400)
-Pentafluorobenzene (8.036)+
-1,4-Difluorobenzene (8.701)
-Toluene-D8 (10.316)
Chlorobenzene-D5 (12.189)
-P-Bromofluorobenzene (13.833)
1,4-Dichlorobenzene-D4 (15.513)

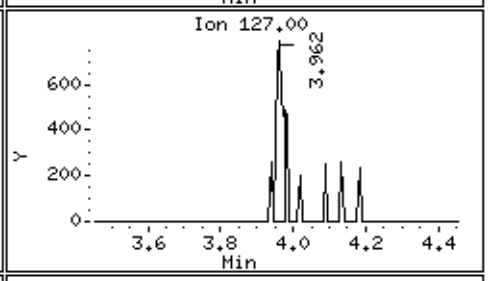
Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2192.D
Date : 08-APR-2015 20:36
Client ID: MW-01-GW-040215 Instrument: gcms-c.i
Sample Info: SI2069-5

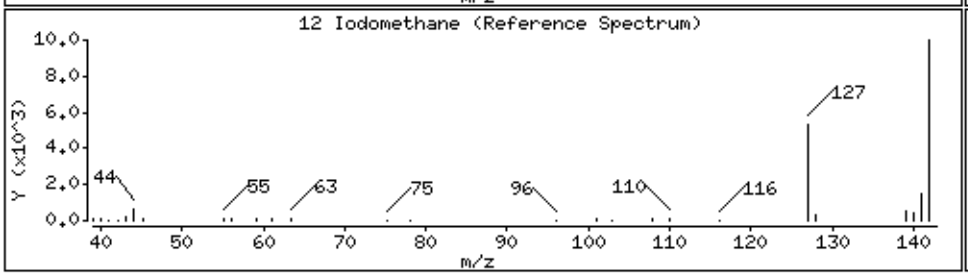
12 Iodomethane Concentration: 0.68 ug/l

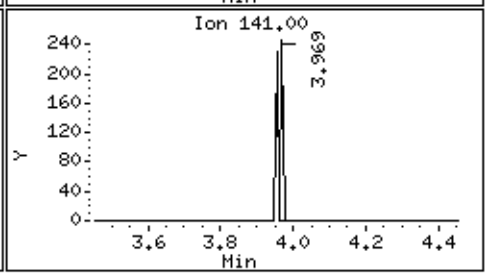




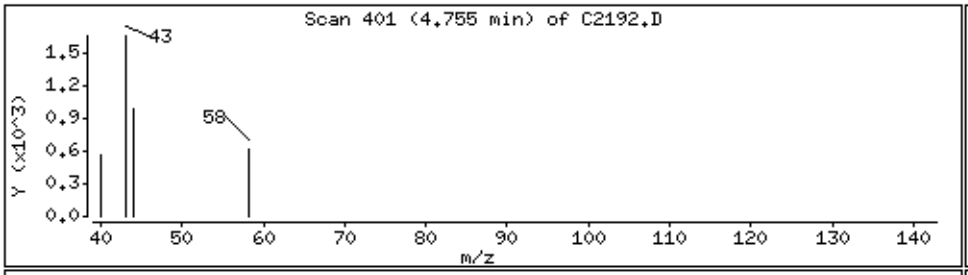


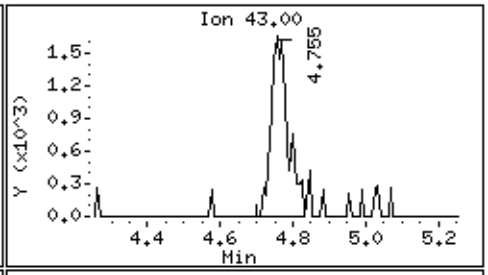


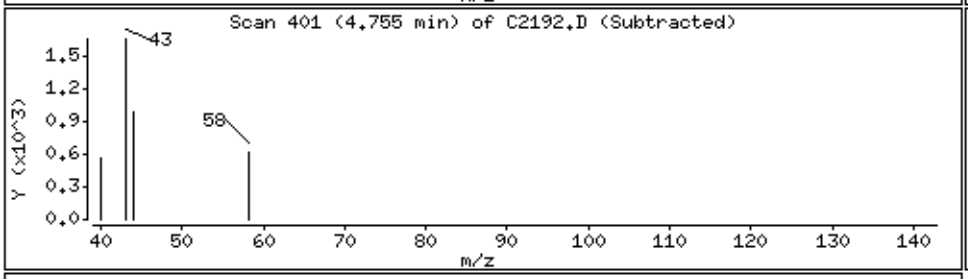


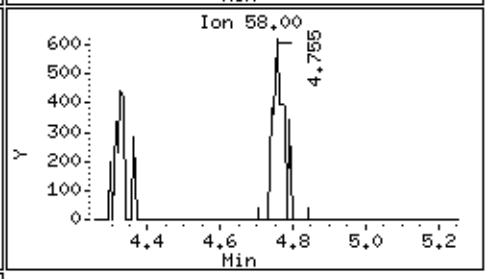


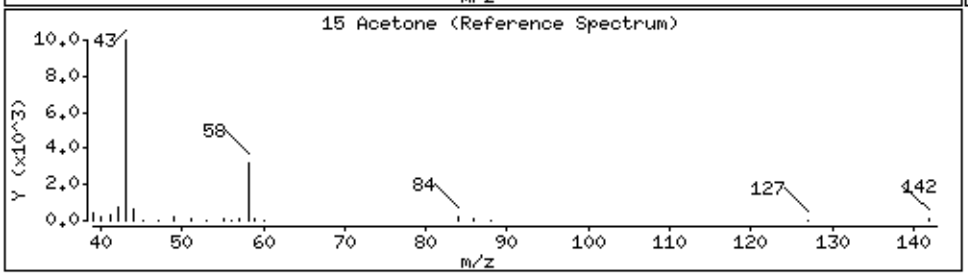
15 Acetone Concentration: 4.3 ug/l







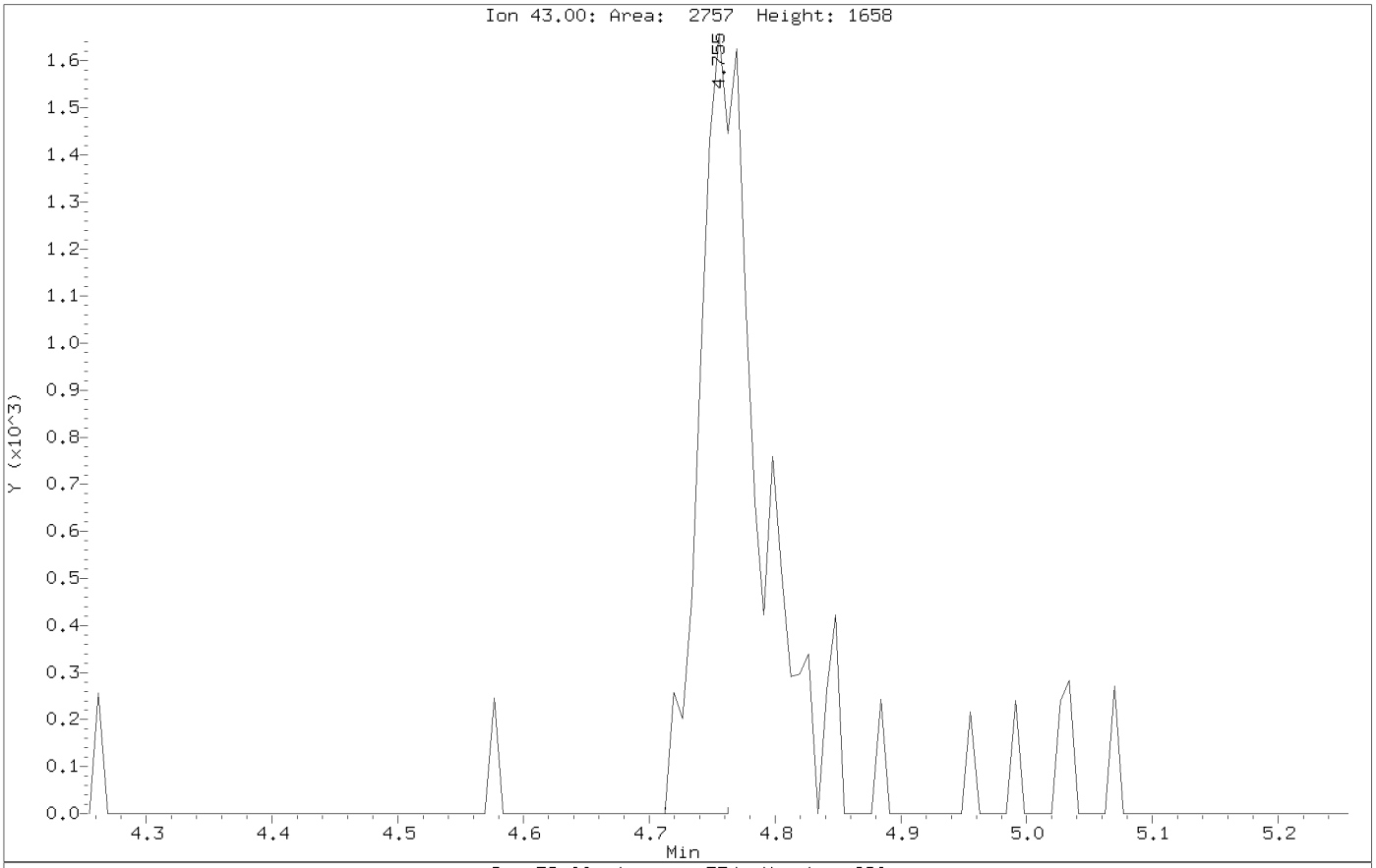


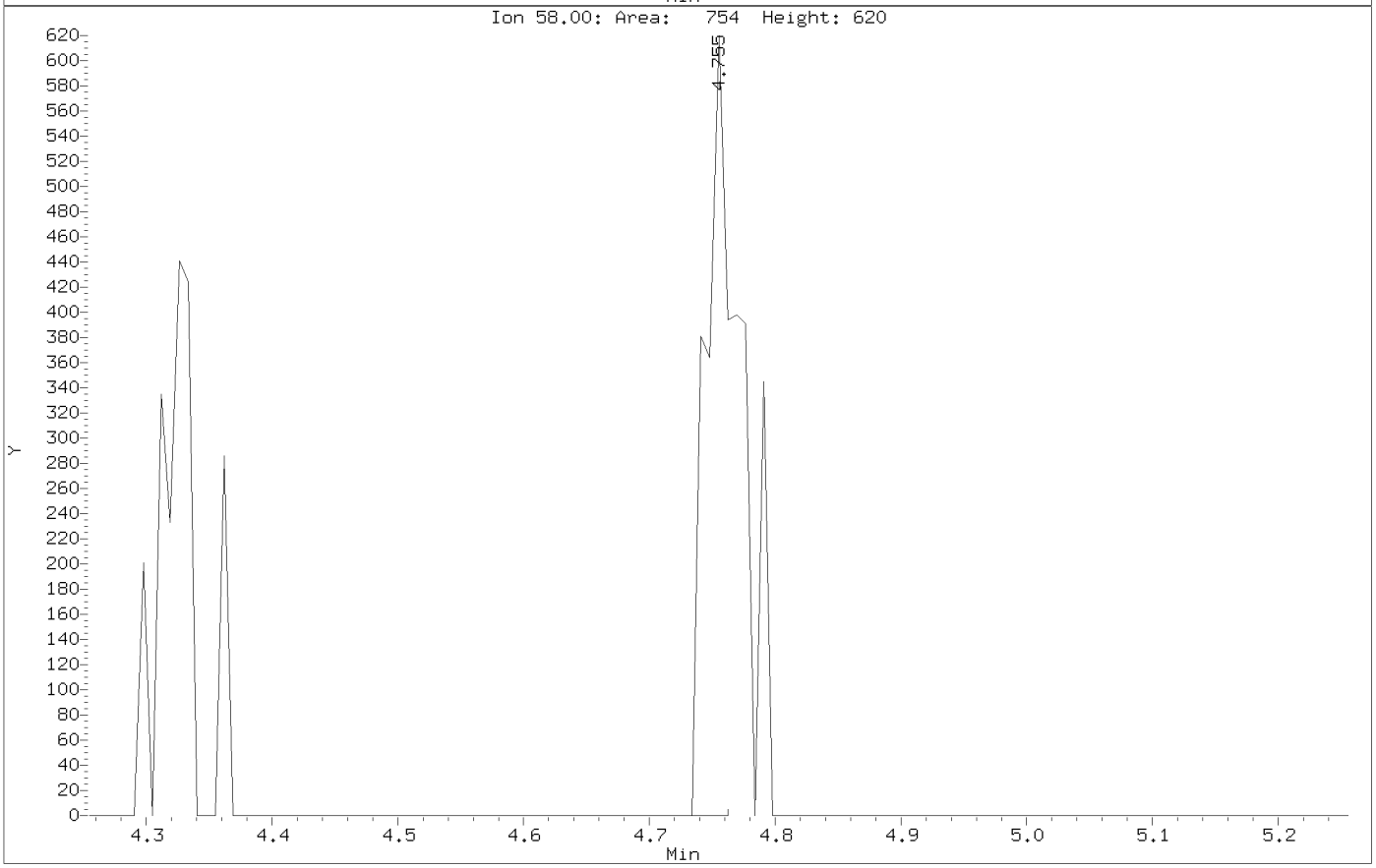


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2192.D
Injection Date: 08-APR-2015 20:36
Instrument: gcms-c.i
Client Sample ID: MW-01-GW-040215

Compound: Acetone
CAS Number: 67-64-1

BEFORE MANUAL INTEGRATION

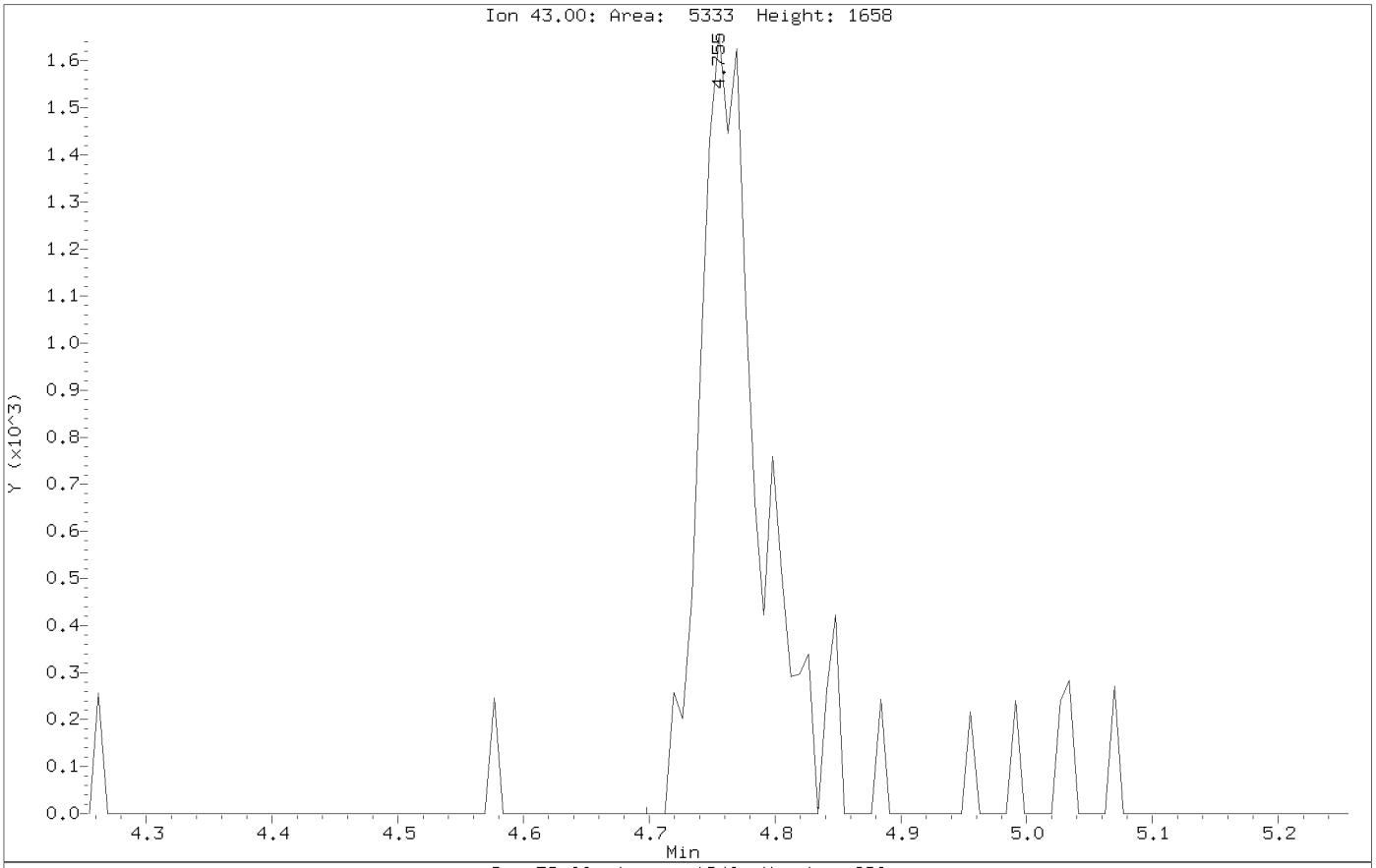


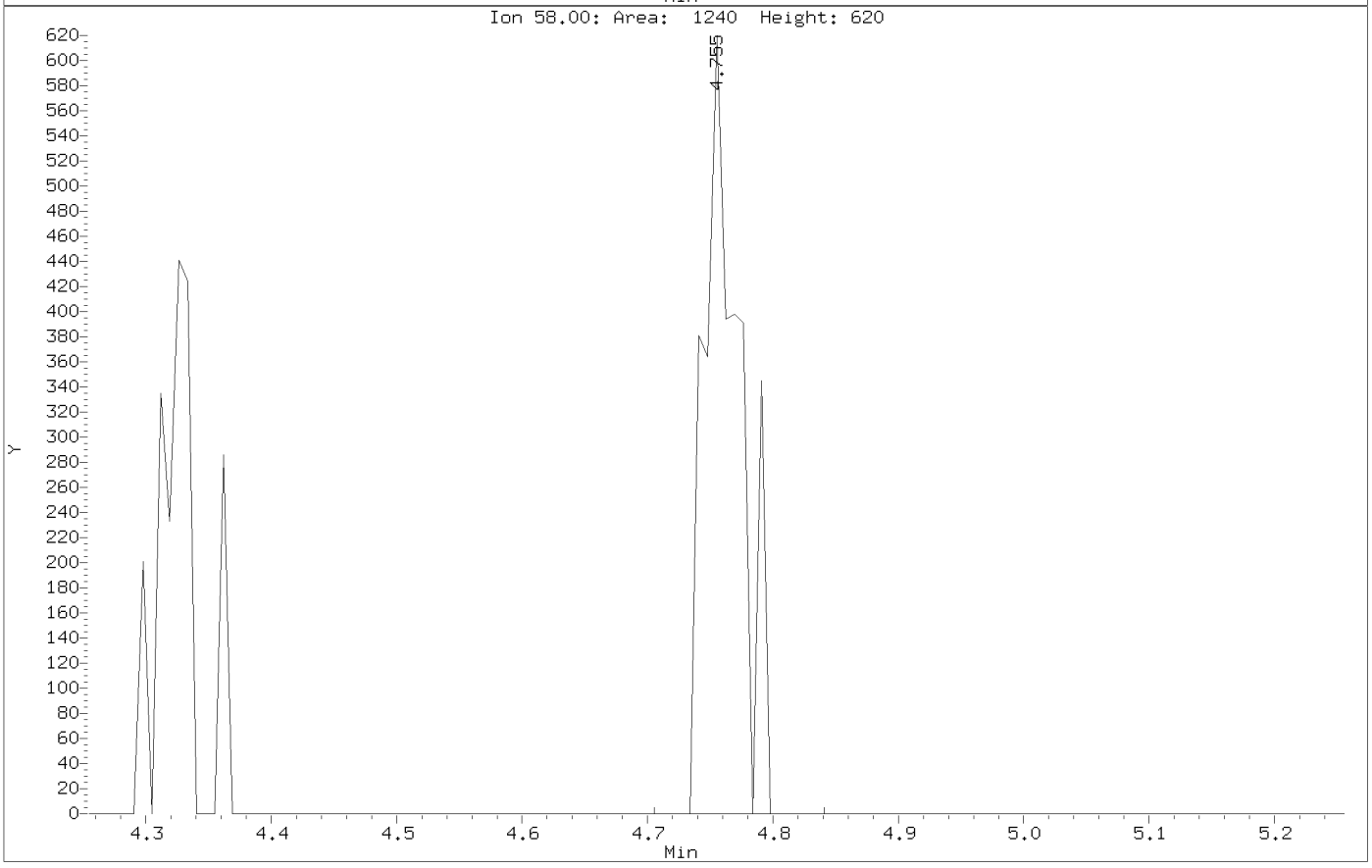


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2192.D
Injection Date: 08-APR-2015 20:36
Instrument: gcms-c.i
Client Sample ID: MW-01-GW-040215

Compound: Acetone
CAS Number: 67-64-1

AFTER MANUAL INTEGRATION





Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2069
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-C
Lab File IDs : C2179.D C2178.D C2177.D C2176.D C2181.D C2180.D **Column ID:**
Calibration Date(s): 08-APR-15 10:49 08-APR-15 14:06

	1.0000 Level 1	5.0000 Level 2	20.0000 Level 3	50.0000 Level 4	100.0000 Level 5	200.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.86317	0.82652	0.94738	0.93791	0.83515	0.80190	AVG		0.86867		6.97915	15.00000	O
Chloromethane	1.33140	1.15942	1.17421	1.11741	1.08850	0.96054	AVG		1.13858		10.65134	15.00000	O
Vinyl chloride	0.84093	0.82119	0.87955	0.86146	0.84622	0.77674	AVG		0.83768		4.26662	15.00000	O
Bromomethane	3783	13213	62272	136805	308622	573047	LNR	-0.01342	0.41450		0.99971	0.99000	O
Chloroethane	3385	14541	60427	123597	227436	432041	LNR	-0.07414	0.30879		0.99680	0.99000	O
Trichlorofluoromethane	1.17448	1.02049	1.09404	0.95250	0.87210	0.95362	AVG		1.01121		10.80769	15.00000	O
1,1-Dichloroethene	0.62310	0.59314	0.59174	0.57706	0.57084	0.57558	AVG		0.58858		3.25867	15.00000	O
Carbon Disulfide	1.74497	1.51845	1.66160	1.66953	1.75285	1.69188	AVG		1.67321		5.06712	15.00000	O
Freon-113	0.38132	0.39036	0.43939	0.42974	0.39254	0.39224	AVG		0.40426		5.94154	15.00000	O
Methylene Chloride	6842	25325	97577	231705	501477	942019	LNR	-0.01671	0.67974		0.99993	0.99000	O
Acetone	0.21228	0.18956	0.21998	0.21816	0.22000	0.21271	AVG		0.21212		5.45540	15.00000	O
trans-1,2-Dichloroethene	0.69608	0.65843	0.67542	0.65624	0.66014	0.64015	AVG		0.66441		2.88194	15.00000	O
Methyl tert-butyl ether	1.26688	1.43009	1.58982	1.57504	1.54279	1.43558	AVG		1.47337		8.29364	15.00000	O
1,1-Dichloroethane	1.11717	1.36725	1.36563	1.33391	1.29608	1.25403	AVG		1.28901		7.34433	15.00000	O
cis-1,2-Dichloroethene	0.69890	0.66384	0.71461	0.68378	0.68162	0.67058	AVG		0.68555		2.71821	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+0	15.00000	M
Chloroform	1.38104	1.31233	1.38758	1.37496	1.30824	1.27018	AVG		1.33905		3.63009	15.00000	O
Carbon Tetrachloride	0.38173	0.40886	0.48817	0.53053	0.51181	0.52190	AVG		0.47383		13.30657	15.00000	O
1,1,1-Trichloroethane	1.26813	1.25429	1.31983	1.32217	1.22089	1.20949	AVG		1.26580		3.77589	15.00000	O
2-Butanone	5848	40972	208136	516280	1060379	1932105	LNR	-0.13270	0.28091		0.99883	0.99000	O
Benzene	1.39179	1.43895	1.51253	1.43143	1.39822	1.28065	AVG		1.40893		5.40576	15.00000	O
Cyclohexane	0.92753	1.06433	1.15957	1.16386	1.13333	1.11563	AVG		1.09404		8.15369	15.00000	O
1,2-Dichloroethane	0.75942	0.70186	0.68939	0.66393	0.60510	0.59800	AVG		0.66962		9.16169	15.00000	O
Trichloroethene	0.47221	0.43134	0.44409	0.42869	0.40364	0.39261	AVG		0.42876		6.65171	15.00000	O
1,2-Dichloropropane	0.37721	0.35635	0.37225	0.38046	0.37479	0.35669	AVG		0.36962		2.84274	15.00000	O
Bromodichloromethane	0.44805	0.53238	0.60051	0.60100	0.58892	0.56693	AVG		0.55630		10.61076	15.00000	O
cis-1,3-dichloropropene	0.43977	0.54994	0.64475	0.64614	0.66021	0.63661	AVG		0.59624		14.46491	15.00000	O
Toluene	0.88050	0.91675	0.98578	0.91516	0.91697	0.86002	AVG		0.91253		4.69868	15.00000	O
4-methyl-2-pentanone	0.26679	0.33392	0.36782	0.36397	0.30986	0.27261	AVG		0.31916		13.72179	15.00000	O
Tetrachloroethene	0.36055	0.32467	0.31582	0.31095	0.30564	0.29746	AVG		0.31918		6.97155	15.00000	O
trans-1,3-Dichloropropene	0.45238	0.52370	0.59768	0.59329	0.59757	0.58996	AVG		0.55910		10.65135	15.00000	O
1,1,2-Trichloroethane	0.27576	0.27745	0.29411	0.28525	0.27904	0.27070	AVG		0.28039		2.93101	15.00000	O
Dibromochloromethane	2879	17948	89976	228616	506126	973085	LNR	0.01712	0.43635		0.99993	0.99000	O
1,2-Dibromoethane	0.35151	+++++	0.37296	0.36804	0.37178	0.35976	AVG		0.36481		2.48190	15.00000	O
2-Hexanone	8213	57705	290451	755640	1486411	2625955	LNR	-0.20795	0.23762		0.99708	0.99000	O
Chlorobenzene	1.07682	1.03659	1.03833	1.02458	1.00438	0.95684	AVG		1.02292		3.92071	15.00000	O
Ethylbenzene	0.52839	0.58627	0.60337	0.59021	0.58875	0.58377	AVG		0.58013		4.52375	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2069
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-C
Lab File IDs : C2179.D C2178.D C2177.D C2176.D C2181.D C2180.D **Column ID:**
Calibration Date(s): 08-APR-15 10:49 08-APR-15 14:06

Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.63432	0.67308	0.72101	0.70060	0.68534	0.64483	AVG		0.67653		4.87325	15.00000	O
o-Xylene	0.49189	0.56456	0.65743	0.66264	0.68111	0.64956	AVG		0.61786		11.9564(	15.00000	O
Styrene	0.85194	1.05716	1.20593	1.20082	1.19289	1.11709	AVG		1.10431		12.38737	15.00000	O
Bromoform	1632	11421	53507	145917	321759	623540	LNR	0.02468	0.27977		0.99983	0.99000	O
Isopropylbenzene	2.54997	3.02509	3.28770	3.16480	2.92303	2.68173	AVG		2.93872		9.59790	15.00000	O
1,1,2,2-Tetrachloroethane	0.79011	0.84554	0.85630	0.84651	0.81472	0.78552	AVG		0.82312		3.73474	15.00000	O
1,3-Dichlorobenzene	1.36820	1.30481	1.36311	1.28787	1.24328	1.20560	AVG		1.29548		4.97983	15.00000	O
1,4-Dichlorobenzene	1.47239	1.49573	1.46301	1.40455	1.33263	1.28189	AVG		1.40837		6.06346	15.00000	O
1,2-Dichlorobenzene	1.12294	1.21977	1.24264	1.18868	1.14179	1.11797	AVG		1.17230		4.47945	15.00000	O
1,2-Dibromo-3-Chloropropane	328	3846	19707	53673	124589	239826	LNR	0.03120	0.17318		0.99975	0.99000	O
1,2,4-Trichlorobenzene	1106	16031	95415	230917	539676	971578	LNR	0.00014	0.70576		0.99942	0.99000	O
Methyl Acetate	0.44380	0.43897	0.51274	0.52869	0.54072	0.55354	AVG		0.50308		9.87343	15.00000	O
Methylcyclohexane	0.87444	0.98062	1.17777	1.17383	1.12626	1.10608	AVG		1.07317		11.26176	15.00000	O
Dibromofluoromethane	0.41686	0.50760	0.52463	0.56756	0.50545	0.48747	AVG		0.50159		9.89255	15.00000	
1,2-Dichloroethane-D4	0.59711	0.68801	0.69404	0.80886	0.62466	0.61398	AVG		0.67111		11.67268	15.00000	
Toluene-D8	0.74566	0.90246	0.95361	1.11844	0.92551	0.85583	AVG		0.91692		13.38419	15.00000	
P-Bromofluorobenzene	0.37326	0.48094	0.52223	0.53048	0.50896	0.47889	AVG		0.48246		11.91736	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG160924-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Misc Info: WG160924,WG160924-4

Client SDG: WG160924
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	51.3	102.62	80-120
	2 Chloromethane	50.0	47.9	95.76	80-120
	3 Vinyl chloride	50.0	48.1	96.29	80-120
	4 Bromomethane	50.0	50.5	101.05	80-120
	5 Chloroethane	50.0	46.0	92.00	80-120
	6 Trichlorofluoromet	50.0	43.7	87.45	80-120
	7 Diethyl Ether	50.0	47.5	94.99	80-120
	8 Tertiary-butyl alc	250	284	113.71	80-120
	9 1,1-Dichloroethene	50.0	50.9	101.78	80-120
	10 Carbon Disulfide	50.0	52.8	105.55	80-120
	11 Freon-113	50.0	52.4	104.70	80-120
	12 Iodomethane	50.0	51.5	103.04	80-120
	13 Acrolein	250	274	109.64	80-120
	14 Methylene Chloride	50.0	49.3	98.66	80-120
	15 Acetone	50.0	64.6	129.17*	80-120
	16 Isobutyl Alcohol	1000	147	14.69*	80-120
	17 trans-1,2-Dichloro	50.0	48.4	96.86	80-120
	18 Allyl Chloride	50.0	53.0	105.93	80-120
	19 Methyl tert-butyl	100	112	112.40	80-120
	20 Acetonitrile	500	480	95.98	80-120
	21 Di-isopropyl ether	50.0	54.5	109.10	80-120
	22 Chloroprene	50.0	53.0	106.04	80-120
	23 Propionitrile	500	518	103.55	80-120
	24 Methacrylonitrile	500	499	99.83	80-120
	25 1,1-Dichloroethane	50.0	51.6	103.16	80-120
	26 Acrylonitrile	250	268	107.11	80-120
	27 Ethyl tertiary-but	50.0	55.0	110.04	80-120
	28 Vinyl Acetate	50.0	56.3	112.65	80-120
	29 cis-1,2-Dichloroet	50.0	49.0	98.11	80-120
M	30 1,2-Dichloroethyle	100	97.5	97.48	80-120
	31 Methyl Methacrylat	50.0	50.8	101.71	80-120
	32 2,2-Dichloropropan	50.0	50.0	100.07	80-120
	33 Bromochloromethane	50.0	52.1	104.19	80-120
	34 Chloroform	50.0	49.5	98.98	80-120
	35 Carbon Tetrachlori	50.0	52.7	105.38	80-120
	36 Tetrahydrofuran	50.0	54.5	108.97	80-120
	38 1,1,1-Trichloroeth	50.0	48.4	96.86	80-120
	39 1,1-Dichloropropen	50.0	53.1	106.18	80-120
	40 2-Butanone	50.0	53.9	107.80	80-120
	41 Benzene	50.0	51.4	102.90	80-120

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
43 Cyclohexane	50.0	50.6	101.29	80-120
44 Ethyl Methacrylate	50.0	56.2	112.44	80-120
46 Tertiary-amyl meth	50.0	54.5	109.07	80-120
47 1,2-Dichloroethane	50.0	47.4	94.77	80-120
48 Trichloroethene	50.0	49.2	98.32	80-120
50 Dibromomethane	50.0	48.8	97.55	80-120
51 1,2-Dichloropropan	50.0	53.1	106.29	80-120
52 Bromodichlorometha	50.0	54.8	109.62	80-120
53 cis-1,3-dichloropr	50.0	54.0	107.91	80-120
54 1,4-Dioxane	1000	1090	109.03	80-120
56 2-Chloroethylvinyl	50.0	77.3	154.61*	80-120
57 Toluene	50.0	50.8	101.56	80-120
58 4-methyl-2-pentano	50.0	60.9	121.87*	80-120
59 Tetrachloroethene	50.0	49.2	98.38	80-120
60 trans-1,3-Dichloro	50.0	54.7	109.47	80-120
61 1,1,2-Trichloroeth	50.0	50.7	101.34	80-120
62 Dibromochlorometha	50.0	49.6	99.16	80-120
63 1,3-Dichloropropan	50.0	52.0	104.02	80-120
64 1,2-Dibromoethane	50.0	52.4	104.72	80-120
65 2-Hexanone	50.0	54.8	109.57	80-120
67 Chlorobenzene	50.0	53.6	107.10	80-120
152 1-Chlorohexane	50.0	52.7	105.39	80-120
68 Ethylbenzene	50.0	50.5	101.01	80-120
69 1,1,1,2-Tetrachlor	50.0	53.4	106.78	80-120
M 70 Xylenes (total)	150	166	110.47	80-120
71 m+p-Xylenes	100	107	106.99	80-120
72 o-Xylene	50.0	58.7	117.42	80-120
73 Styrene	50.0	54.5	109.07	80-120
74 Bromoform	50.0	48.4	96.90	80-120
75 Isopropylbenzene	50.0	56.7	113.46	80-120
77 cis-1,4-Dichloro-2	50.0	48.9	97.89	80-120
78 trans-1,4-Dichloro	50.0	47.8	95.62	80-120
79 Bromobenzene	50.0	52.7	105.46	80-120
80 N-Propylbenzene	50.0	57.0	113.91	80-120
81 1,1,2,2-Tetrachlor	50.0	51.8	103.70	80-120
82 1,3,5-Trimethylben	50.0	50.6	101.10	80-120
83 2-Chlorotoluene	50.0	54.0	108.06	80-120
84 1,2,3-Trichloropro	50.0	50.4	100.75	80-120
85 4-Chlorotoluene	50.0	56.1	112.18	80-120
86 tert-Butylbenzene	50.0	56.4	112.91	80-120
87 Pentachloroethane	50.0	54.2	108.49	80-120
88 1,2,4-Trimethylben	50.0	52.6	105.25	80-120
89 P-Isopropyltoluene	50.0	56.3	112.58	80-120
90 1,3-Dichlorobenzen	50.0	54.1	108.19	80-120
92 1,4-Dichlorobenzen	50.0	49.5	99.06	80-120
93 N-Butylbenzene	50.0	54.1	108.22	80-120
94 sec-Butylbenzene	50.0	55.1	110.15	80-120
95 1,2-Dichlorobenzen	50.0	54.4	108.79	80-120
96 1,2-Dibromo-3-Chlo	50.0	49.2	98.51	80-120
97 1,3,5-Trichloroben	50.0	53.2	106.31	80-120
98 Hexachlorobutadien	50.0	51.9	103.75	80-120
99 1,2,4-Trichloroben	50.0	52.4	104.73	80-120
100 1,2,3-Trimethylben	50.0	51.6	103.13	80-120
101 Naphthalene	50.0	51.6	103.15	80-120

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	52.0	104.06	80-120
103 Methyl Acetate	50.0	53.6	107.22	80-120
104 Methylcyclohexane	50.0	55.2	110.44	80-120
M 153 Total Alkylbenzene	350	382	109.16	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	52.3	104.53	68-128
$ 45 1,2-Dichloroethane	50.0	52.9	105.83	67-135
$ 55 Toluene-D8	50.0	59.7	119.39	65-128
$ 76 P-Bromofluorobenze	50.0	52.3	104.63	56-133

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Lab Smp Id: WG160924-4 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 10:49 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-4
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 10:49 Cal File: C2176.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	311493	50.0000	50.0	
2 Chloromethane	50	2.229	2.229	(0.277)	371109	50.0000	50.0	
3 Vinyl chloride	62	2.322	2.322	(0.289)	286103	50.0000	50.0	
4 Bromomethane	94	2.729	2.730	(0.339)	136805	50.0000	50.0	
5 Chloroethane	64	2.879	2.880	(0.358)	123597	50.0000	50.0	
6 Trichlorofluoromethane	101	3.051	3.051	(0.379)	316341	50.0000	50.0	
7 Diethyl Ether	59	3.487	3.487	(0.434)	193649	50.0000	50.0	
8 Tertiary-butyl alcohol	59	5.353	5.353	(0.666)	103768	250.000	250	
9 1,1-Dichloroethene	96	3.744	3.745	(0.466)	191649	50.0000	50.0	
10 Carbon Disulfide	76	3.780	3.780	(0.470)	554475	50.0000	50.0	
11 Freon-113	151	3.809	3.809	(0.474)	142722	50.0000	50.0	
12 Iodomethane	142	3.952	3.952	(0.492)	217279	50.0000	50.0	
13 Acrolein	56	4.266	4.267	(0.531)	162849	250.000	250	
14 Methylene Chloride	84	4.645	4.645	(0.578)	231705	50.0000	50.0	
15 Acetone	43	4.752	4.753	(0.591)	362266	250.000	250	
16 Isobutyl Alcohol	43	8.255	8.255	(1.027)	166476	1000.00	1000	
17 trans-1,2-Dichloroethene	96	4.917	4.917	(0.612)	217946	50.0000	50.0	
18 Allyl Chloride	41	4.473	4.474	(0.556)	220358	50.0000	50.0	
19 Methyl tert-butyl ether	73	5.124	5.124	(0.637)	1046191	100.000	100	
20 Acetonitrile	39	5.546	5.546	(0.690)	57644	500.000	500(M)	M9
21 Di-isopropyl ether	45	5.781	5.782	(0.719)	662682	50.0000	50.0	
22 Chloroprene	53	5.910	5.911	(0.735)	360015	50.0000	50.0	
23 Propionitrile	54	7.962	7.962	(0.990)	348264	500.000	500	
24 Methacrylonitrile	41	7.983	7.984	(0.993)	1286970	500.000	500	

WAS
11:37 am, Apr 15, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.946	5.946	(0.740)	443013	50.0000	50.0	
	26 Acrylonitrile	52	6.039	6.039	(0.751)	390460	250.000	250	
	27 Ethyl tertiary-butyl ether	59	6.346	6.347	(0.789)	608442	50.0000	50.0	
	28 Vinyl Acetate	43	6.368	6.368	(0.732)	518122	50.0000	50.0	
	29 cis-1,2-Dichloroethene	96	6.761	6.761	(0.841)	227094	50.0000	50.0	
	31 Methyl Methacrylate	41	9.563	9.563	(1.099)	173584	50.0000	50.0	
	32 2,2-Dichloropropane	77	6.904	6.904	(0.859)	384672	50.0000	50.0	
	33 Bromochloromethane	128	7.032	7.033	(0.875)	91427	50.0000	50.0	
	34 Chloroform	83	7.154	7.154	(0.890)	456644	50.0000	50.0	
	35 Carbon Tetrachloride	117	7.311	7.312	(0.841)	297047	50.0000	50.0	
	36 Tetrahydrofuran	42	7.361	7.362	(0.916)	324849	250.000	250	
$	37 Dibromofluoromethane	113	7.404	7.405	(0.921)	188494	50.0000	50.0	
	38 1,1,1-Trichloroethane	97	7.411	7.412	(0.922)	439111	50.0000	50.0	
	39 1,1-Dichloropropene	75	7.583	7.583	(0.872)	332932	50.0000	50.0	
	40 2-Butanone	43	7.583	7.583	(0.943)	516280	250.000	250	
	41 Benzene	78	7.904	7.905	(0.909)	801472	50.0000	50.0	
*	42 Pentafluorobenzene	168	8.040	8.041	(1.000)	332115	50.0000		
	43 Cyclohexane	56	7.018	7.019	(0.873)	386534	50.0000	50.0	
	44 Ethyl Methacrylate	69	11.057	11.057	(1.271)	235638	50.0000	50.0	
$	45 1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	268633	50.0000	50.0	
	46 Tertiary-amyl methyl ether	73	8.076	8.076	(1.004)	462068	50.0000	50.0	
	47 1,2-Dichloroethane	62	8.176	8.177	(0.940)	371741	50.0000	50.0	
	48 Trichloroethene	95	8.648	8.648	(0.994)	240030	50.0000	50.0	
*	49 1,4-Difluorobenzene	114	8.698	8.698	(1.000)	559910	50.0000		
	50 Dibromomethane	93	9.162	9.163	(1.053)	135140	50.0000	50.0	
	51 1,2-Dichloropropane	63	9.284	9.284	(1.067)	213023	50.0000	50.0	
	52 Bromodichloromethane	83	9.370	9.370	(1.077)	336507	50.0000	50.0	
	53 cis-1,3-dichloropropene	75	10.106	10.106	(1.162)	361781	50.0000	50.0	
	54 1,4-Dioxane	88	9.606	9.606	(1.104)	40699	1000.00	1000	
$	55 Toluene-D8	98	10.320	10.321	(1.187)	626226	50.0000	50.0	
	56 2-Chloroethylvinylether	63	10.049	10.049	(1.155)	6506	50.0000	50.0	
	57 Toluene	92	10.378	10.378	(1.193)	512407	50.0000	50.0	
	58 4-methyl-2-pentanone	43	10.828	10.828	(1.245)	1018965	250.000	250	
	59 Tetrachloroethene	164	10.821	10.821	(0.888)	168733	50.0000	50.0	
	60 trans-1,3-Dichloropropene	75	10.871	10.871	(1.250)	332187	50.0000	50.0	
	61 1,1,2-Trichloroethane	83	11.057	11.057	(1.271)	159716	50.0000	50.0	
	62 Dibromochloromethane	129	11.264	11.264	(0.924)	228616	50.0000	50.0	
	63 1,3-Dichloropropane	76	11.378	11.379	(0.934)	350622	50.0000	50.0	
	64 1,2-Dibromoethane	107	11.550	11.550	(1.328)	206070	50.0000	50.0	
	65 2-Hexanone	43	11.836	11.836	(0.971)	755640	250.000	250	
*	66 Chlorobenzene-D5	117	12.186	12.187	(1.000)	542634	50.0000		
	67 Chlorobenzene	112	12.207	12.208	(1.002)	555973	50.0000	50.0	
	152 1-Chlorohexane	91	12.179	12.179	(0.999)	317979	50.0000	50.0	
	68 Ethylbenzene	106	12.243	12.244	(1.005)	320266	50.0000	50.0	
	69 1,1,1,2-Tetrachloroethane	131	12.293	12.294	(1.009)	223375	50.0000	50.0	
	71 m+p-Xylenes	106	12.436	12.437	(1.021)	760343	100.000	100	
	72 o-Xylene	106	13.001	13.001	(1.067)	359572	50.0000	50.0	
	73 Styrene	104	13.080	13.080	(1.073)	651608	50.0000	50.0	
	74 Bromoform	173	13.115	13.116	(1.076)	145917	50.0000	50.0	
	75 Isopropylbenzene	105	13.437	13.437	(0.866)	1043712	50.0000	50.0	
$	76 P-Bromofluorobenzene	95	13.837	13.838	(1.591)	297020	50.0000	50.0	
	77 cis-1,4-Dichloro-2-Butene	53	13.937	13.938	(0.898)	106801	50.0000	50.0	
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.395	(0.928)	88044	50.0000	50.0	
	79 Bromobenzene	156	13.980	13.981	(0.901)	243899	50.0000	50.0	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Report Date: 10-Apr-2015 09:24

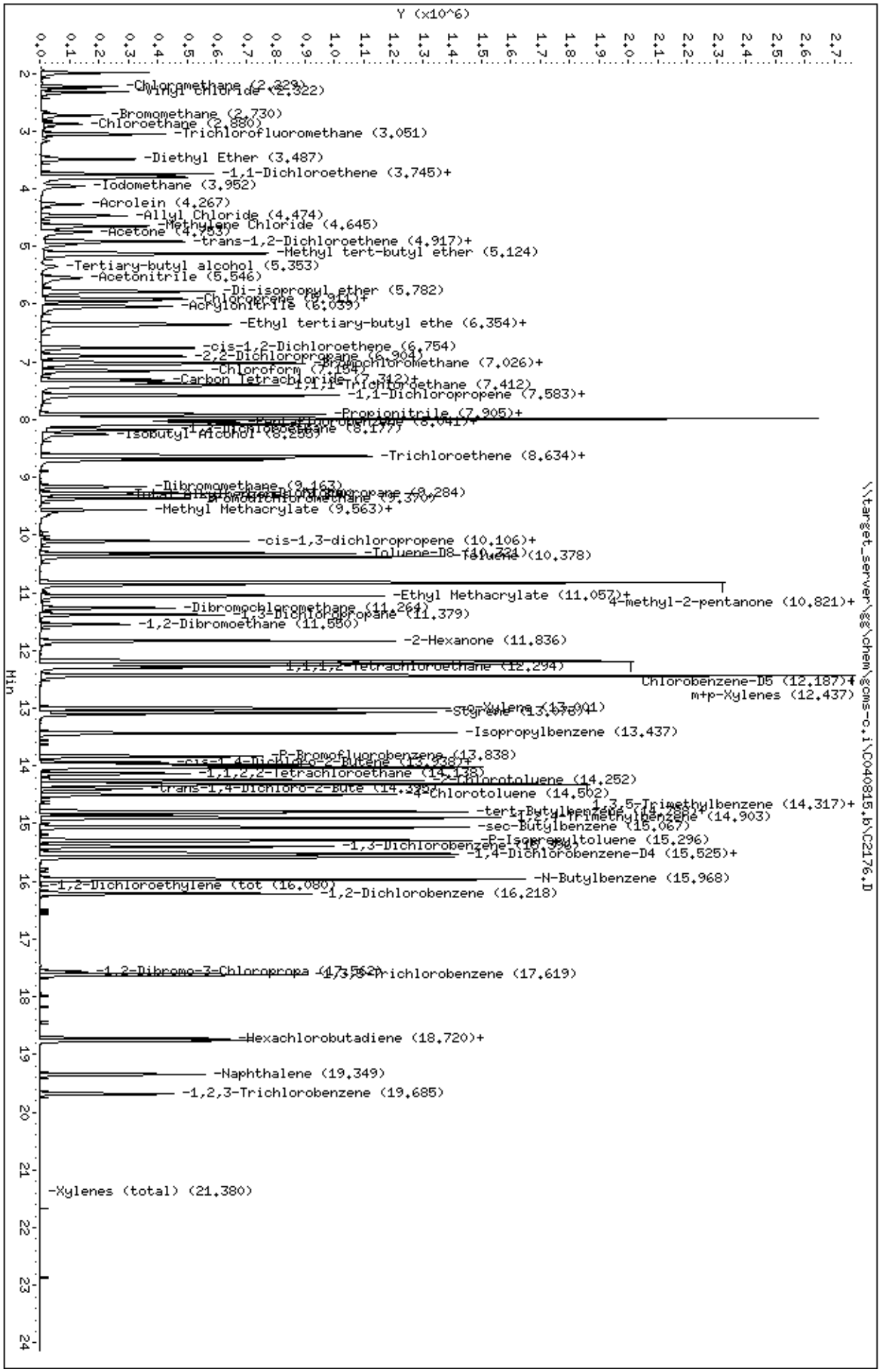
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	80 N-Propylbenzene	91	14.023	14.024	(0.904)	1269963	50.0000	50.0	
	81 1,1,2,2-Tetrachloroethane	83	14.130	14.131	(0.911)	279170	50.0000	50.0	
	82 1,3,5-Trimethylbenzene	105	14.316	14.317	(0.923)	977741	50.0000	50.0	
	83 2-Chlorotoluene	91	14.252	14.252	(0.918)	808828	50.0000	50.0	
	84 1,2,3-Trichloropropane	75	14.330	14.331	(0.924)	243579	50.0000	50.0	
	85 4-Chlorotoluene	91	14.502	14.502	(0.935)	820699	50.0000	50.0	
	86 tert-Butylbenzene	119	14.788	14.788	(0.953)	863992	50.0000	50.0	
	87 Pentachloroethane	117	14.824	14.824	(0.955)	184085	50.0000	50.0	
	88 1,2,4-Trimethylbenzene	105	14.902	14.903	(0.960)	960928	50.0000	50.0	
	89 P-Isopropyltoluene	119	15.295	15.296	(0.986)	933633	50.0000	50.0	
	90 1,3-Dichlorobenzene	146	15.395	15.396	(0.992)	424725	50.0000	50.0	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	329788	50.0000		
	92 1,4-Dichlorobenzene	146	15.538	15.539	(1.001)	463204	50.0000	50.0	
	93 N-Butylbenzene	91	15.967	15.968	(1.029)	1022881	50.0000	50.0	
	94 sec-Butylbenzene	105	15.067	15.067	(0.971)	1126105	50.0000	50.0	
	95 1,2-Dichlorobenzene	146	16.218	16.218	(1.045)	392012	50.0000	50.0	
	96 1,2-Dibromo-3-Chloropropane	75	17.561	17.562	(1.132)	53673	50.0000	50.0	
	97 1,3,5-Trichlorobenzene	180	17.619	17.619	(1.135)	302175	50.0000	50.0	
	98 Hexachlorobutadiene	225	18.719	18.720	(1.206)	141567	50.0000	50.0	
	99 1,2,4-Trichlorobenzene	180	18.762	18.763	(1.209)	230917	50.0000	50.0	
	100 1,2,3-Trimethylbenzene	105	15.581	15.582	(1.004)	872747	50.0000	50.0	
	101 Naphthalene	128	19.348	19.349	(1.247)	467717	50.0000	50.0	
	102 1,2,3-Trichlorobenzene	180	19.684	19.685	(1.269)	147572	50.0000	50.0	
	103 Methyl Acetate	43	4.967	4.967	(0.618)	175586	50.0000	50.0	
	104 Methylcyclohexane	83	8.626	8.627	(1.073)	389847	50.0000	50.0	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Date : 08-APR-2015 10:49
Client ID: Initial Calibration
Sample Info: WG160924-4
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2177.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2177.D
Lab Smp Id: WG160924-3 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 11:59
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-3
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 11:59 Cal File: C2177.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	127256	20.0000	21.2	
2 Chloromethane	50	2.230	2.229	(0.277)	157725	20.0000	19.6	
3 Vinyl chloride	62	2.330	2.322	(0.290)	118145	20.0000	20.7	
4 Bromomethane	94	2.730	2.730	(0.340)	62272	20.0000	19.8	
5 Chloroethane	64	2.880	2.880	(0.358)	60427	20.0000	20.0	
6 Trichlorofluoromethane	101	3.059	3.051	(0.380)	146956	20.0000	20.6	
7 Diethyl Ether	59	3.488	3.487	(0.434)	80996	20.0000	20.4	
8 Tertiary-butyl alcohol	59	5.339	5.353	(0.664)	45068	100.000	100	
9 1,1-Dichloroethene	96	3.752	3.745	(0.467)	79485	20.0000	19.8	
10 Carbon Disulfide	76	3.788	3.780	(0.471)	223193	20.0000	20.0	
11 Freon-113	151	3.809	3.809	(0.474)	59021	20.0000	21.4	
12 Iodomethane	142	3.959	3.952	(0.492)	93243	20.0000	20.9	
13 Acrolein	56	4.267	4.267	(0.531)	59221	100.000	101	
14 Methylene Chloride	84	4.653	4.645	(0.579)	97577	20.0000	20.5	
15 Acetone	43	4.746	4.753	(0.590)	147746	100.000	105	
16 Isobutyl Alcohol	43	8.255	8.255	(1.027)	69193	400.000	446	
17 trans-1,2-Dichloroethene	96	4.917	4.917	(0.612)	90725	20.0000	20.1	
18 Allyl Chloride	41	4.474	4.474	(0.556)	92930	20.0000	21.4	
19 Methyl tert-butyl ether	73	5.124	5.124	(0.637)	427104	40.0000	43.4	
20 Acetonitrile	39	5.539	5.546	(0.689)	20340	200.000	185	
21 Di-isopropyl ether	45	5.782	5.782	(0.719)	267262	20.0000	21.5	
22 Chloroprene	53	5.911	5.911	(0.735)	138906	20.0000	21.4	
23 Propionitrile	54	7.962	7.962	(0.990)	145108	200.000	209	
24 Methacrylonitrile	41	7.984	7.984	(0.993)	553539	200.000	211	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2177.D
Report Date: 10-Apr-2015 09:24

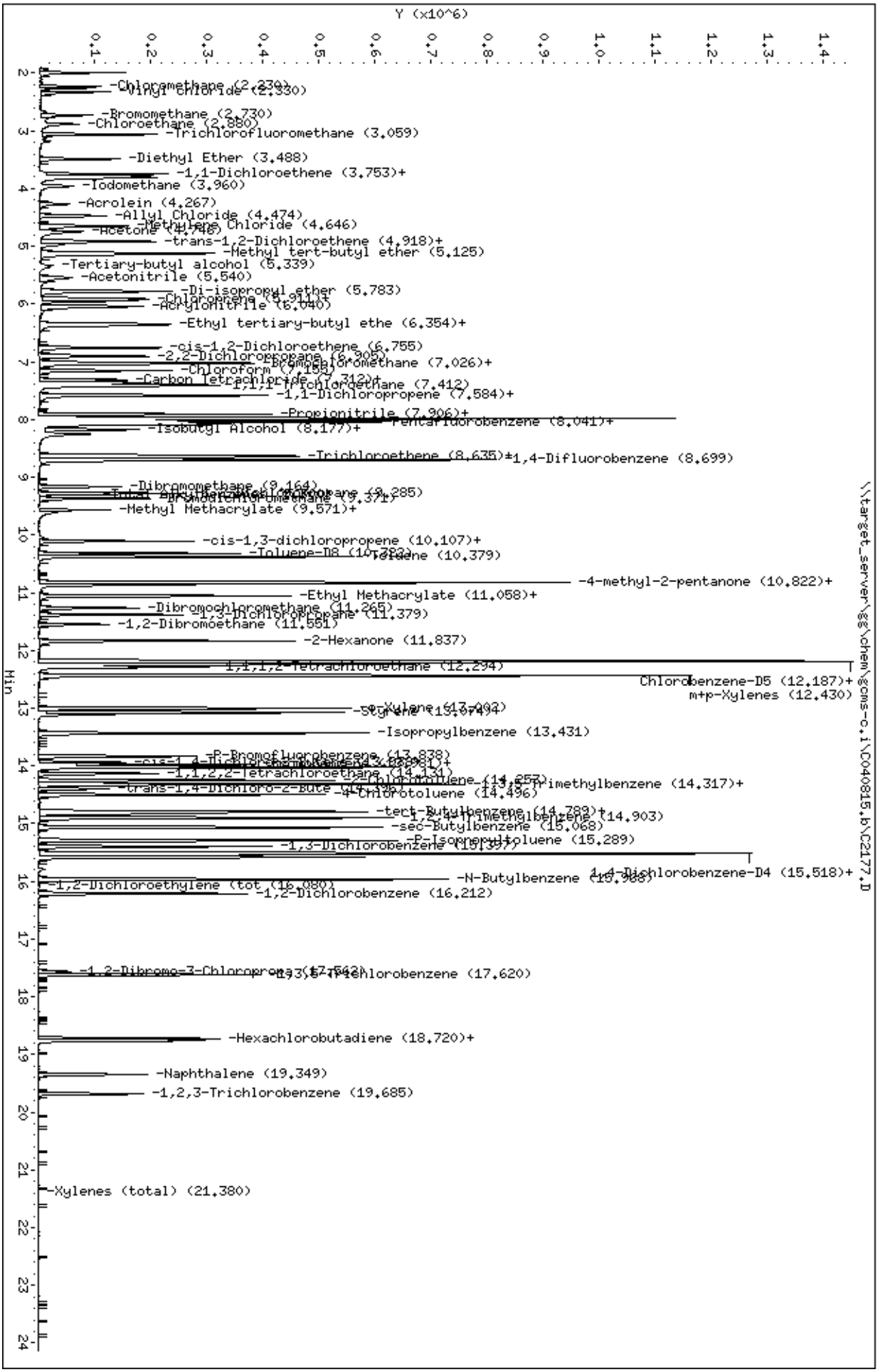
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.946	5.946	(0.740)	183438	20.0000	21.1	
	26 Acrylonitrile	52	6.039	6.039	(0.751)	155554	100.000	102	
	27 Ethyl tertiary-butyl ether	59	6.347	6.347	(0.789)	237290	20.0000	21.5	
	28 Vinyl Acetate	43	6.368	6.368	(0.732)	197002	20.0000	19.6	
	29 cis-1,2-Dichloroethene	96	6.754	6.761	(0.840)	95989	20.0000	20.7	
	31 Methyl Methacrylate	41	9.563	9.563	(1.099)	62438	20.0000	23.1	
	32 2,2-Dichloropropane	77	6.904	6.904	(0.859)	150486	20.0000	21.3	
	33 Bromochloromethane	128	7.033	7.033	(0.875)	39056	20.0000	20.8	
	34 Chloroform	83	7.155	7.154	(0.890)	186386	20.0000	20.3	
	35 Carbon Tetrachloride	117	7.319	7.312	(0.841)	107910	20.0000	21.6	
	36 Tetrahydrofuran	42	7.362	7.362	(0.916)	134323	100.000	112	
$	37 Dibromofluoromethane	113	7.398	7.405	(0.920)	70470	20.0000	20.8	
	38 1,1,1-Trichloroethane	97	7.412	7.412	(0.922)	177286	20.0000	20.4	
	39 1,1-Dichloropropene	75	7.583	7.583	(0.872)	133501	20.0000	21.5	
	40 2-Butanone	43	7.576	7.583	(0.942)	208136	100.000	118	
	41 Benzene	78	7.905	7.905	(0.909)	334346	20.0000	21.0	
*	42 Pentafluorobenzene	168	8.041	8.041	(1.000)	335811	50.0000		
	43 Cyclohexane	56	7.019	7.019	(0.873)	155759	20.0000	21.5	
	44 Ethyl Methacrylate	69	11.057	11.057	(1.271)	88908	20.0000	19.5	
$	45 1,2-Dichloroethane-D4	65	8.091	8.090	(1.006)	93226	20.0000	19.9	
	46 Tertiary-amyl methyl ether	73	8.077	8.076	(1.004)	178864	20.0000	21.4	
	47 1,2-Dichloroethane	62	8.177	8.177	(0.940)	152389	20.0000	19.6	
	48 Trichloroethene	95	8.648	8.648	(0.994)	98167	20.0000	20.0	
*	49 1,4-Difluorobenzene	114	8.698	8.698	(1.000)	552626	50.0000		
	50 Dibromomethane	93	9.163	9.163	(1.053)	56399	20.0000	20.7	
	51 1,2-Dichloropropane	63	9.285	9.284	(1.067)	82287	20.0000	20.0	
	52 Bromodichloromethane	83	9.363	9.370	(1.076)	132744	20.0000	22.0	
	53 cis-1,3-dichloropropene	75	10.107	10.106	(1.162)	142522	20.0000	22.6	
	54 1,4-Dioxane	88	9.606	9.606	(1.104)	20403	400.000	274	
$	55 Toluene-D8	98	10.321	10.321	(1.187)	210795	20.0000	20.5	
	56 2-Chloroethylvinylether	63	10.049	10.049	(1.155)	3394	20.0000	17.2	
	57 Toluene	92	10.378	10.378	(1.193)	217906	20.0000	21.3	
	58 4-methyl-2-pentanone	43	10.821	10.828	(1.244)	406533	100.000	110	
	59 Tetrachloroethene	164	10.821	10.821	(0.888)	68941	20.0000	19.2	
	60 trans-1,3-Dichloropropene	75	10.864	10.871	(1.249)	132117	20.0000	22.1	
	61 1,1,2-Trichloroethane	83	11.057	11.057	(1.271)	65013	20.0000	20.8	
	62 Dibromochloromethane	129	11.265	11.264	(0.924)	89976	20.0000	22.6	
	63 1,3-Dichloropropane	76	11.379	11.379	(0.934)	146065	20.0000	20.8	
	64 1,2-Dibromoethane	107	11.551	11.550	(1.328)	82443	20.0000	20.5	
	65 2-Hexanone	43	11.836	11.836	(0.971)	290451	100.000	115	
*	66 Chlorobenzene-D5	117	12.187	12.187	(1.000)	545724	50.0000		
	67 Chlorobenzene	112	12.208	12.208	(1.002)	226657	20.0000	19.9	
	152 1-Chlorohexane	91	12.180	12.179	(0.999)	127591	20.0000	20.0	
	68 Ethylbenzene	106	12.244	12.244	(1.005)	131710	20.0000	20.9	
	69 1,1,1,2-Tetrachloroethane	131	12.294	12.294	(1.009)	90239	20.0000	22.2	
	71 m+p-Xylenes	106	12.430	12.437	(1.020)	314780	40.0000	42.3	
	72 o-Xylene	106	13.002	13.001	(1.067)	143510	20.0000	22.1	
	73 Styrene	104	13.073	13.080	(1.073)	263242	20.0000	22.4	
	74 Bromoform	173	13.116	13.116	(1.076)	53507	20.0000	22.0	
	75 Isopropylbenzene	105	13.430	13.437	(0.865)	428370	20.0000	21.9	
$	76 P-Bromofluorobenzene	95	13.838	13.838	(1.591)	115439	20.0000	21.9	
	77 cis-1,4-Dichloro-2-Butene	53	13.938	13.938	(0.898)	38632	20.0000	18.9	
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.395	(0.928)	32806	20.0000	19.3	
	79 Bromobenzene	156	13.981	13.981	(0.901)	97772	20.0000	20.8	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2177.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	80 N-Propylbenzene	91	14.024	14.024	(0.904)	530787	20.0000	21.9	
	81 1,1,2,2-Tetrachloroethane	83	14.131	14.131	(0.911)	111572	20.0000	20.5	
	82 1,3,5-Trimethylbenzene	105	14.317	14.317	(0.923)	411445	20.0000	21.8	
	83 2-Chlorotoluene	91	14.252	14.252	(0.918)	336110	20.0000	21.2	
	84 1,2,3-Trichloropropane	75	14.331	14.331	(0.924)	100758	20.0000	20.3	
	85 4-Chlorotoluene	91	14.496	14.502	(0.934)	342261	20.0000	21.3	
	86 tert-Butylbenzene	119	14.789	14.788	(0.953)	349716	20.0000	21.7	
	87 Pentachloroethane	117	14.824	14.824	(0.955)	72234	20.0000	22.7	
	88 1,2,4-Trimethylbenzene	105	14.903	14.903	(0.960)	396995	20.0000	21.7	
	89 P-Isopropyltoluene	119	15.289	15.296	(0.985)	398779	20.0000	22.6	
	90 1,3-Dichlorobenzene	146	15.396	15.396	(0.992)	177606	20.0000	20.5	
*	91 1,4-Dichlorobenzene-D4	152	15.518	15.518	(1.000)	325737	50.0000		
	92 1,4-Dichlorobenzene	146	15.539	15.539	(1.001)	190623	20.0000	20.0	
	93 N-Butylbenzene	91	15.968	15.968	(1.029)	451300	20.0000	23.9	
	94 sec-Butylbenzene	105	15.067	15.067	(0.971)	482087	20.0000	21.8	
	95 1,2-Dichlorobenzene	146	16.211	16.218	(1.045)	161909	20.0000	20.8	
	96 1,2-Dibromo-3-Chloropropane	75	17.562	17.562	(1.132)	19707	20.0000	19.2	
	97 1,3,5-Trichlorobenzene	180	17.619	17.619	(1.135)	132250	20.0000	21.7	
	98 Hexachlorobutadiene	225	18.720	18.720	(1.206)	71447	20.0000	23.9	
	99 1,2,4-Trichlorobenzene	180	18.763	18.763	(1.209)	95415	20.0000	21.0	
	100 1,2,3-Trimethylbenzene	105	15.582	15.582	(1.004)	361886	20.0000	20.7	
	101 Naphthalene	128	19.349	19.349	(1.247)	154810	20.0000	18.2	
	102 1,2,3-Trichlorobenzene	180	19.685	19.685	(1.269)	62795	20.0000	20.3	
	103 Methyl Acetate	43	4.967	4.967	(0.618)	68874	20.0000	21.3	
	104 Methylcyclohexane	83	8.627	8.627	(1.073)	158203	20.0000	22.4	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2177.D
Date : 08-APR-2015 11:59
Client ID: Initial Calibration
Sample Info: WG160924-3
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Lab Smp Id: WG160924-2 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 12:31
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-2
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 12:31 Cal File: C2178.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

WAS

11:37 am, Apr 15, 2015

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.988	1.986	(0.247)	27015	5.00000	4.6	
2 Chloromethane	50	2.231	2.229	(0.278)	37896	5.00000	4.8	
3 Vinyl chloride	62	2.324	2.322	(0.289)	26841	5.00000	4.8	
4 Bromomethane	94	2.724	2.730	(0.339)	13213	5.00000	4.3	
5 Chloroethane	64	2.889	2.880	(0.360)	14541	5.00000	5.0	
6 Trichlorofluoromethane	101	3.060	3.051	(0.381)	33355	5.00000	4.8	
7 Diethyl Ether	59	3.489	3.487	(0.434)	18420	5.00000	4.8	
8 Tertiary-butyl alcohol	59	5.333	5.353	(0.664)	11494	25.0000	26.3(M)	M9
9 1,1-Dichloroethene	96	3.747	3.745	(0.466)	19387	5.00000	5.0	
10 Carbon Disulfide	76	3.782	3.780	(0.471)	49631	5.00000	4.7	
11 Freon-113	151	3.811	3.809	(0.474)	12759	5.00000	4.8	
12 Iodomethane	142	3.954	3.952	(0.492)	21569	5.00000	4.8	
13 Acrolein	56	4.268	4.267	(0.531)	11772	25.0000	20.7	
14 Methylene Chloride	84	4.654	4.645	(0.579)	25325	5.00000	5.1	
15 Acetone	43	4.747	4.753	(0.591)	30980	25.0000	22.6	
16 Isobutyl Alcohol	43	8.264	8.255	(1.028)	14777	100.000	97.9	
17 trans-1,2-Dichloroethene	96	4.919	4.917	(0.612)	21521	5.00000	4.9	
18 Allyl Chloride	41	4.476	4.474	(0.557)	20268	5.00000	4.8	
19 Methyl tert-butyl ether	73	5.126	5.124	(0.638)	93486	10.0000	9.8	
20 Acetonitrile	39	5.555	5.546	(0.691)	5950	50.0000	55.5(M)	M9
21 Di-isopropyl ether	45	5.784	5.782	(0.720)	59013	5.00000	4.9	
22 Chloroprene	53	5.905	5.911	(0.735)	30633	5.00000	4.8	
23 Propionitrile	54	7.964	7.962	(0.991)	34737	50.0000	51.4	
24 Methacrylonitrile	41	7.985	7.984	(0.994)	126506	50.0000	49.6	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.948	5.946	(0.740)	44689	5.00000	5.3	
	26 Acrylonitrile	52	6.048	6.039	(0.753)	37067	25.0000	25.0	
	27 Ethyl tertiary-butyl ether	59	6.348	6.347	(0.790)	51377	5.00000	4.8	
	28 Vinyl Acetate	43	6.377	6.368	(0.733)	39245	5.00000	4.5	
	29 cis-1,2-Dichloroethene	96	6.763	6.761	(0.842)	21698	5.00000	4.8	
	31 Methyl Methacrylate	41	9.572	9.563	(1.100)	11941	5.00000	4.6	
	32 2,2-Dichloropropane	77	6.906	6.904	(0.859)	33123	5.00000	4.8	
	33 Bromochloromethane	128	7.035	7.033	(0.875)	8383	5.00000	4.6	
	34 Chloroform	83	7.156	7.154	(0.891)	42894	5.00000	4.8	
	35 Carbon Tetrachloride	117	7.321	7.312	(0.841)	21770	5.00000	4.5	
	36 Tetrahydrofuran	42	7.363	7.362	(0.916)	30025	25.0000	25.7	
$	37 Dibromofluoromethane	113	7.399	7.405	(0.921)	16591	5.00000	5.0	
	38 1,1,1-Trichloroethane	97	7.406	7.412	(0.922)	40997	5.00000	4.8	
	39 1,1-Dichloropropene	75	7.585	7.583	(0.872)	29438	5.00000	4.9	
	40 2-Butanone	43	7.585	7.583	(0.944)	40972	25.0000	23.8	
	41 Benzene	78	7.907	7.905	(0.909)	76618	5.00000	5.0	
*	42 Pentafluorobenzene	168	8.035	8.041	(1.000)	326854	50.0000		
	43 Cyclohexane	56	7.020	7.019	(0.874)	34788	5.00000	4.9	
	44 Ethyl Methacrylate	69	11.059	11.057	(1.271)	17964	5.00000	4.5	
$	45 1,2-Dichloroethane-D4	65	8.093	8.090	(1.007)	22488	5.00000	4.9	
	46 Tertiary-amyl methyl ether	73	8.078	8.076	(1.005)	38812	5.00000	4.8	
	47 1,2-Dichloroethane	62	8.178	8.177	(0.940)	37371	5.00000	5.0	
	48 Trichloroethene	95	8.650	8.648	(0.994)	22967	5.00000	4.8	
*	49 1,4-Difluorobenzene	114	8.700	8.698	(1.000)	532458	50.0000		
	50 Dibromomethane	93	9.165	9.163	(1.053)	15072	5.00000	5.4	
	51 1,2-Dichloropropane	63	9.286	9.284	(1.067)	18974	5.00000	4.8	
	52 Bromodichloromethane	83	9.365	9.370	(1.076)	28347	5.00000	4.9	
	53 cis-1,3-dichloropropene	75	10.108	10.106	(1.162)	29282	5.00000	4.8	
	54 1,4-Dioxane	88	9.615	9.606	(1.105)	8358	100.000	116	
$	55 Toluene-D8	98	10.316	10.321	(1.186)	48052	5.00000	4.8	
	56 2-Chloroethylvinylether	63	10.044	10.049	(1.154)	1060	5.00000	5.6(M)	M6
	57 Toluene	92	10.380	10.378	(1.193)	48813	5.00000	5.0	
	58 4-methyl-2-pentanone	43	10.823	10.828	(1.244)	88900	25.0000	25.0	
	59 Tetrachloroethene	164	10.823	10.821	(0.888)	17110	5.00000	4.9	
	60 trans-1,3-Dichloropropene	75	10.866	10.871	(1.249)	27885	5.00000	4.8	
	61 1,1,2-Trichloroethane	83	11.052	11.057	(1.270)	14773	5.00000	4.9	
	62 Dibromochloromethane	129	11.266	11.264	(0.924)	17948	5.00000	4.7	
	63 1,3-Dichloropropane	76	11.381	11.379	(0.934)	34025	5.00000	5.0	
	65 2-Hexanone	43	11.838	11.836	(0.971)	57705	25.0000	23.6	
*	66 Chlorobenzene-D5	117	12.188	12.187	(1.000)	526997	50.0000		
	67 Chlorobenzene	112	12.210	12.208	(1.002)	54628	5.00000	5.0	
	152 1-Chlorohexane	91	12.181	12.179	(0.999)	29336	5.00000	4.8	
	68 Ethylbenzene	106	12.238	12.244	(1.004)	30896	5.00000	5.1	
	69 1,1,1,2-Tetrachloroethane	131	12.288	12.294	(1.008)	17726	5.00000	4.5	
	71 m+p-Xylenes	106	12.431	12.437	(1.020)	70942	10.0000	9.9	
	72 o-Xylene	106	13.003	13.001	(1.067)	29752	5.00000	4.8	
	73 Styrene	104	13.082	13.080	(1.073)	55712	5.00000	4.9	
	74 Bromoform	173	13.118	13.116	(1.076)	11421	5.00000	4.9	
	75 Isopropylbenzene	105	13.432	13.437	(0.866)	95152	5.00000	5.0	
$	76 P-Bromofluorobenzene	95	13.832	13.838	(1.590)	25608	5.00000	5.0	
	77 cis-1,4-Dichloro-2-Butene	53	13.933	13.938	(0.898)	8026	5.00000	4.6	
	78 trans-1,4-Dichloro-2-Butene	53	14.397	14.395	(0.928)	6985	5.00000	4.7	
	79 Bromobenzene	156	13.983	13.981	(0.901)	24090	5.00000	5.3	
	80 N-Propylbenzene	91	14.025	14.024	(0.904)	121037	5.00000	5.2	

WAS

11:37 am, Apr 15, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Report Date: 10-Apr-2015 09:24

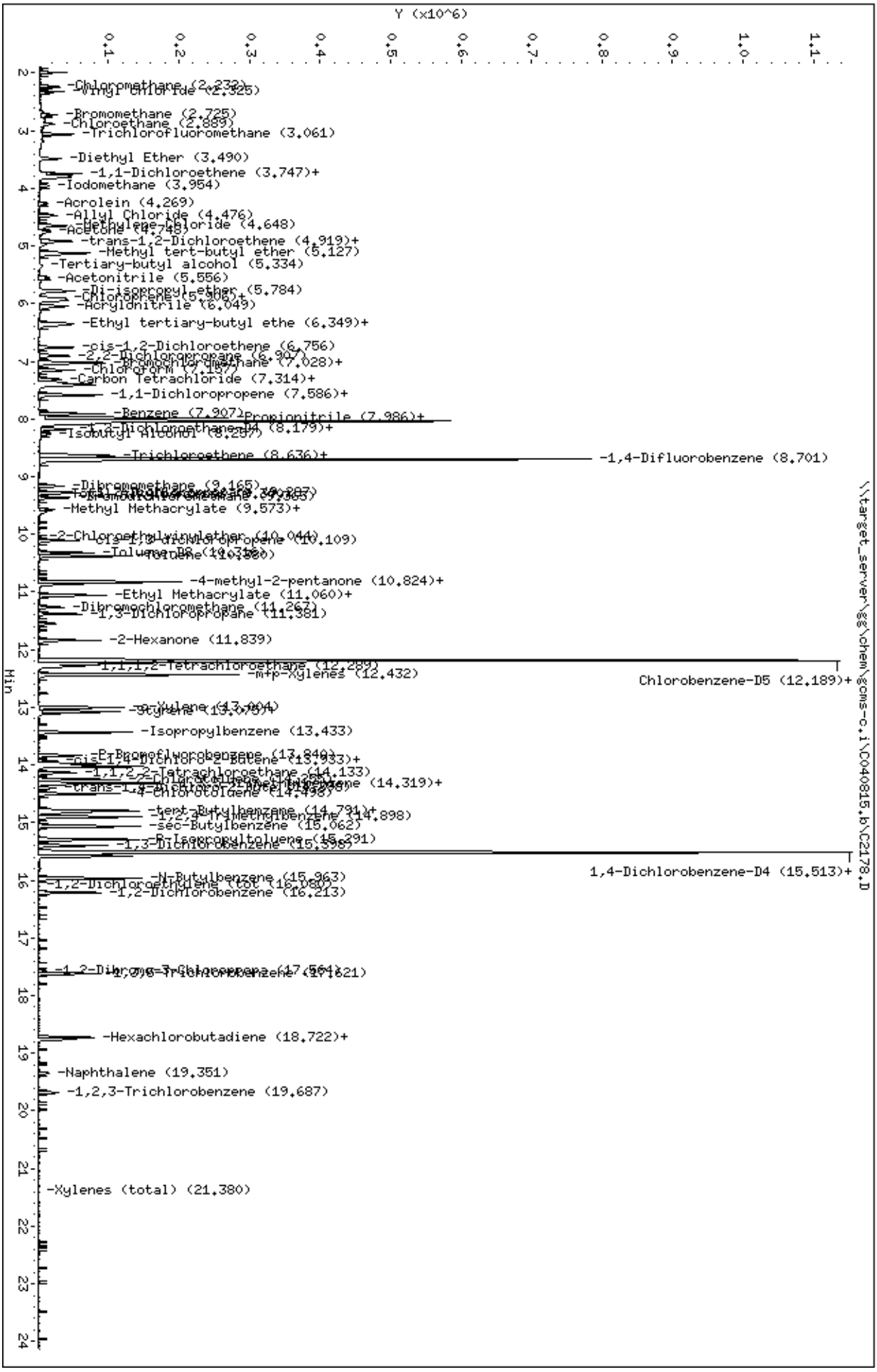
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
81	1,1,2,2-Tetrachloroethane	83	14.133	14.131	(0.911)	26596	5.00000	5.1	
82	1,3,5-Trimethylbenzene	105	14.318	14.317	(0.923)	94957	5.00000	5.2	
83	2-Chlorotoluene	91	14.254	14.252	(0.919)	75789	5.00000	5.0	
84	1,2,3-Trichloropropane	75	14.333	14.331	(0.924)	25132	5.00000	5.2	
85	4-Chlorotoluene	91	14.497	14.502	(0.935)	79154	5.00000	5.1	
86	tert-Butylbenzene	119	14.790	14.788	(0.953)	80517	5.00000	5.2	
87	Pentachloroethane	117	14.819	14.824	(0.955)	15309	5.00000	5.0	
88	1,2,4-Trimethylbenzene	105	14.897	14.903	(0.960)	90632	5.00000	5.1	
89	P-Isopropyltoluene	119	15.291	15.296	(0.986)	83324	5.00000	4.9	
90	1,3-Dichlorobenzene	146	15.398	15.396	(0.993)	41042	5.00000	4.9	
* 91	1,4-Dichlorobenzene-D4	152	15.512	15.518	(1.000)	314543	50.0000		
92	1,4-Dichlorobenzene	146	15.541	15.539	(1.002)	47047	5.00000	5.1	
93	N-Butylbenzene	91	15.963	15.968	(1.029)	90962	5.00000	5.0	
94	sec-Butylbenzene	105	15.062	15.067	(0.971)	109364	5.00000	5.1	
95	1,2-Dichlorobenzene	146	16.213	16.218	(1.045)	38367	5.00000	5.1	
96	1,2-Dibromo-3-Chloropropane	75	17.564	17.562	(1.132)	3846	5.00000	4.5	
97	1,3,5-Trichlorobenzene	180	17.621	17.619	(1.136)	28960	5.00000	4.7	
98	Hexachlorobutadiene	225	18.722	18.720	(1.207)	16843	5.00000	4.9	
99	1,2,4-Trichlorobenzene	180	18.757	18.763	(1.209)	16031	5.00000	4.1	
100	1,2,3-Trimethylbenzene	105	15.584	15.582	(1.005)	87210	5.00000	5.2	
101	Naphthalene	128	19.351	19.349	(1.247)	14461	5.00000	3.4	
102	1,2,3-Trichlorobenzene	180	19.687	19.685	(1.269)	10316	5.00000	3.9	
103	Methyl Acetate	43	4.976	4.967	(0.619)	14348	5.00000	4.6	
104	Methylcyclohexane	83	8.629	8.627	(1.074)	32052	5.00000	4.7	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Date : 08-APR-2015 12:31
Client ID: Initial Calibration
Sample Info: WG160924-2
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Lab Smp Id: WG160924-1 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 13:02
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-1
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 13:02 Cal File: C2179.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

WAS

11:37 am, Apr 15, 2015

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.988	1.986	(0.247)	5512	1.00000	0.96(a)	
2 Chloromethane	50	2.231	2.229	(0.278)	8502	1.00000	1.1	
3 Vinyl chloride	62	2.324	2.322	(0.289)	5370	1.00000	0.99(a)	
4 Bromomethane	94	2.731	2.730	(0.340)	3783	1.00000	1.3	
5 Chloroethane	64	2.889	2.880	(0.360)	3385	1.00000	1.2(M)	M9
6 Trichlorofluoromethane	101	3.060	3.051	(0.381)	7500	1.00000	1.1	
7 Diethyl Ether	59	3.489	3.487	(0.434)	3942	1.00000	1.0	
8 Tertiary-butyl alcohol	59	5.355	5.353	(0.666)	2164	5.00000	5.1(M)	M9
9 1,1-Dichloroethene	96	3.746	3.745	(0.466)	3979	1.00000	1.0	
10 Carbon Disulfide	76	3.789	3.780	(0.472)	11143	1.00000	1.2	
11 Freon-113	151	3.825	3.809	(0.476)	2435	1.00000	0.93(aM)	M9
12 Iodomethane	142	3.961	3.952	(0.493)	4354	1.00000	0.83(aM)	M6
13 Acrolein	56	4.268	4.267	(0.531)	2867	5.00000	5.2(M)	M9
15 Acetone	43	4.754	4.753	(0.592)	6778	5.00000	5.0(M)	M9
16 Isobutyl Alcohol	43	8.257	8.255	(1.028)	2423	20.0000	16.4(aM)	M9
17 trans-1,2-Dichloroethene	96	4.926	4.917	(0.613)	4445	1.00000	1.0	
18 Allyl Chloride	41	4.468	4.474	(0.556)	3876	1.00000	0.94(a)	
19 Methyl tert-butyl ether	73	5.133	5.124	(0.639)	16180	2.00000	1.7	
20 Acetonitrile	39	5.569	5.546	(0.693)	948	10.0000	9.0(aM)	M9
21 Di-isopropyl ether	45	5.777	5.782	(0.719)	10229	1.00000	0.87(a)	
22 Chloroprene	53	5.919	5.911	(0.737)	5174	1.00000	0.84(a)	
23 Propionitrile	54	7.971	7.962	(0.992)	6027	10.0000	9.1(a)	
24 Methacrylonitrile	41	7.992	7.984	(0.995)	23810	10.0000	9.6(a)	
25 1,1-Dichloroethane	63	5.948	5.946	(0.740)	7134	1.00000	0.86(a)	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	26 Acrylonitrile	52	6.055	6.039	(0.754)	6809	5.00000	4.7(aM)	M9
	27 Ethyl tertiary-butyl ether	59	6.348	6.347	(0.790)	8957	1.00000	0.85(a)	
	28 Vinyl Acetate	43	6.391	6.368	(0.735)	6270	1.00000	1.2(M)	M6
	29 cis-1,2-Dichloroethene	96	6.756	6.761	(0.841)	4463	1.00000	1.0	
	31 Methyl Methacrylate	41	9.572	9.563	(1.100)	1679	1.00000	0.66(aM)	M9
	32 2,2-Dichloropropane	77	6.899	6.904	(0.859)	5822	1.00000	0.87(a)	
	33 Bromochloromethane	128	7.027	7.033	(0.875)	1902	1.00000	1.1	
	34 Chloroform	83	7.156	7.154	(0.891)	8819	1.00000	1.0	
	35 Carbon Tetrachloride	117	7.313	7.312	(0.841)	3966	1.00000	0.84(a)	
	36 Tetrahydrofuran	42	7.371	7.362	(0.917)	4337	5.00000	3.8(a)	
$	37 Dibromofluoromethane	113	7.406	7.405	(0.922)	2662	1.00000	0.83(a)	
	38 1,1,1-Trichloroethane	97	7.413	7.412	(0.923)	8098	1.00000	0.98(a)	
	39 1,1-Dichloropropene	75	7.592	7.583	(0.873)	5120	1.00000	0.88(a)	
	40 2-Butanone	43	7.592	7.583	(0.945)	5848	5.00000	3.5(a)	
	41 Benzene	78	7.914	7.905	(0.910)	14460	1.00000	0.96(a)	
*	42 Pentafluorobenzene	168	8.035	8.041	(1.000)	319289	50.0000		
	43 Cyclohexane	56	7.020	7.019	(0.874)	5923	1.00000	0.86(a)	
	44 Ethyl Methacrylate	69	11.059	11.057	(1.271)	3249	1.00000	1.2	
$	45 1,2-Dichloroethane-D4	65	8.092	8.090	(1.007)	3813	1.00000	0.86(aM)	M6
	46 Tertiary-amyl methyl ether	73	8.078	8.076	(1.005)	6844	1.00000	0.86(a)	
	47 1,2-Dichloroethane	62	8.178	8.177	(0.940)	7890	1.00000	1.1	
	48 Trichloroethene	95	8.650	8.648	(0.994)	4906	1.00000	1.1	
*	49 1,4-Difluorobenzene	114	8.700	8.698	(1.000)	519476	50.0000		
	50 Dibromomethane	93	9.165	9.163	(1.053)	2591	1.00000	0.60(a)	
	51 1,2-Dichloropropane	63	9.293	9.284	(1.068)	3919	1.00000	1.0(M)	M6
	52 Bromodichloromethane	83	9.365	9.370	(1.076)	4655	1.00000	0.82(aM)	M6
	53 cis-1,3-dichloropropene	75	10.108	10.106	(1.162)	4569	1.00000	0.77(a)	
	54 1,4-Dioxane	88	9.615	9.606	(1.105)	2264	20.0000	32.3(M)	M9
$	55 Toluene-D8	98	10.323	10.321	(1.186)	7747	1.00000	0.80(a)	
	56 2-Chloroethylvinylether	63	10.051	10.049	(1.155)	253	1.00000	1.4(M)	M6
	57 Toluene	92	10.380	10.378	(1.193)	9148	1.00000	0.95(a)	
	58 4-methyl-2-pentanone	43	10.830	10.828	(1.245)	13859	5.00000	4.0(a)	
	59 Tetrachloroethene	164	10.830	10.821	(0.889)	3654	1.00000	1.1	
	60 trans-1,3-Dichloropropene	75	10.873	10.871	(1.250)	4700	1.00000	0.84(a)	
	61 1,1,2-Trichloroethane	83	11.059	11.057	(1.271)	2865	1.00000	0.97(a)	
	62 Dibromochloromethane	129	11.266	11.264	(0.924)	2879	1.00000	0.78(a)	
	63 1,3-Dichloropropane	76	11.388	11.379	(0.934)	6137	1.00000	0.94(a)	
	64 1,2-Dibromoethane	107	11.552	11.550	(1.328)	3652	1.00000	0.96(aM)	M6
	65 2-Hexanone	43	11.845	11.836	(0.972)	8213	5.00000	3.5(aM)	M9
*	66 Chlorobenzene-D5	117	12.188	12.187	(1.000)	506724	50.0000		
	67 Chlorobenzene	112	12.210	12.208	(1.002)	10913	1.00000	1.0	
	152 1-Chlorohexane	91	12.181	12.179	(0.999)	6150	1.00000	1.0	
	68 Ethylbenzene	106	12.245	12.244	(1.005)	5355	1.00000	0.92(a)	
	69 1,1,1,2-Tetrachloroethane	131	12.295	12.294	(1.009)	3308	1.00000	0.88(a)	
	71 m+p-Xylenes	106	12.431	12.437	(1.020)	12857	2.00000	1.8(a)	
	72 o-Xylene	106	13.003	13.001	(1.067)	4985	1.00000	0.83(a)	
	73 Styrene	104	13.082	13.080	(1.073)	8634	1.00000	0.79(a)	
	74 Bromoform	173	13.125	13.116	(1.077)	1632	1.00000	0.72(aM)	M6
	75 Isopropylbenzene	105	13.439	13.437	(0.866)	15346	1.00000	0.85(a)	
$	76 P-Bromofluorobenzene	95	13.839	13.838	(1.591)	3878	1.00000	0.78(a)	
	77 cis-1,4-Dichloro-2-Butene	53	13.947	13.938	(0.899)	1222	1.00000	1.3	
	78 trans-1,4-Dichloro-2-Butene	53	14.404	14.395	(0.929)	870	1.00000	1.1	
	79 Bromobenzene	156	13.982	13.981	(0.901)	3816	1.00000	0.88(a)	
	80 N-Propylbenzene	91	14.025	14.024	(0.904)	18717	1.00000	0.84(a)	

WAS

11:37 am, Apr 15, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
81	1,1,2,2-Tetrachloroethane	83	14.140	14.131	(0.912)	4755	1.00000	0.95(a)	
82	1,3,5-Trimethylbenzene	105	14.311	14.317	(0.923)	14781	1.00000	0.85(a)	
83	2-Chlorotoluene	91	14.254	14.252	(0.919)	13733	1.00000	0.94(a)	
84	1,2,3-Trichloropropane	75	14.333	14.331	(0.924)	4447	1.00000	0.97(a)	
85	4-Chlorotoluene	91	14.497	14.502	(0.935)	13380	1.00000	0.90(a)	
86	tert-Butylbenzene	119	14.783	14.788	(0.953)	12103	1.00000	0.81(a)	
88	1,2,4-Trimethylbenzene	105	14.897	14.903	(0.960)	14364	1.00000	0.85(a)	
89	P-Isopropyltoluene	119	15.298	15.296	(0.986)	13881	1.00000	0.85(a)	
90	1,3-Dichlorobenzene	146	15.398	15.396	(0.993)	8234	1.00000	1.0	
* 91	1,4-Dichlorobenzene-D4	152	15.512	15.518	(1.000)	300906	50.0000		
92	1,4-Dichlorobenzene	146	15.541	15.539	(1.002)	8861	1.00000	1.0	
93	N-Butylbenzene	91	15.977	15.968	(1.030)	12876	1.00000	0.74(a)	
94	sec-Butylbenzene	105	15.069	15.067	(0.971)	17774	1.00000	0.87(a)	
95	1,2-Dichlorobenzene	146	16.213	16.218	(1.045)	6758	1.00000	0.94(a)	
96	1,2-Dibromo-3-Chloropropane	75	17.564	17.562	(1.132)	328	1.00000	1.1(M)	M6
97	1,3,5-Trichlorobenzene	180	17.621	17.619	(1.136)	4234	1.00000	0.52(a)	
99	1,2,4-Trichlorobenzene	180	18.757	18.763	(1.209)	1106	1.00000	0.75(a)	
100	1,2,3-Trimethylbenzene	105	15.584	15.582	(1.005)	15214	1.00000	0.94(a)	
101	Naphthalene	128	19.351	19.349	(1.247)	155	1.00000	1.9(M)	M6
102	1,2,3-Trichlorobenzene	180	19.672	19.685	(1.268)	587	1.00000	1.00(M)	M6
103	Methyl Acetate	43	4.983	4.967	(0.620)	2834	1.00000	0.92(aM)	M9
104	Methylcyclohexane	83	8.636	8.627	(1.075)	5584	1.00000	0.83(a)	

QC Flag Legend

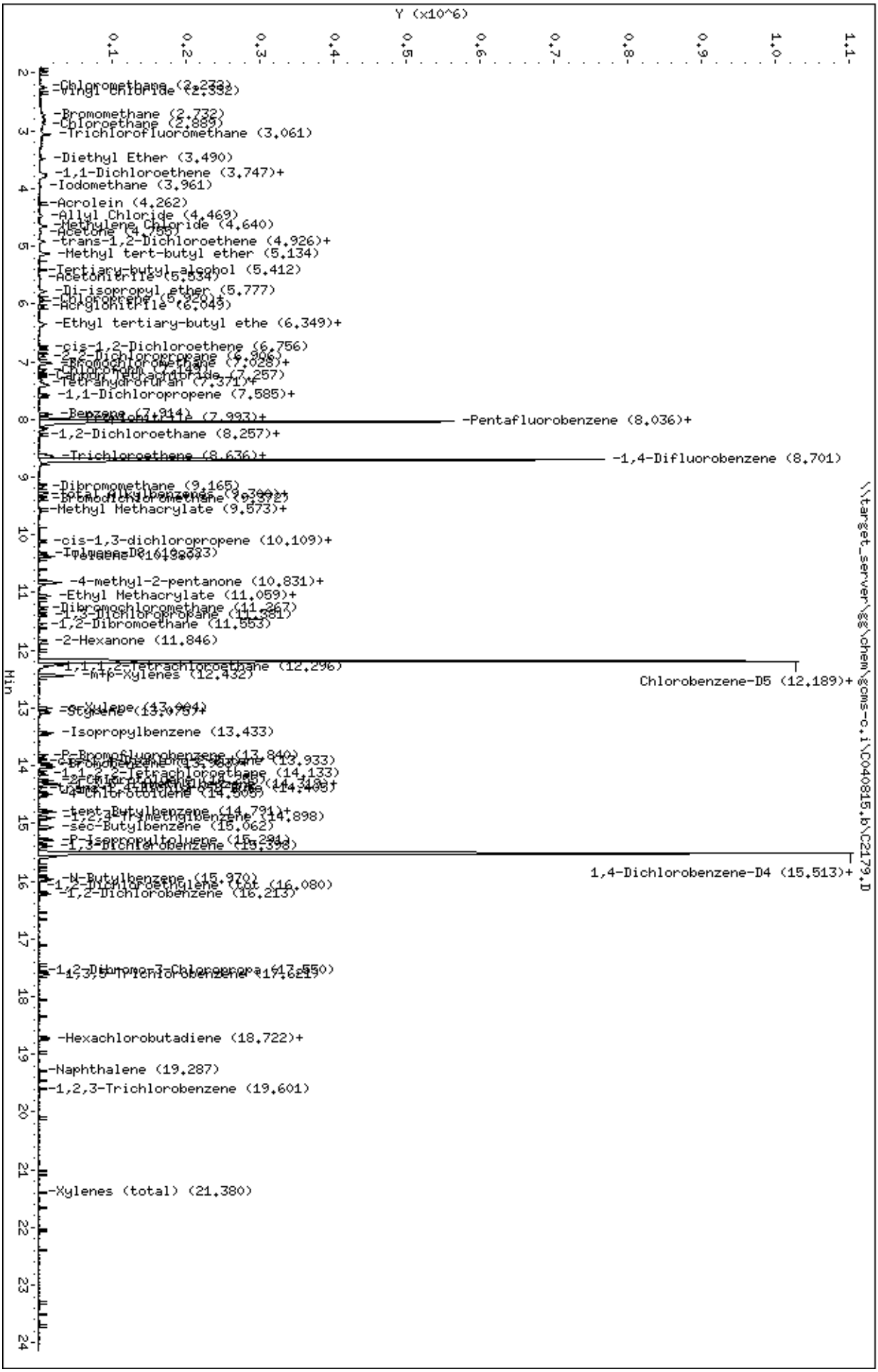
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

WAS

11:37 am, Apr 15, 2015

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Date : 08-APR-2015 13:02
Client ID: Initial Calibration
Sample Info: WG160924-1
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2180.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2180.D
Lab Smp Id: WG160924-6 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 13:34 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-6
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 13:34 Cal File: C2180.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	1109855	200.000	183	
2 Chloromethane	50	2.229	2.229	(0.277)	1329409	200.000	167	
3 Vinyl chloride	62	2.329	2.322	(0.290)	1075033	200.000	186	
4 Bromomethane	94	2.729	2.730	(0.339)	573047	200.000	181	
5 Chloroethane	64	2.879	2.880	(0.358)	432041	200.000	148	
6 Trichlorofluoromethane	101	3.051	3.051	(0.379)	1319834	200.000	184	
7 Diethyl Ether	59	3.494	3.487	(0.435)	730548	200.000	182	
8 Tertiary-butyl alcohol	59	5.352	5.353	(0.666)	417241	1000.00	919	
9 1,1-Dichloroethene	96	3.751	3.745	(0.467)	796611	200.000	194	
10 Carbon Disulfide	76	3.780	3.780	(0.470)	2341608	200.000	200(A)	
11 Freon-113	151	3.808	3.809	(0.474)	542875	200.000	193	
12 Iodomethane	142	3.951	3.952	(0.491)	893653	200.000	200	
13 Acrolein	56	4.273	4.267	(0.531)	634882	1000.00	1040(A)	
14 Methylene Chloride	84	4.652	4.645	(0.579)	942019	200.000	200	
15 Acetone	43	4.752	4.753	(0.591)	1472001	1000.00	1010(A)	
16 Isobutyl Alcohol	43	8.254	8.255	(1.027)	677576	4000.00	4190(A)	
17 trans-1,2-Dichloroethene	96	4.916	4.917	(0.612)	885987	200.000	192	
18 Allyl Chloride	41	4.473	4.474	(0.556)	782593	200.000	180	
19 Methyl tert-butyl ether	73	5.131	5.124	(0.638)	3973746	400.000	393	
20 Acetonitrile	39	5.545	5.546	(0.690)	228678	2000.00	2010(A)	
21 Di-isopropyl ether	45	5.781	5.782	(0.719)	2586781	200.000	202(A)	
22 Chloroprene	53	5.910	5.911	(0.735)	1386373	200.000	206(A)	
23 Propionitrile	54	7.976	7.962	(0.992)	1281536	2000.00	1830	
24 Methacrylonitrile	41	7.997	7.984	(0.995)	3975030	2000.00	1560	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2180.D
Report Date: 10-Apr-2015 09:24

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.946	5.946	(0.740)	1735605	200.000	195	
	26 Acrylonitrile	52	6.046	6.039	(0.752)	1539388	1000.00	985	
	27 Ethyl tertiary-butyl ether	59	6.346	6.347	(0.789)	2434002	200.000	211(A)	
	28 Vinyl Acetate	43	6.367	6.368	(0.732)	1978734	200.000	199	
	29 cis-1,2-Dichloroethene	96	6.761	6.761	(0.841)	928097	200.000	195	
	31 Methyl Methacrylate	41	9.563	9.563	(1.099)	695006	200.000	231(A)	
	32 2,2-Dichloropropane	77	6.903	6.904	(0.859)	1551417	200.000	210(A)	
	33 Bromochloromethane	128	7.039	7.033	(0.876)	361091	200.000	189	
	34 Chloroform	83	7.154	7.154	(0.890)	1757960	200.000	189	
	35 Carbon Tetrachloride	117	7.318	7.312	(0.841)	1231753	200.000	224(A)	
	36 Tetrahydrofuran	42	7.361	7.362	(0.916)	1274683	1000.00	1020(A)	
$	37 Dibromofluoromethane	113	7.404	7.405	(0.921)	674677	200.000	195	
	38 1,1,1-Trichloroethane	97	7.418	7.412	(0.923)	1673970	200.000	190	
	39 1,1-Dichloropropene	75	7.583	7.583	(0.872)	1306913	200.000	198	
	40 2-Butanone	43	7.583	7.583	(0.943)	1932105	1000.00	1050(A)	
	41 Benzene	78	7.911	7.905	(0.910)	3022508	200.000	182	
*	42 Pentafluorobenzene	168	8.040	8.041	(1.000)	346006	50.0000		
	43 Cyclohexane	56	7.018	7.019	(0.873)	1544062	200.000	205(A)	
	44 Ethyl Methacrylate	69	11.056	11.057	(1.271)	958099	200.000	200	
$	45 1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	849763	200.000	180	
	46 Tertiary-amyl methyl ether	73	8.083	8.076	(1.005)	1892612	200.000	215(A)	
	47 1,2-Dichloroethane	62	8.176	8.177	(0.940)	1411357	200.000	175	
	48 Trichloroethene	95	8.648	8.648	(0.994)	926614	200.000	181	
*	49 1,4-Difluorobenzene	114	8.698	8.698	(1.000)	590032	50.0000		
	50 Dibromomethane	93	9.162	9.163	(1.053)	548724	200.000	200	
	51 1,2-Dichloropropane	63	9.284	9.284	(1.067)	841835	200.000	194	
	52 Bromodichloromethane	83	9.370	9.370	(1.077)	1338031	200.000	206(A)	
	53 cis-1,3-dichloropropene	75	10.106	10.106	(1.162)	1502474	200.000	218(A)	
	54 1,4-Dioxane	88	9.613	9.606	(1.105)	126170	4000.00	1800	
$	55 Toluene-D8	98	10.320	10.321	(1.187)	2019864	200.000	187	
	56 2-Chloroethylvinylether	63	10.049	10.049	(1.155)	18124	200.000	97.3	
	57 Toluene	92	10.377	10.378	(1.193)	2029762	200.000	189	
	58 4-methyl-2-pentanone	43	10.828	10.828	(1.245)	3217015	1000.00	849	
	59 Tetrachloroethene	164	10.821	10.821	(0.887)	664641	200.000	185	
	60 trans-1,3-Dichloropropene	75	10.871	10.871	(1.250)	1392388	200.000	214(A)	
	61 1,1,2-Trichloroethane	83	11.056	11.057	(1.271)	638886	200.000	193	
	62 Dibromochloromethane	129	11.271	11.264	(0.924)	973085	200.000	230(A)	
	63 1,3-Dichloropropane	76	11.385	11.379	(0.934)	1397265	200.000	196	
	64 1,2-Dibromoethane	107	11.550	11.550	(1.328)	849089	200.000	198	
	65 2-Hexanone	43	11.836	11.836	(0.971)	2625955	1000.00	1010(A)	
*	66 Chlorobenzene-D5	117	12.193	12.187	(1.000)	558593	50.0000		
	67 Chlorobenzene	112	12.214	12.208	(1.002)	2137941	200.000	186	
	152 1-Chlorohexane	91	12.186	12.179	(0.999)	1327396	200.000	203(A)	
	68 Ethylbenzene	106	12.250	12.244	(1.005)	1304366	200.000	202(A)	
	69 1,1,1,2-Tetrachloroethane	131	12.300	12.294	(1.009)	918420	200.000	216(A)	
	71 m+p-Xylenes	106	12.436	12.437	(1.020)	2881567	400.000	382	
	72 o-Xylene	106	13.008	13.001	(1.067)	1451352	200.000	215(A)	
	73 Styrene	104	13.079	13.080	(1.073)	2495996	200.000	206(A)	
	74 Bromoform	173	13.115	13.116	(1.076)	623540	200.000	238(A)	
	75 Isopropylbenzene	105	13.437	13.437	(0.866)	3725588	200.000	182	
$	76 P-Bromofluorobenzene	95	13.837	13.838	(1.591)	1130230	200.000	201(A)	
	77 cis-1,4-Dichloro-2-Butene	53	13.937	13.938	(0.898)	454844	200.000	200(A)	
	78 trans-1,4-Dichloro-2-Butene	53	14.402	14.395	(0.928)	362239	200.000	200	
	79 Bromobenzene	156	13.987	13.981	(0.901)	964461	200.000	194	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2180.D
Report Date: 10-Apr-2015 09:24

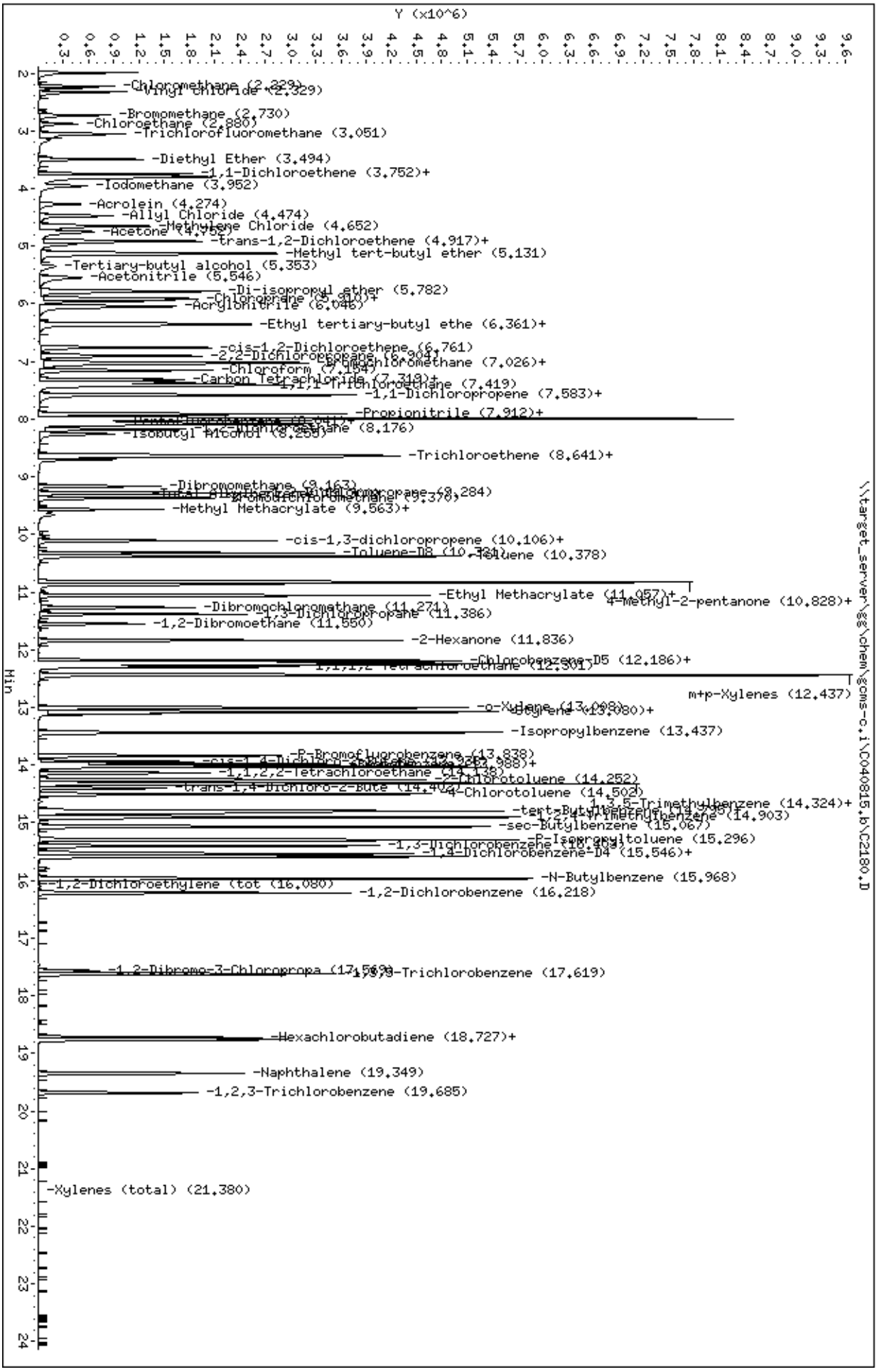
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	80 N-Propylbenzene	91	14.030	14.024	(0.904)	4353832	200.000	174	
	81 1,1,2,2-Tetrachloroethane	83	14.137	14.131	(0.911)	1091281	200.000	190	
	82 1,3,5-Trimethylbenzene	105	14.323	14.317	(0.923)	3413517	200.000	175	
	83 2-Chlorotoluene	91	14.259	14.252	(0.919)	2928995	200.000	178	
	84 1,2,3-Trichloropropane	75	14.330	14.331	(0.924)	929698	200.000	180	
	85 4-Chlorotoluene	91	14.502	14.502	(0.935)	2972215	200.000	178	
	86 tert-Butylbenzene	119	14.795	14.788	(0.953)	3257076	200.000	192	
	87 Pentachloroethane	117	14.823	14.824	(0.955)	747774	200.000	216(A)	
	88 1,2,4-Trimethylbenzene	105	14.902	14.903	(0.960)	3438952	200.000	181	
	89 P-Isopropyltoluene	119	15.295	15.296	(0.986)	3431984	200.000	185	
	90 1,3-Dichlorobenzene	146	15.402	15.396	(0.993)	1674882	200.000	185	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	347312	50.0000		
	92 1,4-Dichlorobenzene	146	15.545	15.539	(1.002)	1780870	200.000	180	
	93 N-Butylbenzene	91	15.967	15.968	(1.029)	3642654	200.000	184	
	94 sec-Butylbenzene	105	15.067	15.067	(0.971)	4024264	200.000	176	
	95 1,2-Dichlorobenzene	146	16.217	16.218	(1.045)	1553136	200.000	190	
	96 1,2-Dibromo-3-Chloropropane	75	17.568	17.562	(1.132)	239826	200.000	200(A)	
	97 1,3,5-Trichlorobenzene	180	17.625	17.619	(1.136)	1214070	200.000	199	
	98 Hexachlorobutadiene	225	18.726	18.720	(1.207)	592498	200.000	200	
	99 1,2,4-Trichlorobenzene	180	18.762	18.763	(1.209)	971578	200.000	200	
	100 1,2,3-Trimethylbenzene	105	15.588	15.582	(1.005)	3138352	200.000	174	
	101 Naphthalene	128	19.348	19.349	(1.247)	2041182	200.000	200(A)	
	102 1,2,3-Trichlorobenzene	180	19.684	19.685	(1.269)	629222	200.000	200(A)	
	103 Methyl Acetate	43	4.974	4.967	(0.619)	766108	200.000	223(A)	
	104 Methylcyclohexane	83	8.626	8.627	(1.073)	1530842	200.000	208(A)	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2180.D
Date : 08-APR-2015 13:34
Client ID: Initial Calibration
Sample Info: WG160924-6
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2181.D
Report Date: 10-Apr-2015 09:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2181.D
Lab Smp Id: WG160924-5 Client Smp ID: Initial Calibration
Inj Date : 08-APR-2015 14:06 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-5
Misc Info :
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.989	1.986	(0.247)	606325	100.000	96.1	
2 Chloromethane	50	2.232	2.229	(0.278)	790259	100.000	95.6	
3 Vinyl chloride	62	2.325	2.322	(0.289)	614367	100.000	101	
4 Bromomethane	94	2.725	2.730	(0.339)	308622	100.000	102	
5 Chloroethane	64	2.882	2.880	(0.358)	227436	100.000	97.7	
6 Trichlorofluoromethane	101	3.054	3.051	(0.380)	633154	100.000	86.2	
7 Diethyl Ether	59	3.490	3.487	(0.434)	386539	100.000	93.2	
8 Tertiary-butyl alcohol	59	5.348	5.353	(0.665)	273266	500.000	560	
9 1,1-Dichloroethene	96	3.747	3.745	(0.466)	414434	100.000	97.0	
10 Carbon Disulfide	76	3.783	3.780	(0.470)	1272587	100.000	105	
11 Freon-113	151	3.811	3.809	(0.474)	284989	100.000	97.1	
12 Iodomethane	142	3.954	3.952	(0.492)	482227	100.000	99.6	
13 Acrolein	56	4.269	4.267	(0.531)	338660	500.000	525	
14 Methylene Chloride	84	4.648	4.645	(0.578)	501477	100.000	101	
15 Acetone	43	4.748	4.753	(0.590)	798621	500.000	518	
16 Isobutyl Alcohol	43	8.250	8.255	(1.026)	426302	2000.00	2410	
17 trans-1,2-Dichloroethene	96	4.912	4.917	(0.611)	479270	100.000	99.4	
18 Allyl Chloride	41	4.469	4.474	(0.556)	471997	100.000	103	
19 Methyl tert-butyl ether	73	5.127	5.124	(0.637)	2240164	200.000	209	
20 Acetonitrile	39	5.548	5.546	(0.690)	129283	1000.00	1070	
21 Di-isopropyl ether	45	5.784	5.782	(0.719)	1412038	100.000	104	
22 Chloroprene	53	5.906	5.911	(0.734)	726941	100.000	102	
23 Propionitrile	54	7.972	7.962	(0.991)	700830	1000.00	961	
24 Methacrylonitrile	41	7.993	7.984	(0.994)	2334204	1000.00	890	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2181.D
Report Date: 10-Apr-2015 09:24

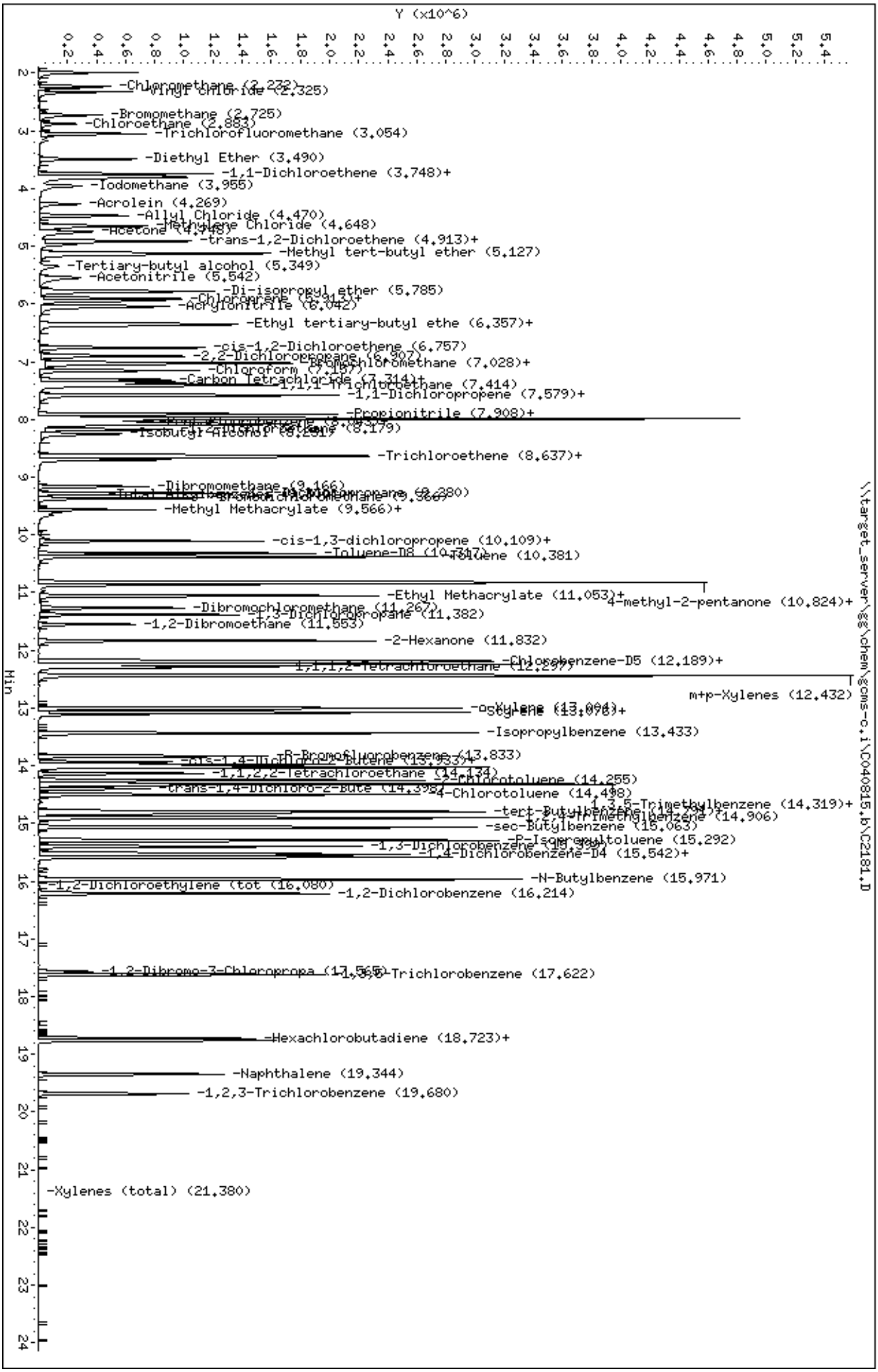
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	25 1,1-Dichloroethane	63	5.949	5.946	(0.740)	940966	100.000	100	
	26 Acrylonitrile	52	6.042	6.039	(0.751)	805625	500.000	493	
	27 Ethyl tertiary-butyl ether	59	6.349	6.347	(0.789)	1312308	100.000	107	
	28 Vinyl Acetate	43	6.370	6.368	(0.732)	1053589	100.000	101	
	29 cis-1,2-Dichloroethene	96	6.756	6.761	(0.840)	494860	100.000	99.4	
	31 Methyl Methacrylate	41	9.566	9.563	(1.099)	362113	100.000	99.9	
	32 2,2-Dichloropropane	77	6.906	6.904	(0.859)	808537	100.000	104	
	33 Bromochloromethane	128	7.035	7.033	(0.875)	193296	100.000	97.0	
	34 Chloroform	83	7.157	7.154	(0.890)	949792	100.000	97.7	
	35 Carbon Tetrachloride	117	7.314	7.312	(0.841)	628712	100.000	108	
	36 Tetrahydrofuran	42	7.357	7.362	(0.915)	685158	500.000	520	
$	37 Dibromofluoromethane	113	7.400	7.405	(0.920)	366962	100.000	101	
	38 1,1,1-Trichloroethane	97	7.414	7.412	(0.922)	886378	100.000	96.4	
	39 1,1-Dichloropropene	75	7.578	7.583	(0.871)	693938	100.000	101	
	40 2-Butanone	43	7.578	7.583	(0.942)	1060379	500.000	513	
	41 Benzene	78	7.907	7.905	(0.909)	1717579	100.000	99.2	
*	42 Pentafluorobenzene	168	8.043	8.041	(1.000)	363005	50.0000		
	43 Cyclohexane	56	7.021	7.019	(0.873)	822810	100.000	104	
	44 Ethyl Methacrylate	69	11.059	11.057	(1.271)	497029	100.000	106	
$	45 1,2-Dichloroethane-D4	65	8.093	8.090	(1.006)	453509	100.000	93.1	
	46 Tertiary-amyl methyl ether	73	8.079	8.076	(1.004)	1010242	100.000	108	
	47 1,2-Dichloroethane	62	8.179	8.177	(0.940)	743312	100.000	90.4	
	48 Trichloroethene	95	8.651	8.648	(0.994)	495835	100.000	94.1	
*	49 1,4-Difluorobenzene	114	8.701	8.698	(1.000)	614202	50.0000		
	50 Dibromomethane	93	9.165	9.163	(1.053)	291490	100.000	95.0	
	51 1,2-Dichloropropane	63	9.280	9.284	(1.067)	460390	100.000	101	
	52 Bromodichloromethane	83	9.365	9.370	(1.076)	723437	100.000	106	
	53 cis-1,3-dichloropropene	75	10.109	10.106	(1.162)	811000	100.000	111	
	54 1,4-Dioxane	88	9.608	9.606	(1.104)	131159	2000.00	3000	
$	55 Toluene-D8	98	10.316	10.321	(1.186)	1136901	100.000	101	
	56 2-Chloroethylvinylether	63	10.044	10.049	(1.154)	11582	100.000	97.8	
	57 Toluene	92	10.380	10.378	(1.193)	1126410	100.000	100	
	58 4-methyl-2-pentanone	43	10.824	10.828	(1.244)	1903151	500.000	485	
	59 Tetrachloroethene	164	10.816	10.821	(0.887)	359299	100.000	95.8	
	60 trans-1,3-Dichloropropene	75	10.866	10.871	(1.249)	734058	100.000	107	
	61 1,1,2-Trichloroethane	83	11.052	11.057	(1.270)	342776	100.000	99.5	
	62 Dibromochloromethane	129	11.267	11.264	(0.924)	506126	100.000	99.5	
	63 1,3-Dichloropropane	76	11.381	11.379	(0.934)	760675	100.000	101	
	64 1,2-Dibromoethane	107	11.553	11.550	(1.328)	456702	100.000	102	
	65 2-Hexanone	43	11.831	11.836	(0.971)	1486411	500.000	522	
*	66 Chlorobenzene-D5	117	12.189	12.187	(1.000)	587786	50.0000		
	67 Chlorobenzene	112	12.210	12.208	(1.002)	1180717	100.000	98.2	
	152 1-Chlorohexane	91	12.182	12.179	(0.999)	708128	100.000	102	
	68 Ethylbenzene	106	12.246	12.244	(1.005)	692120	100.000	101	
	69 1,1,1,2-Tetrachloroethane	131	12.296	12.294	(1.009)	490215	100.000	108	
	71 m+p-Xylenes	106	12.432	12.437	(1.020)	1611338	200.000	203	
	72 o-Xylene	106	13.004	13.001	(1.067)	800691	100.000	110	
	73 Styrene	104	13.075	13.080	(1.073)	1402329	100.000	108	
	74 Bromoform	173	13.111	13.116	(1.076)	321759	100.000	99.1	
	75 Isopropylbenzene	105	13.433	13.437	(0.866)	2158760	100.000	99.5	
$	76 P-Bromofluorobenzene	95	13.833	13.838	(1.590)	625208	100.000	105	
	77 cis-1,4-Dichloro-2-Butene	53	13.933	13.938	(0.898)	227481	100.000	95.6	
	78 trans-1,4-Dichloro-2-Butene	53	14.398	14.395	(0.928)	185418	100.000	97.0	
	79 Bromobenzene	156	13.983	13.981	(0.901)	532873	100.000	100	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2181.D
Report Date: 10-Apr-2015 09:24

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
80 N-Propylbenzene	91	14.026	14.024	(0.904)	2581964	100.000	97.5	
81 1,1,2,2-Tetrachloroethane	83	14.133	14.131	(0.911)	601697	100.000	99.0	
82 1,3,5-Trimethylbenzene	105	14.319	14.317	(0.923)	1999079	100.000	96.9	
83 2-Chlorotoluene	91	14.255	14.252	(0.918)	1688934	100.000	97.2	
84 1,2,3-Trichloropropane	75	14.333	14.331	(0.924)	509657	100.000	93.9	
85 4-Chlorotoluene	91	14.498	14.502	(0.934)	1713170	100.000	97.2	
86 tert-Butylbenzene	119	14.791	14.788	(0.953)	1830181	100.000	101	
87 Pentachloroethane	117	14.819	14.824	(0.955)	395668	100.000	99.4	
88 1,2,4-Trimethylbenzene	105	14.905	14.903	(0.960)	2008407	100.000	99.3	
89 P-Isopropyltoluene	119	15.291	15.296	(0.985)	1981112	100.000	100	
90 1,3-Dichlorobenzene	146	15.398	15.396	(0.992)	918209	100.000	96.0	
* 91 1,4-Dichlorobenzene-D4	152	15.520	15.518	(1.000)	369268	50.0000		
92 1,4-Dichlorobenzene	146	15.541	15.539	(1.001)	984195	100.000	94.6	
93 N-Butylbenzene	91	15.970	15.968	(1.029)	2108601	100.000	105	
94 sec-Butylbenzene	105	15.062	15.067	(0.971)	2327469	100.000	96.5	
95 1,2-Dichlorobenzene	146	16.213	16.218	(1.045)	843252	100.000	97.4	
96 1,2-Dibromo-3-Chloropropane	75	17.564	17.562	(1.132)	124589	100.000	99.0	
97 1,3,5-Trichlorobenzene	180	17.621	17.619	(1.135)	668233	100.000	102	
98 Hexachlorobutadiene	225	18.722	18.720	(1.206)	337044	100.000	105	
99 1,2,4-Trichlorobenzene	180	18.758	18.763	(1.209)	539676	100.000	104	
100 1,2,3-Trimethylbenzene	105	15.584	15.582	(1.004)	1793805	100.000	94.6	
101 Naphthalene	128	19.351	19.349	(1.247)	1120569	100.000	103	
102 1,2,3-Trichlorobenzene	180	19.680	19.685	(1.268)	351310	100.000	104	
103 Methyl Acetate	43	4.969	4.967	(0.618)	392569	100.000	107	
104 Methylcyclohexane	83	8.629	8.627	(1.073)	817675	100.000	105	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2181.D
Date : 08-APR-2015 14:06
Client ID: Initial Calibration
Sample Info: WG160924-5
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Lab Smp Id: WG160924-7 Client Smp ID: Independent Source
Inj Date : 08-APR-2015 14:53 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-7
Misc Info : WG160924,WG160924-4
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 7 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8260-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	334890	51.3109	51.3	
2 Chloromethane	50	2.229	2.229	(0.277)	409595	47.8800	47.9	
3 Vinyl chloride	62	2.329	2.322	(0.290)	303019	48.1451	48.1	
4 Bromomethane	94	2.729	2.730	(0.339)	159436	50.5233	50.5	
5 Chloroethane	64	2.879	2.880	(0.358)	115324	45.9998	46.0	
6 Trichlorofluoromethane	101	3.058	3.051	(0.380)	332220	43.7269	43.7	
7 Diethyl Ether	59	3.487	3.487	(0.434)	203825	47.4934	47.5	
8 Tertiary-butyl alcohol	59	5.345	5.353	(0.665)	143553	284.268	284	
9 1,1-Dichloroethene	96	3.744	3.745	(0.466)	225046	50.8899	50.9	
10 Carbon Disulfide	76	3.780	3.780	(0.470)	663440	52.7731	52.8	
11 Freon-113	151	3.808	3.809	(0.474)	159009	52.3502	52.4	
12 Iodomethane	142	3.959	3.952	(0.492)	258055	51.5185	51.5	
13 Acrolein	56	4.266	4.267	(0.531)	182990	274.111	274	
14 Methylene Chloride	84	4.645	4.645	(0.578)	256192	49.3277	49.3	
15 Acetone	43	4.752	4.753	(0.591)	102929	64.5838	64.6(R)	
16 Isobutyl Alcohol	43	8.626	8.255	(1.073)	26892	146.855	147(R)	
17 trans-1,2-Dichloroethene	96	4.916	4.917	(0.612)	241758	48.4292	48.4	
18 Allyl Chloride	41	4.473	4.474	(0.556)	251900	52.9651	53.0	
19 Methyl tert-butyl ether	73	5.124	5.124	(0.637)	1244278	112.401	112	
20 Acetonitrile	39	5.545	5.546	(0.690)	60020	479.886	480	
21 Di-isopropyl ether	45	5.781	5.782	(0.719)	765485	54.5492	54.5	
22 Chloroprene	53	5.910	5.911	(0.735)	389627	53.0191	53.0	
23 Propionitrile	54	7.961	7.962	(0.990)	390726	517.729	518	
24 Methacrylonitrile	41	7.983	7.984	(0.993)	1355260	499.152	499	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	25	1,1-Dichloroethane	63	5.946	5.946	(0.740)	499560	51.5814	51.6	
	26	Acrylonitrile	52	6.039	6.039	(0.751)	453062	267.765	268	
	27	Ethyl tertiary-butyl ether	59	6.346	6.347	(0.789)	698592	55.0212	55.0	
	28	Vinyl Acetate	43	6.367	6.368	(0.732)	573133	56.3242	56.3	
	29	cis-1,2-Dichloroethene	96	6.753	6.761	(0.840)	252670	49.0540	49.0	
M	30	1,2-Dichloroethylene (total)	96				494428	97.4832	97.5	
	31	Methyl Methacrylate	41	9.563	9.563	(1.099)	188513	50.8563	50.8	
	32	2,2-Dichloropropane	77	6.904	6.904	(0.859)	403399	50.0355	50.0	
	33	Bromochloromethane	128	7.032	7.033	(0.875)	107473	52.0935	52.1	
	34	Chloroform	83	7.154	7.154	(0.890)	497888	49.4876	49.5	
	35	Carbon Tetrachloride	117	7.311	7.312	(0.841)	314088	52.6918	52.7	
	36	Tetrahydrofuran	42	7.361	7.362	(0.916)	74242	54.4861	54.5	
$	37	Dibromofluoromethane	113	7.397	7.405	(0.920)	196973	52.2656	52.3	
	38	1,1,1-Trichloroethane	97	7.411	7.412	(0.922)	460587	48.4293	48.4	
	39	1,1-Dichloropropene	75	7.583	7.583	(0.872)	374331	53.0899	53.1	
	40	2-Butanone	43	7.583	7.583	(0.943)	127764	53.8998	53.9	
	41	Benzene	78	7.904	7.905	(0.909)	911943	51.4512	51.4	
*	42	Pentafluorobenzene	168	8.040	8.041	(1.000)	375671	50.0000		
	43	Cyclohexane	56	7.018	7.019	(0.873)	416292	50.6438	50.6	
	44	Ethyl Methacrylate	69	11.057	11.057	(1.271)	269189	56.2190	56.2	
$	45	1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	266821	52.9163	52.9	
	46	Tertiary-amyl methyl ether	73	8.076	8.076	(1.004)	528635	54.5344	54.5	
	47	1,2-Dichloroethane	62	8.176	8.177	(0.940)	399163	47.3851	47.4	
	48	Trichloroethene	95	8.648	8.648	(0.994)	265157	49.1588	49.2	
*	49	1,4-Difluorobenzene	114	8.698	8.698	(1.000)	629003	50.0000		
	50	Dibromomethane	93	9.162	9.163	(1.053)	153275	48.7768	48.8	
	51	1,2-Dichloropropane	63	9.284	9.284	(1.067)	247108	53.1427	53.1	
	52	Bromodichloromethane	83	9.370	9.370	(1.077)	383589	54.8118	54.8	
	53	cis-1,3-dichloropropene	75	10.106	10.106	(1.162)	404692	53.9540	54.0	
	54	1,4-Dioxane	88	9.606	9.606	(1.104)	80020	1090.27	1090	
$	55	Toluene-D8	98	10.320	10.321	(1.187)	688599	59.6972	59.7	
	56	2-Chloroethylvinylether	63	10.042	10.049	(1.154)	10022	77.3026	77.3(R)	
	57	Toluene	92	10.378	10.378	(1.193)	582935	50.7797	50.8	
	58	4-methyl-2-pentanone	43	10.828	10.828	(1.245)	244669	60.9374	60.9(R)	
	59	Tetrachloroethene	164	10.821	10.821	(0.888)	189018	49.1921	49.2	
	60	trans-1,3-Dichloropropene	75	10.864	10.871	(1.249)	384988	54.7366	54.7	
	61	1,1,2-Trichloroethane	83	11.057	11.057	(1.271)	178719	50.6679	50.7	
	62	Dibromochloromethane	129	11.264	11.264	(0.924)	255951	49.5818	49.6	
	63	1,3-Dichloropropane	76	11.378	11.379	(0.934)	400618	52.0124	52.0	
	64	1,2-Dibromoethane	107	11.550	11.550	(1.328)	240298	52.3599	52.4	
	65	2-Hexanone	43	11.836	11.836	(0.971)	186455	54.7843	54.8	
*	66	Chlorobenzene-D5	117	12.186	12.187	(1.000)	601919	50.0000		
	67	Chlorobenzene	112	12.207	12.208	(1.002)	659439	53.5505	53.6	
	152	1-Chlorohexane	91	12.179	12.179	(0.999)	373250	52.6931	52.7	
	68	Ethylbenzene	106	12.243	12.244	(1.005)	352704	50.5032	50.5	
	69	1,1,1,2-Tetrachloroethane	131	12.293	12.294	(1.009)	248073	53.3890	53.4	
M	70	Xylenes (total)	106				1308104	165.707	166	
	71	m+p-Xylenes	106	12.436	12.437	(1.021)	871403	106.995	107	
	72	o-Xylene	106	13.001	13.001	(1.067)	436701	58.7116	58.7	
	73	Styrene	104	13.079	13.080	(1.073)	725014	54.5367	54.5	
	74	Bromoform	173	13.115	13.116	(1.076)	159013	48.4475	48.4	
	75	Isopropylbenzene	105	13.437	13.437	(0.866)	1228311	56.7292	56.7	
$	76	P-Bromofluorobenzene	95	13.837	13.838	(1.591)	317523	52.3157	52.3	
	77	cis-1,4-Dichloro-2-Butene	53	13.937	13.938	(0.898)	114715	48.9440	48.9	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Report Date: 13-Apr-2015 11:09

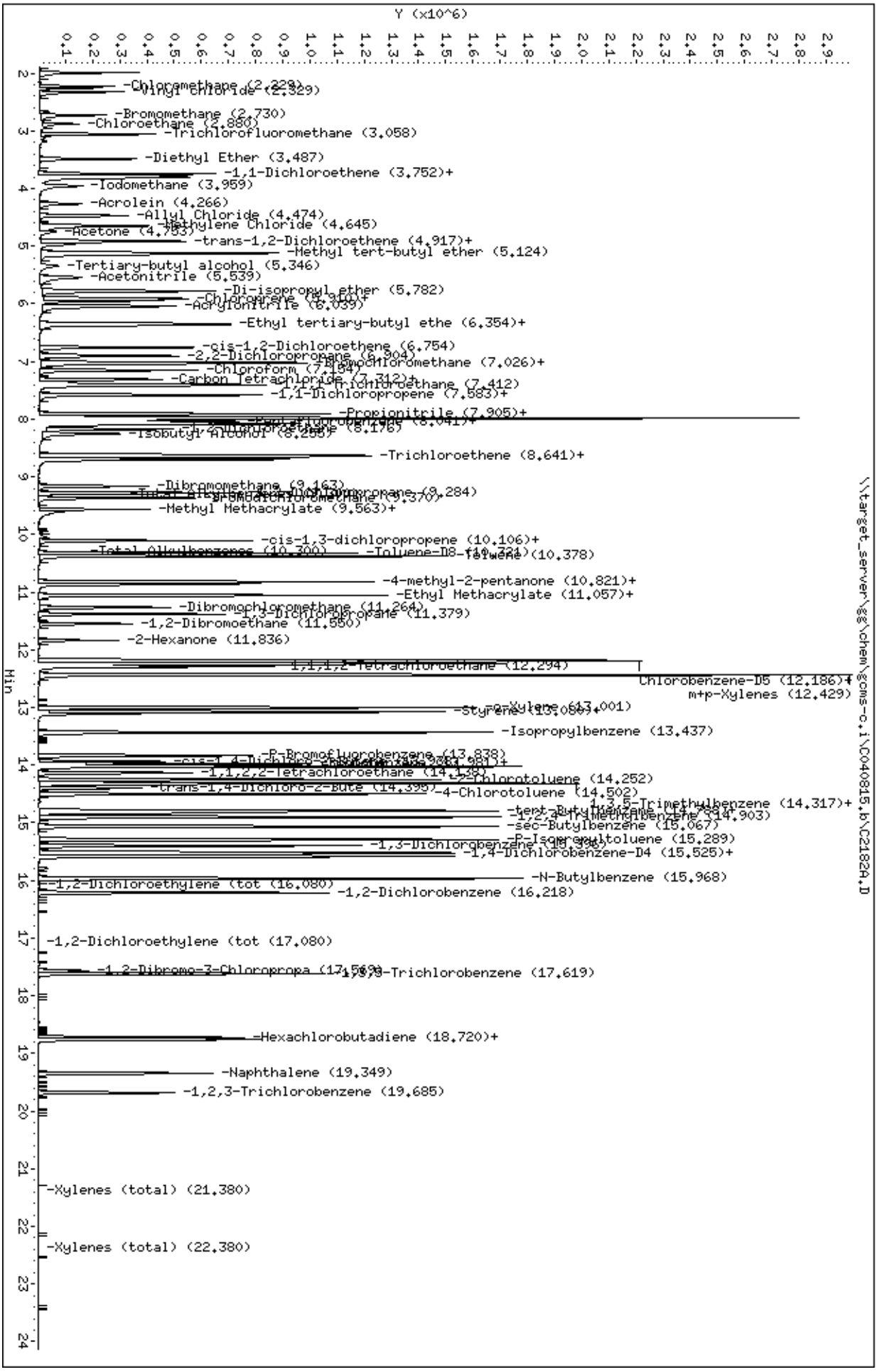
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	78 trans-1,4-Dichloro-2-Butene	53	14.395	14.395	(0.928)	90667	47.8076	47.8	
	79 Bromobenzene	156	13.980	13.981	(0.901)	278812	52.7325	52.7	
	80 N-Propylbenzene	91	14.023	14.024	(0.904)	1504603	56.9553	57.0	
	81 1,1,2,2-Tetrachloroethane	83	14.137	14.131	(0.911)	314450	51.8496	51.8	
	82 1,3,5-Trimethylbenzene	105	14.316	14.317	(0.923)	1040475	50.5508	50.6	
	83 2-Chlorotoluene	91	14.252	14.252	(0.918)	936724	54.0282	54.0	
	84 1,2,3-Trichloropropane	75	14.330	14.331	(0.924)	272757	50.3767	50.4	
	85 4-Chlorotoluene	91	14.502	14.502	(0.935)	985937	56.0903	56.1	
	86 tert-Butylbenzene	119	14.788	14.788	(0.953)	1018895	56.4543	56.4	
	87 Pentachloroethane	117	14.824	14.824	(0.955)	201915	54.2450	54.2	
	88 1,2,4-Trimethylbenzene	105	14.902	14.903	(0.960)	1061329	52.6243	52.6	
	89 P-Isopropyltoluene	119	15.295	15.296	(0.986)	1105946	56.2885	56.3	
	90 1,3-Dichlorobenzene	146	15.395	15.396	(0.992)	516318	54.0932	54.1	
*	91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	368395	50.0000		
	92 1,4-Dichlorobenzene	146	15.538	15.539	(1.001)	513934	49.5277	49.5	
	93 N-Butylbenzene	91	15.967	15.968	(1.029)	1113774	54.1082	54.1	
	94 sec-Butylbenzene	105	15.067	15.067	(0.971)	1325087	55.0742	55.1	
	95 1,2-Dichlorobenzene	146	16.217	16.218	(1.045)	469845	54.3968	54.4	
	96 1,2-Dibromo-3-Chloropropane	75	17.561	17.562	(1.132)	60855	49.2534	49.2	
	97 1,3,5-Trichlorobenzene	180	17.618	17.619	(1.135)	348184	53.1550	53.2	
	98 Hexachlorobutadiene	225	18.719	18.720	(1.206)	169749	51.8734	51.9	
	99 1,2,4-Trichlorobenzene	180	18.762	18.763	(1.209)	272263	52.3652	52.4	
	100 1,2,3-Trimethylbenzene	105	15.581	15.582	(1.004)	975931	51.5653	51.6	
	101 Naphthalene	128	19.348	19.349	(1.247)	547561	51.5748	51.6	
	102 1,2,3-Trichlorobenzene	180	19.684	19.685	(1.269)	175255	52.0281	52.0	
	103 Methyl Acetate	43	4.974	4.967	(0.619)	202638	53.6103	53.6	
	104 Methylcyclohexane	83	8.626	8.627	(1.073)	445236	55.2186	55.2	
M	153 Total Alkylbenzenes	100				8170109	382.056	382	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182A.D
Date : 08-APR-2015 14:53
Client ID: Independent Source
Sample Info: WG160924-7
Purge Volume: 5.0
Column phase: RTX-VMS

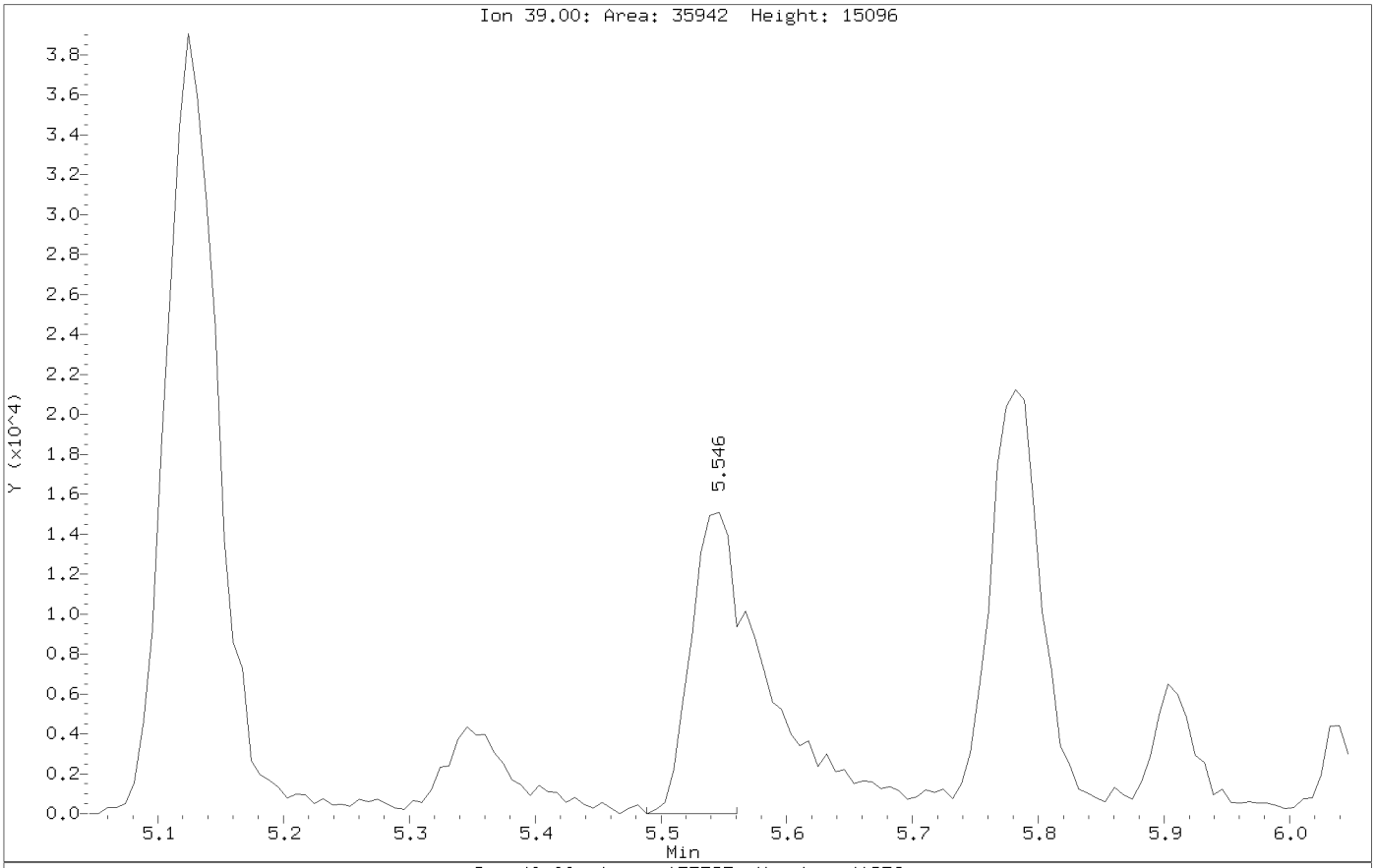
Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18

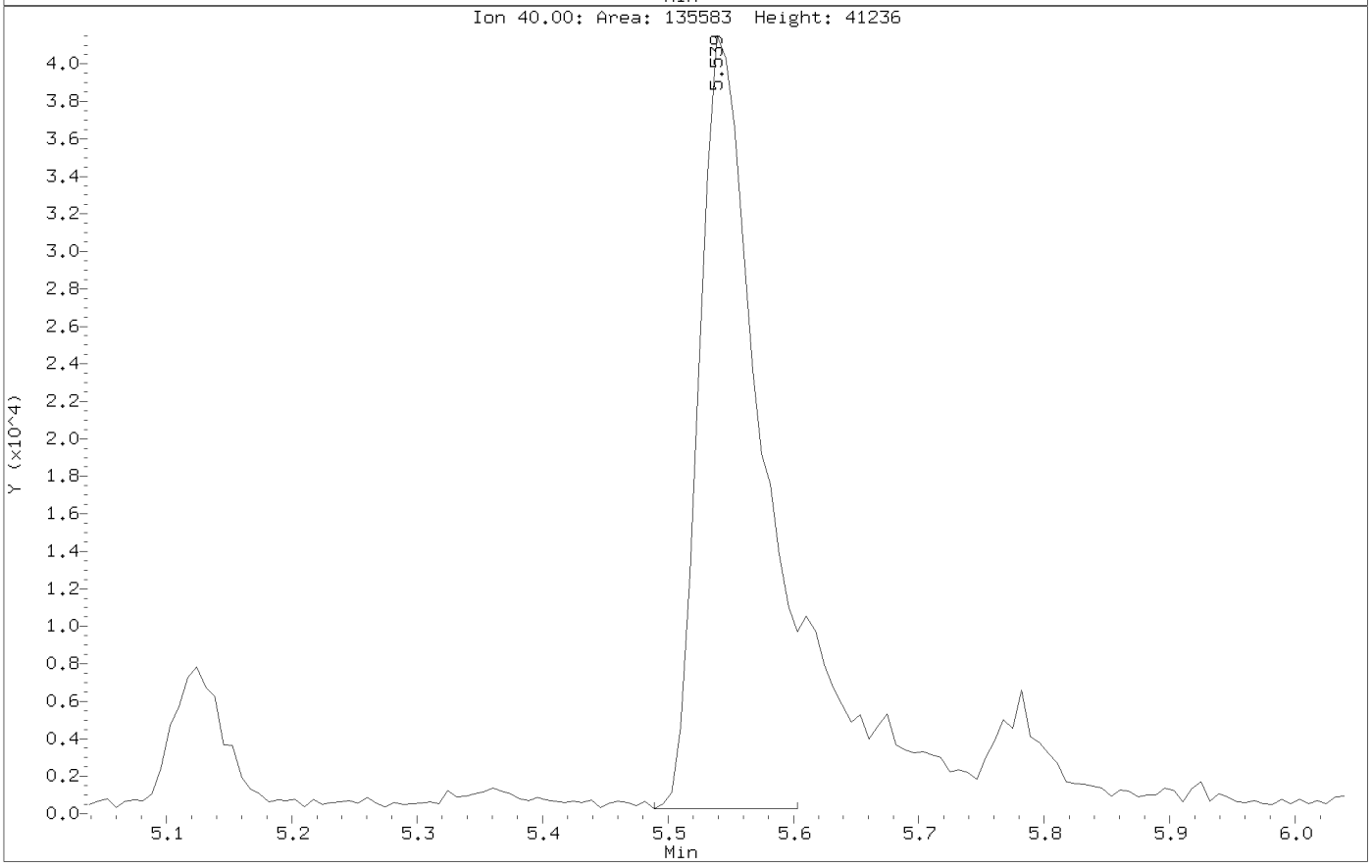


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Injection Date: 08-APR-2015 10:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8

BEFORE MANUAL INTEGRATION

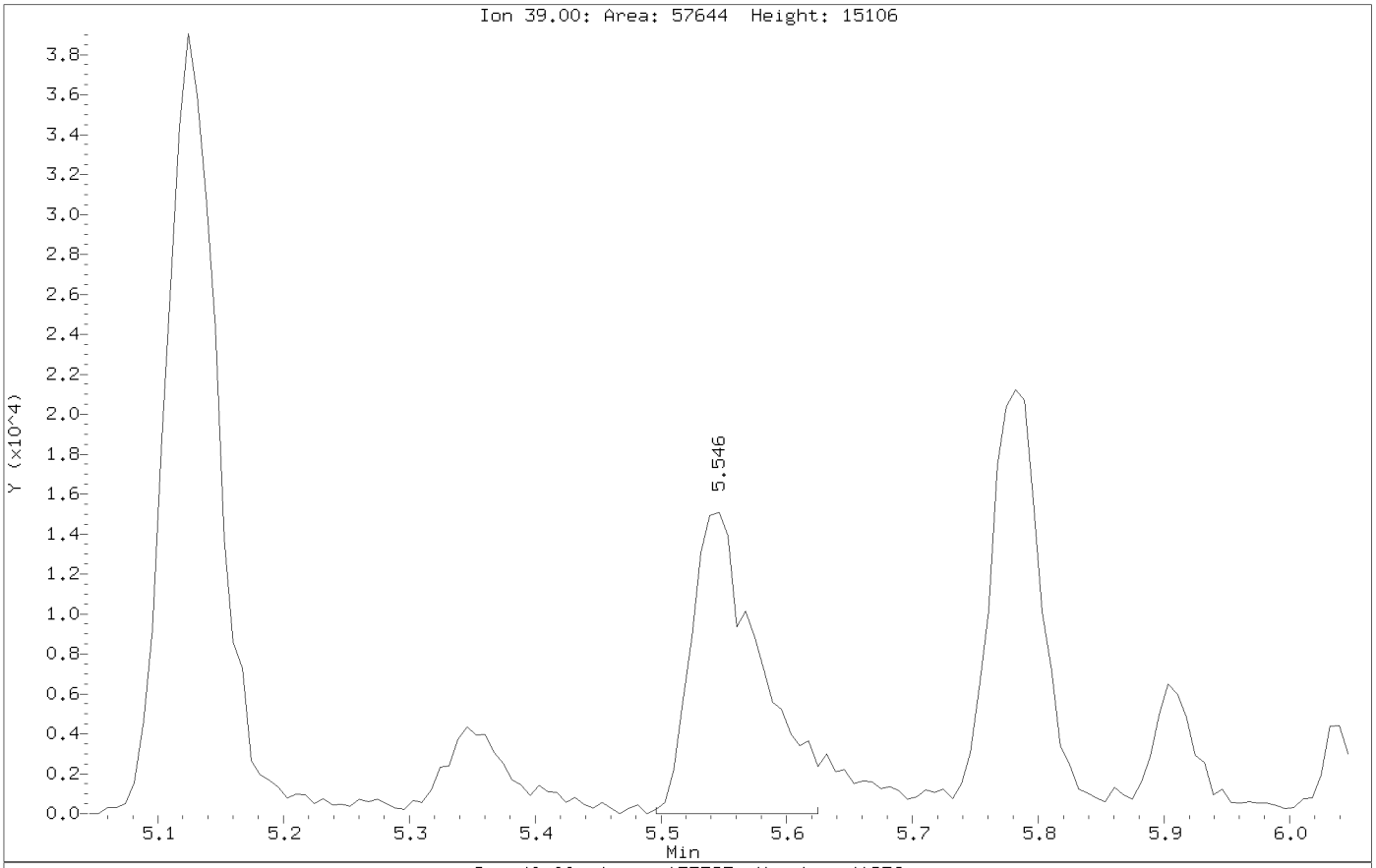


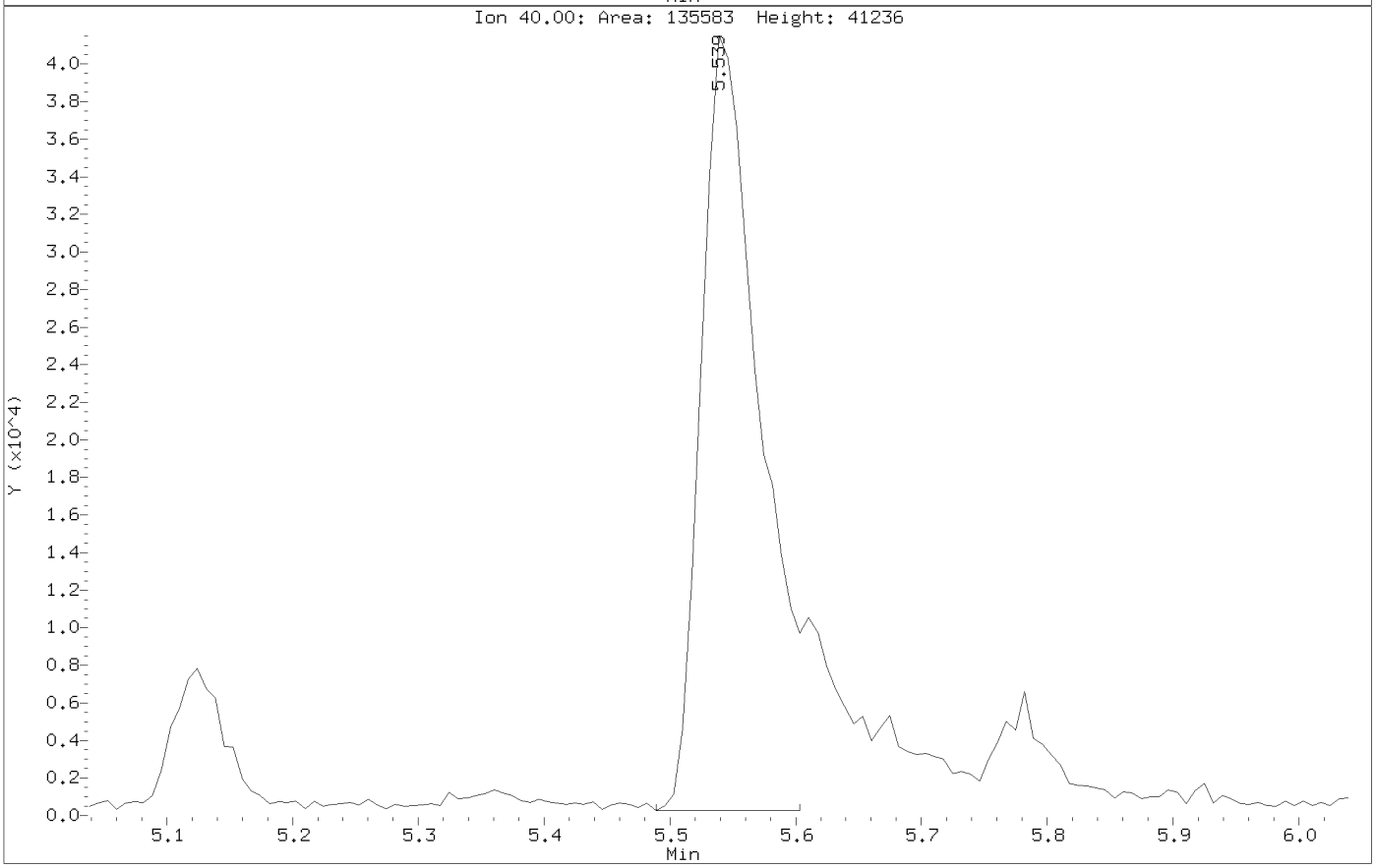


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2176.D
Injection Date: 08-APR-2015 10:49
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8

AFTER MANUAL INTEGRATION

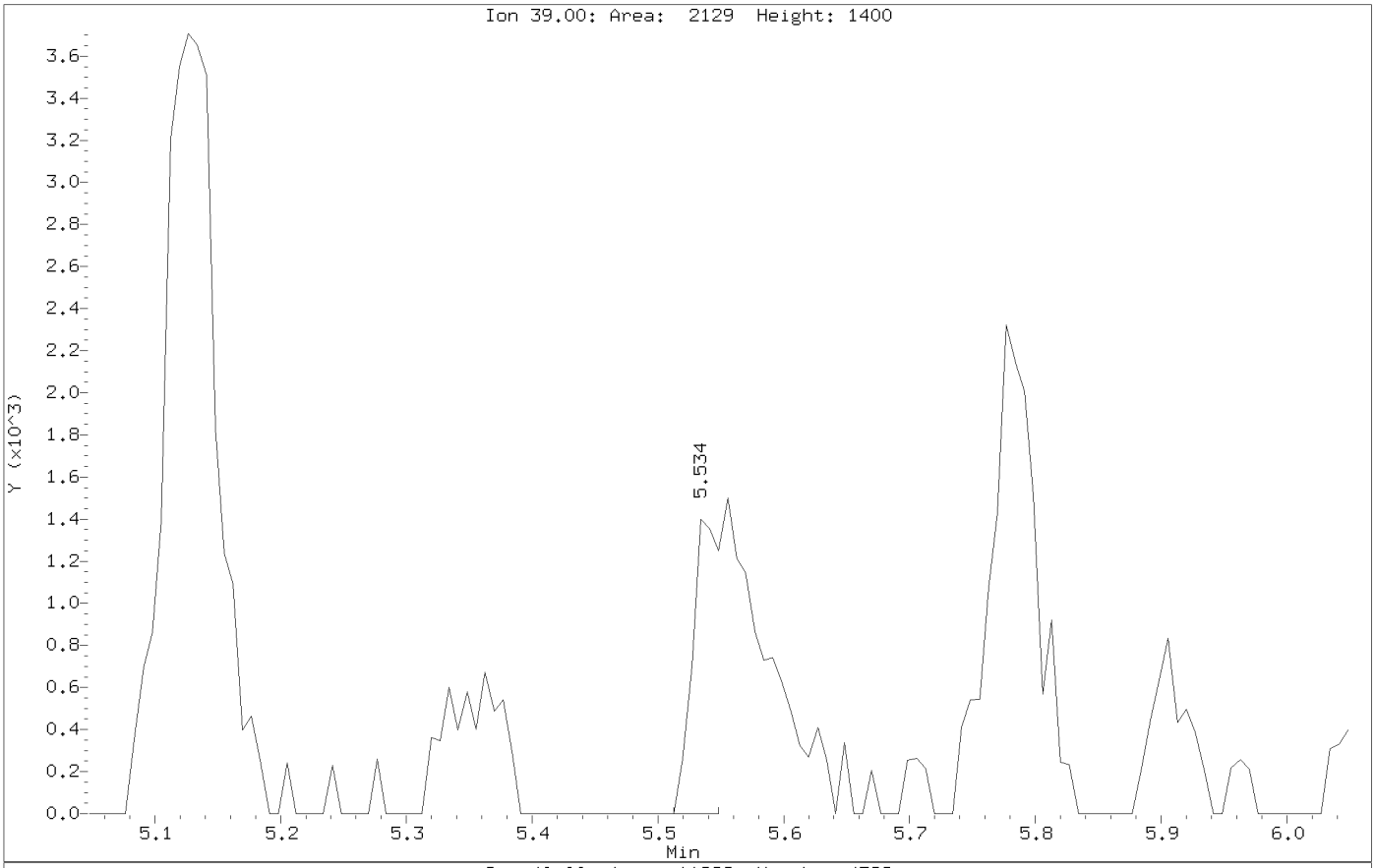


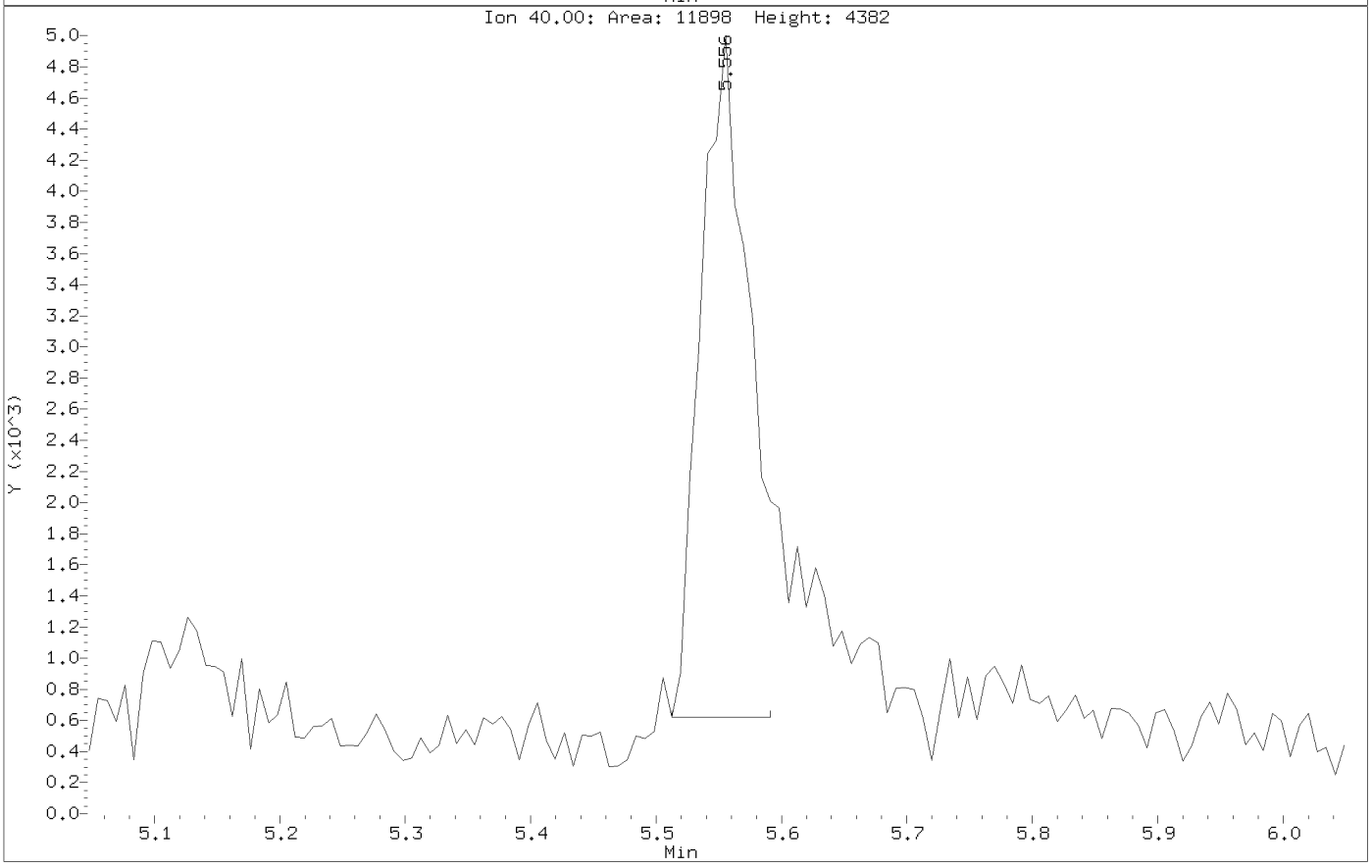


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Injection Date: 08-APR-2015 12:31
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8

BEFORE MANUAL INTEGRATION

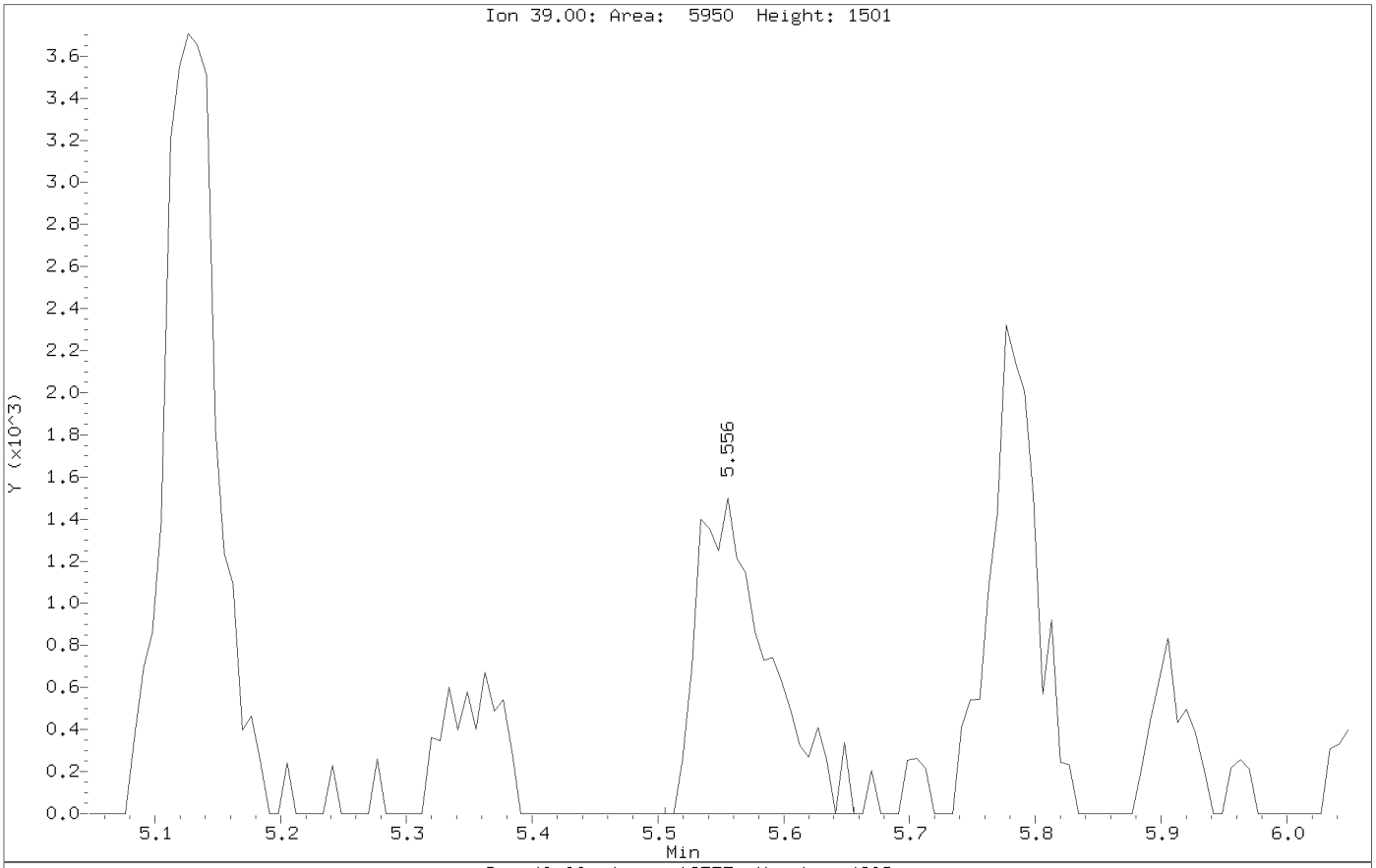


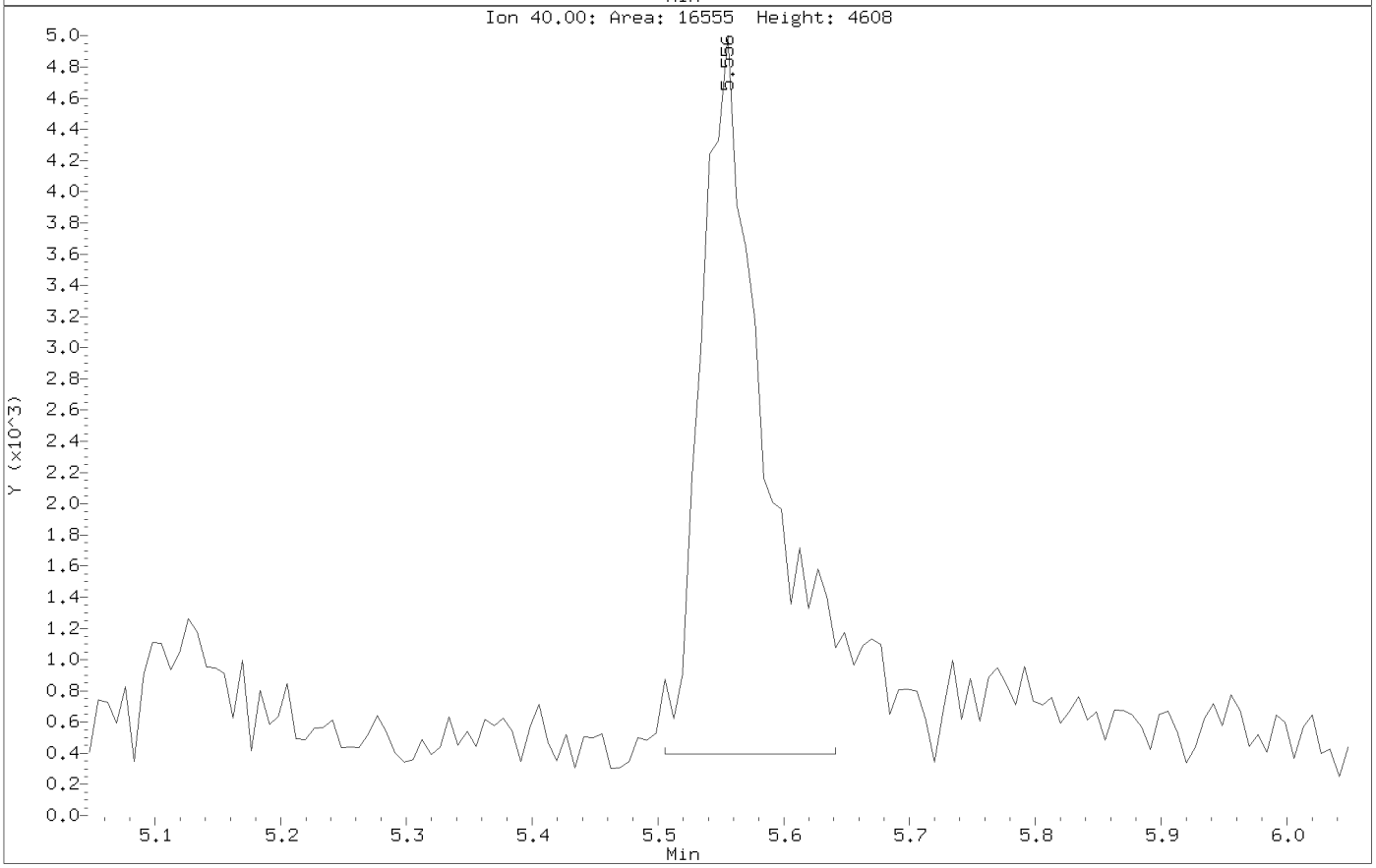


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2178.D
Injection Date: 08-APR-2015 12:31
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetonitrile
CAS Number: 75-05-8

AFTER MANUAL INTEGRATION

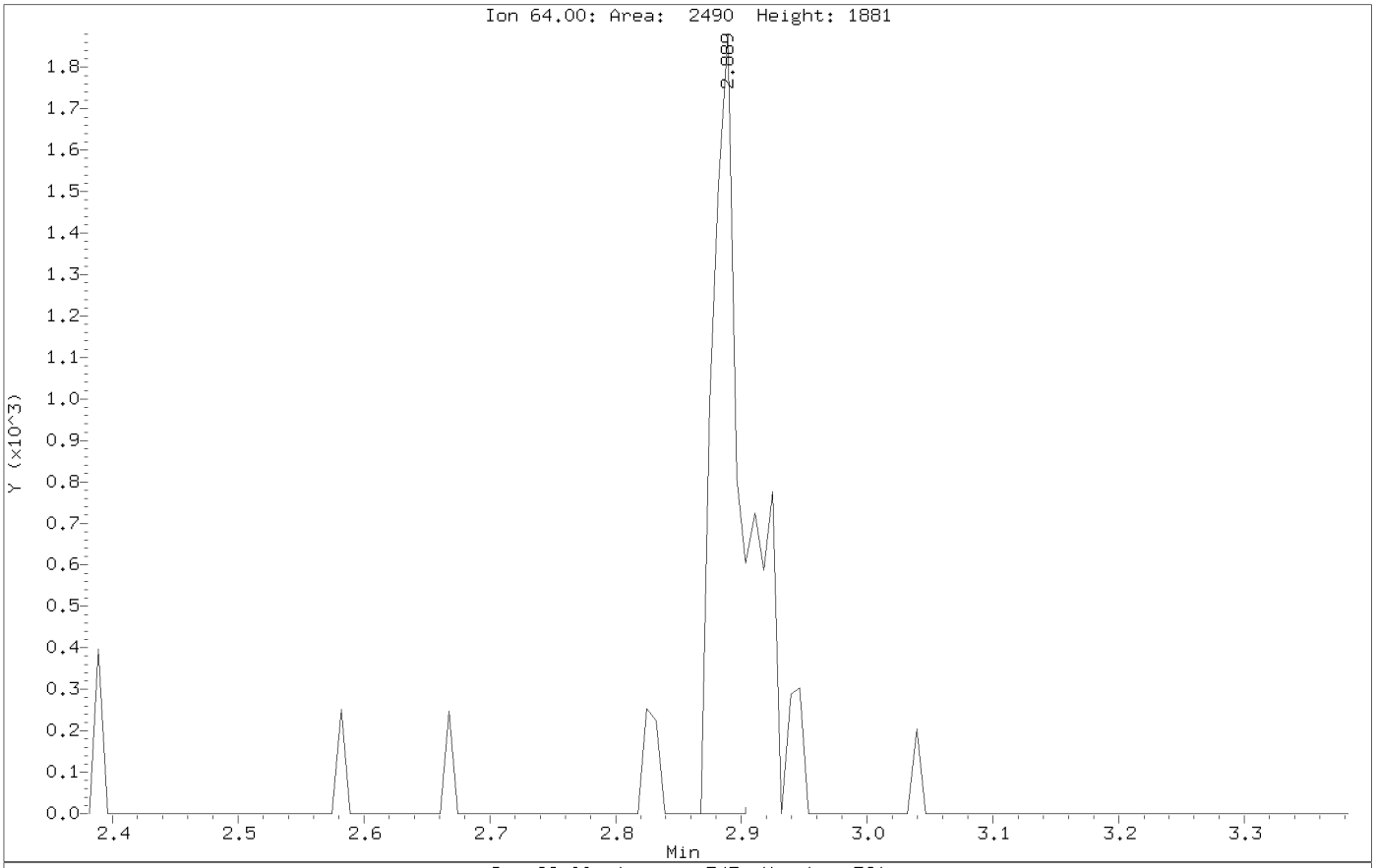


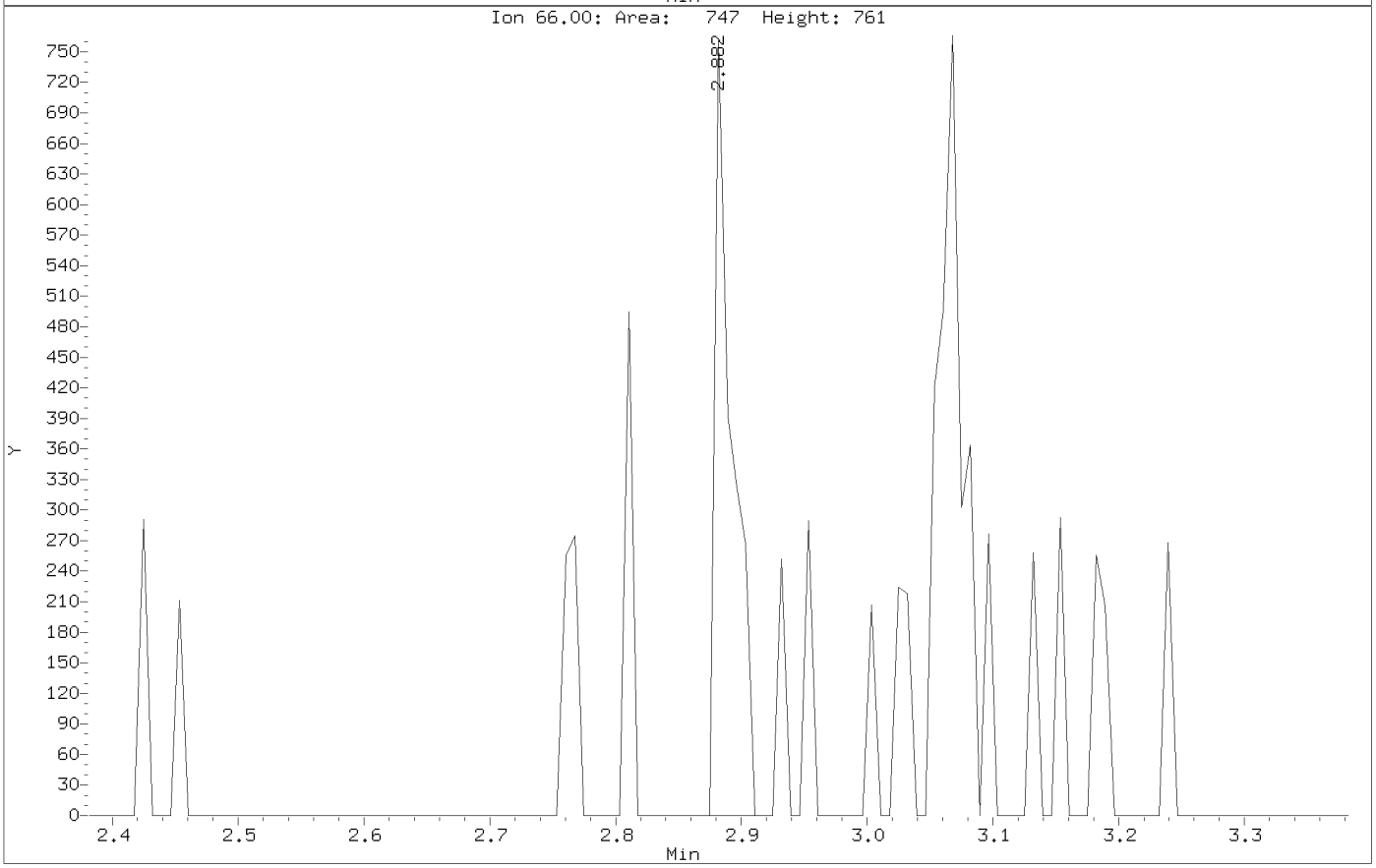


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Chloroethane
CAS Number: 75-00-3

BEFORE MANUAL INTEGRATION

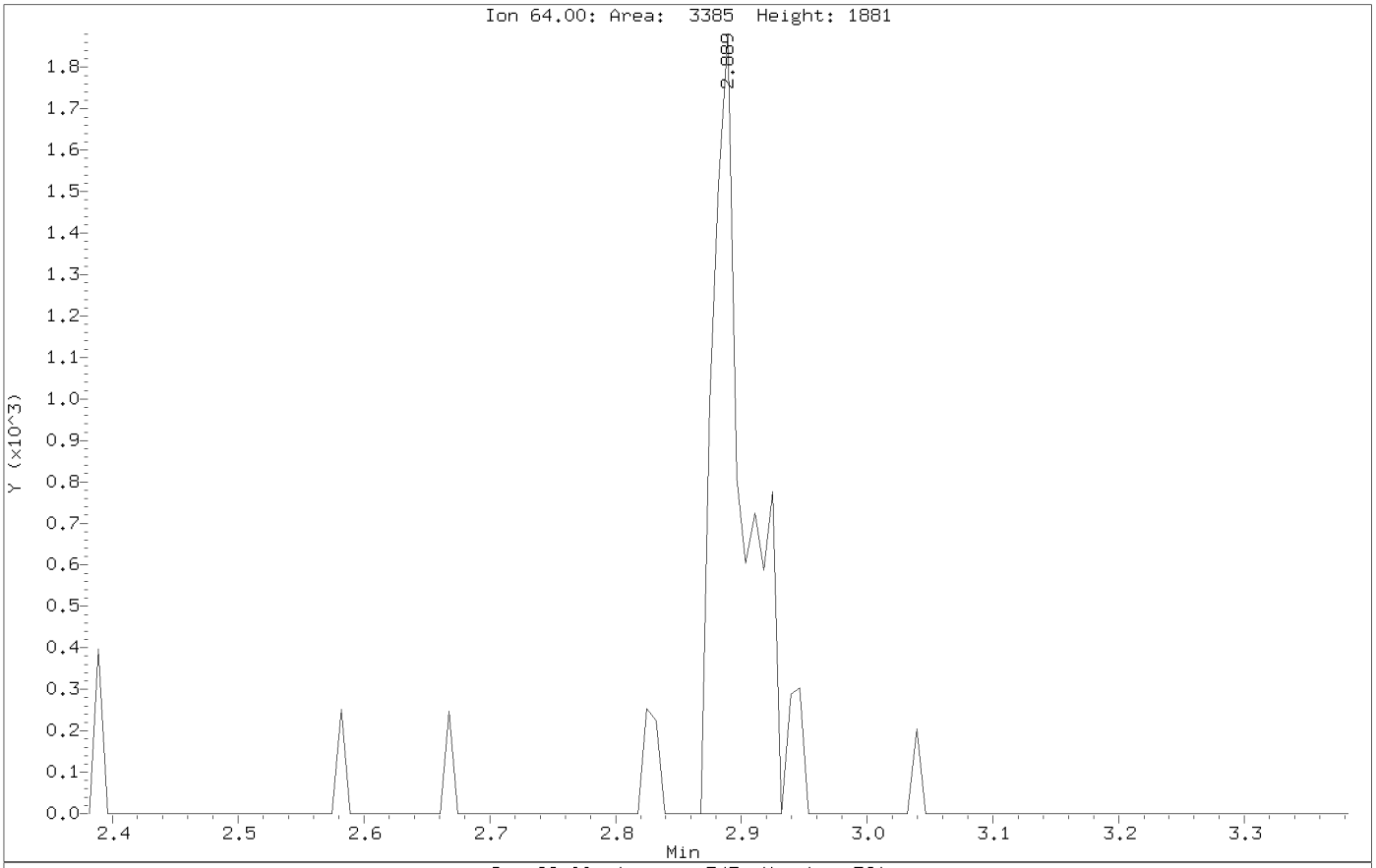


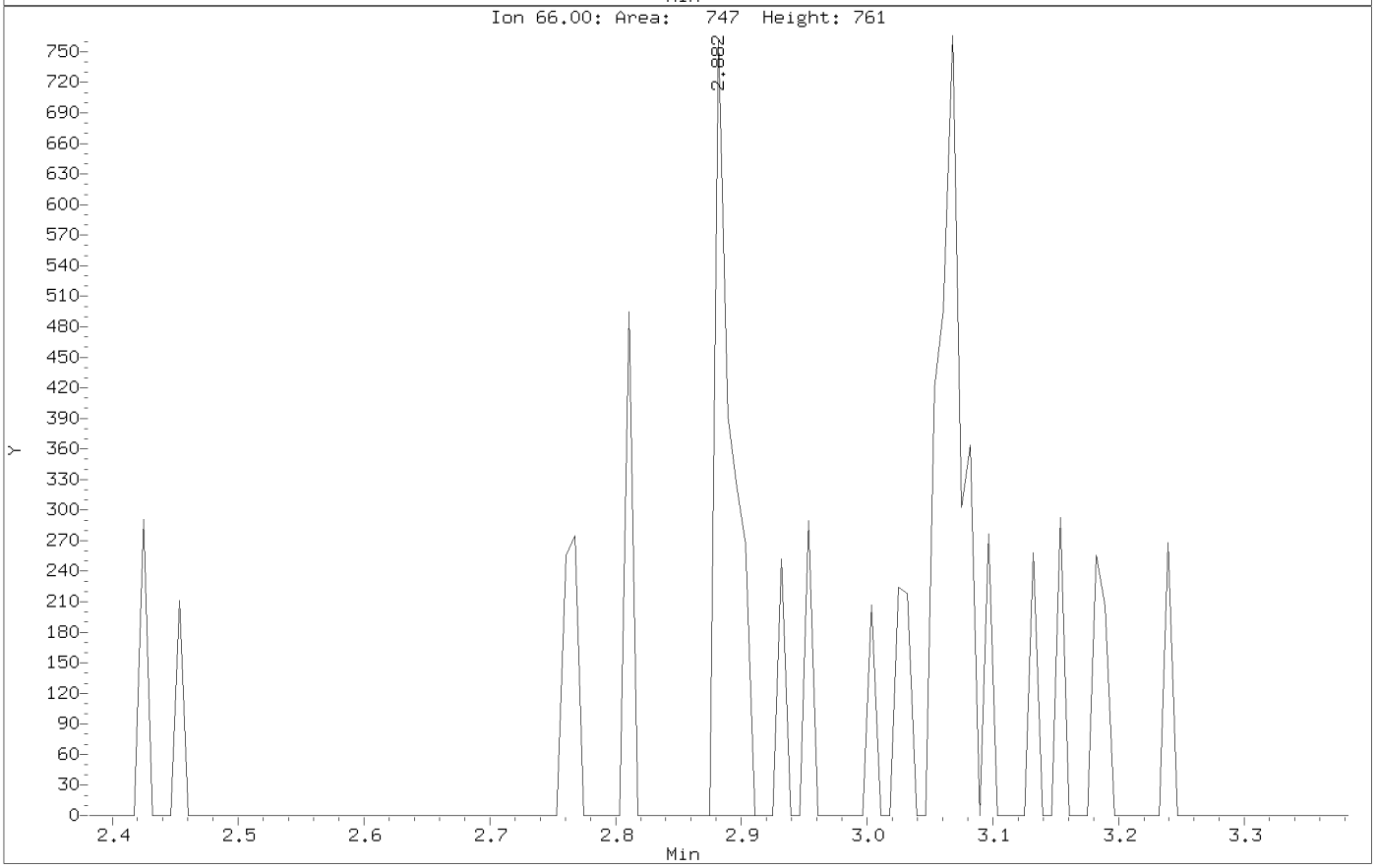


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Chloroethane
CAS Number: 75-00-3

AFTER MANUAL INTEGRATION

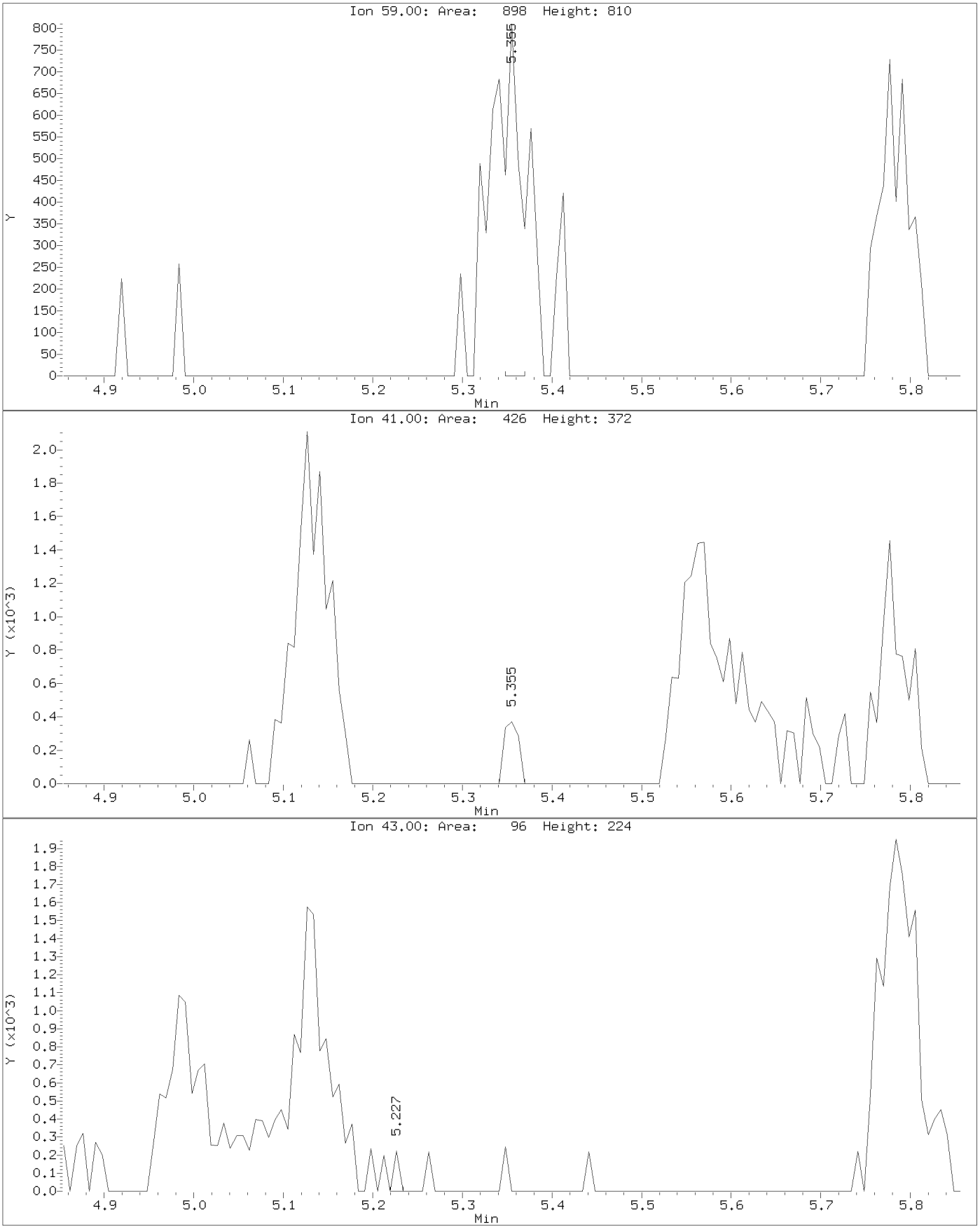




Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Tertiary-butyl alcohol
CAS Number: 75-65-0

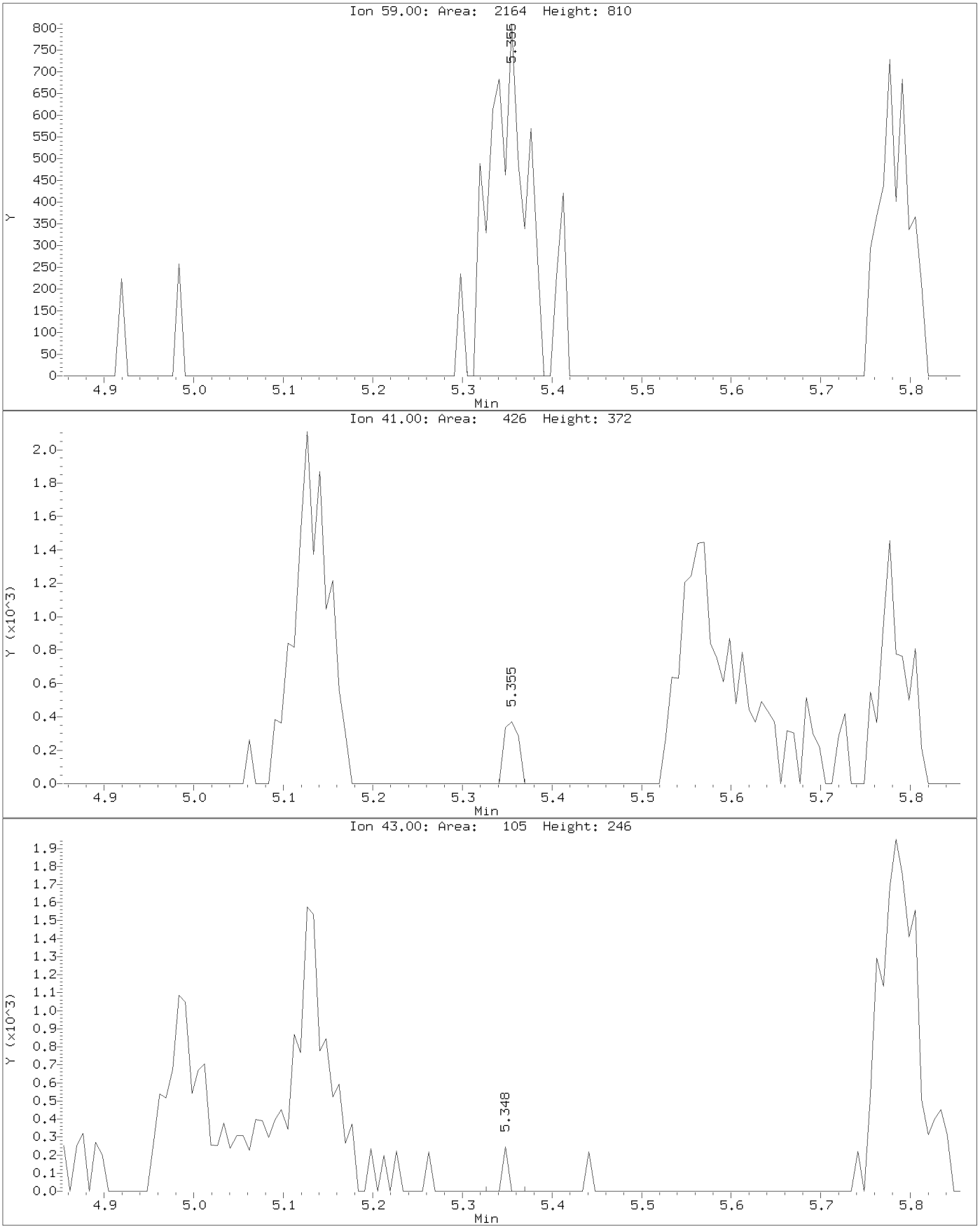
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Tertiary-butyl alcohol
CAS Number: 75-65-0

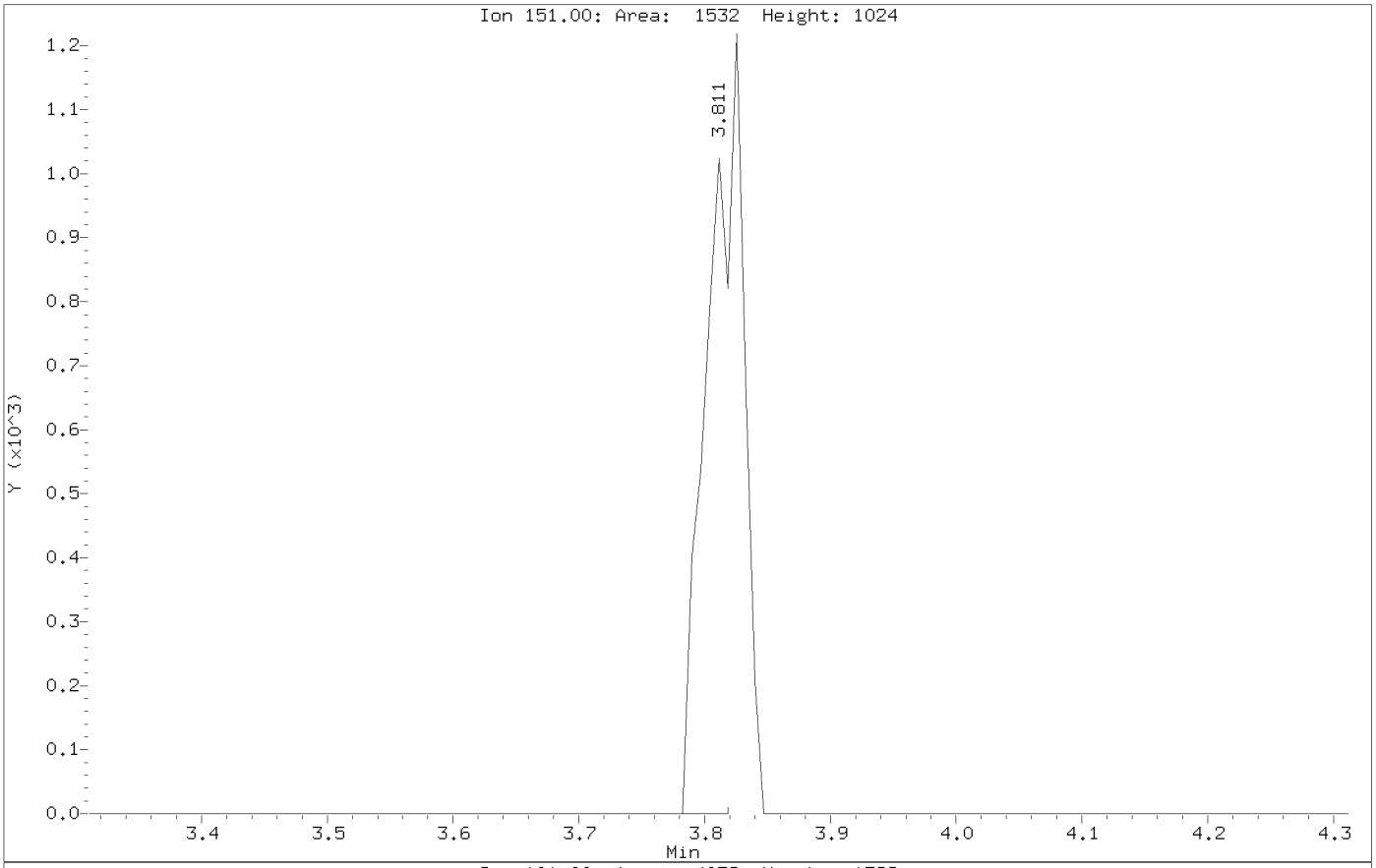
AFTER MANUAL INTEGRATION

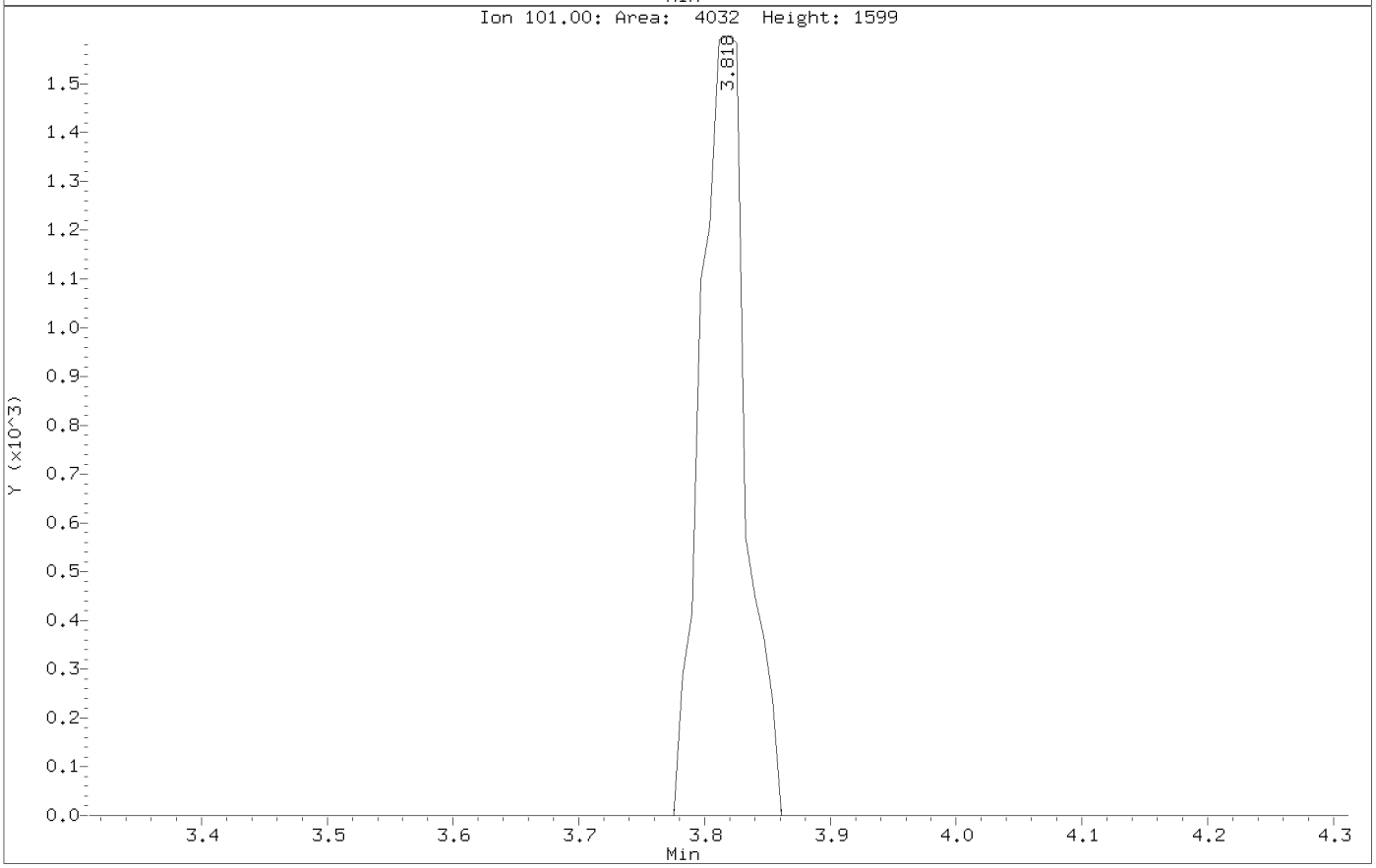


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Freon-113
CAS Number: 76-13-1

BEFORE MANUAL INTEGRATION

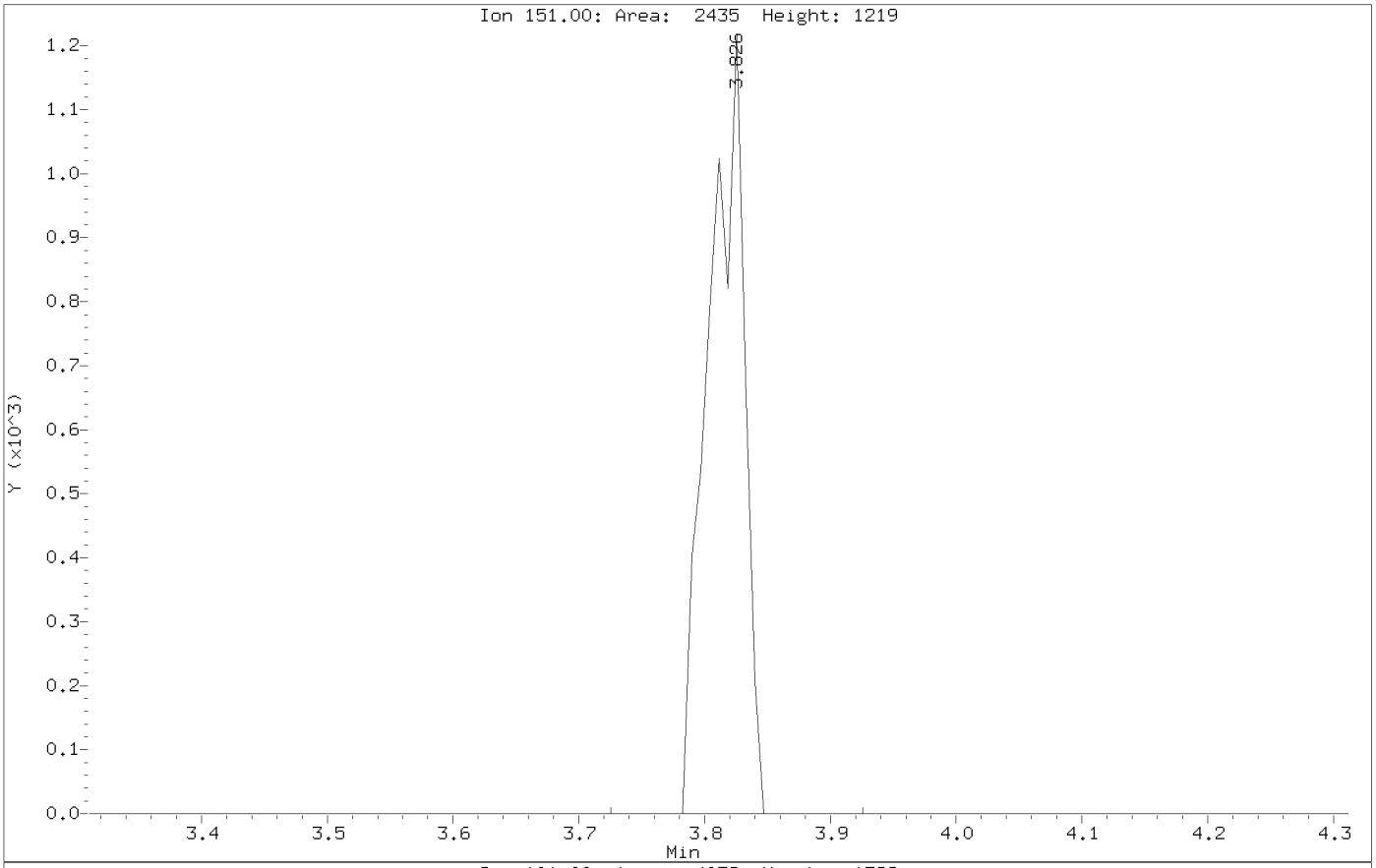


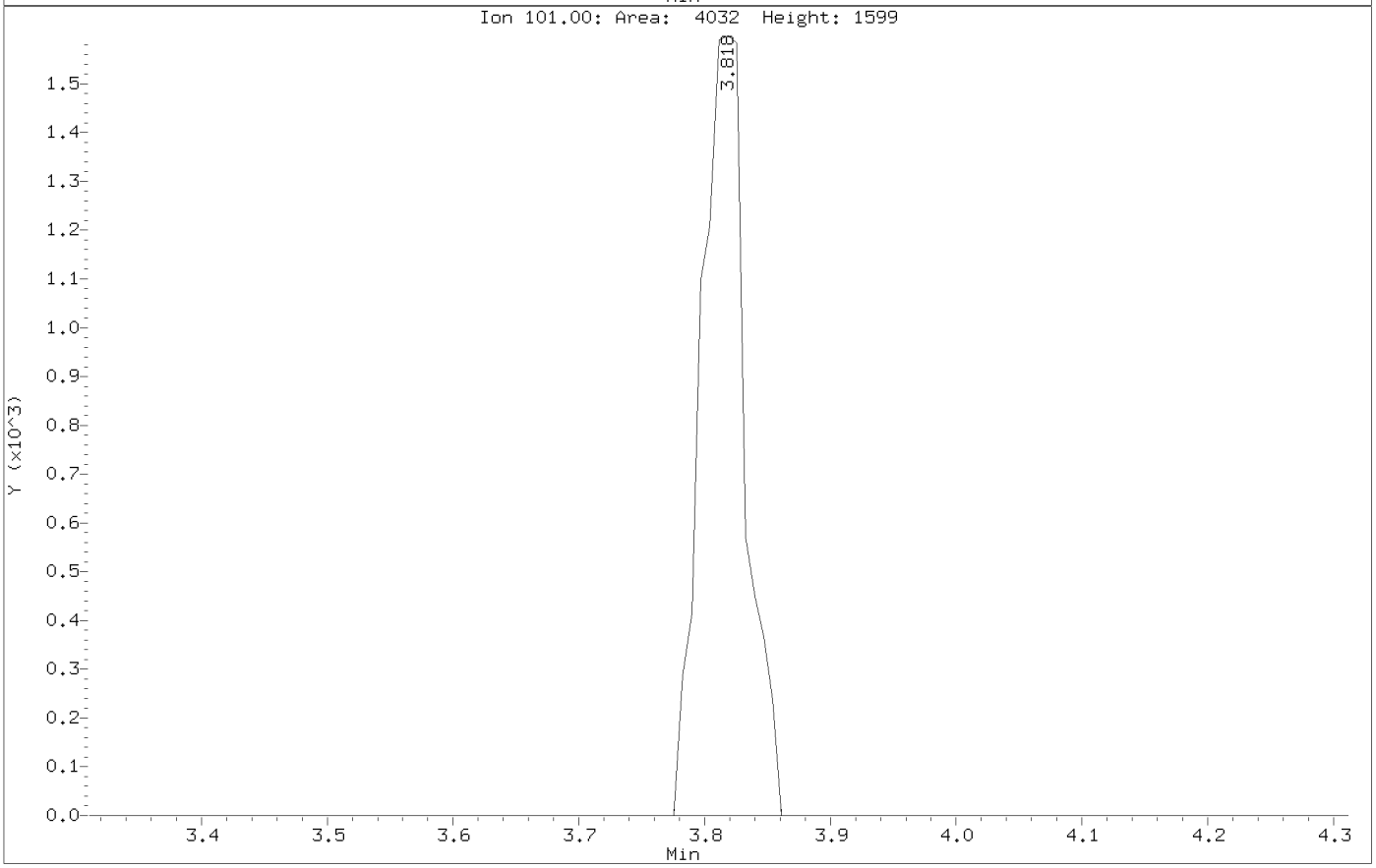


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Freon-113
CAS Number: 76-13-1

AFTER MANUAL INTEGRATION

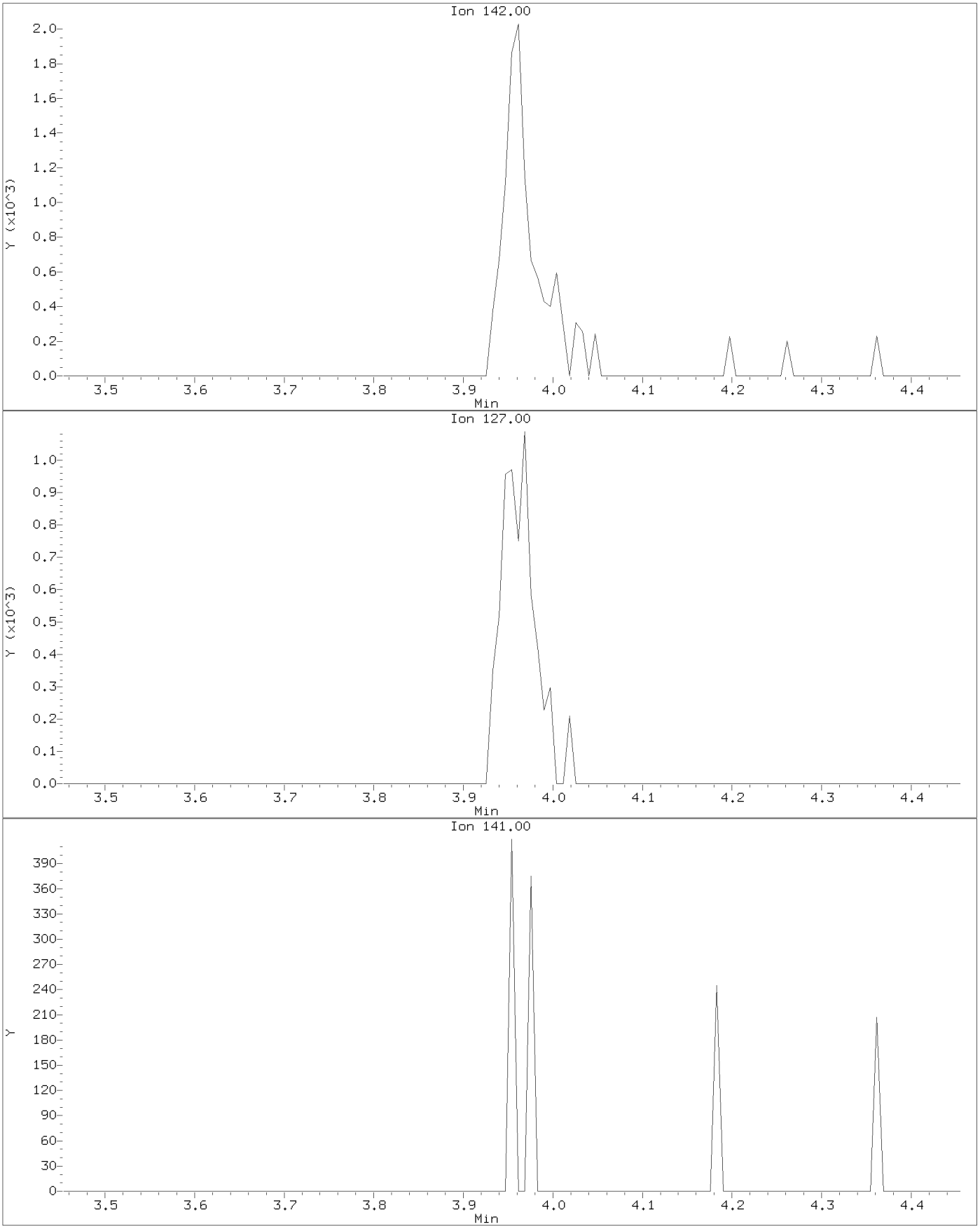




Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Iodomethane
CAS Number: 74-88-4

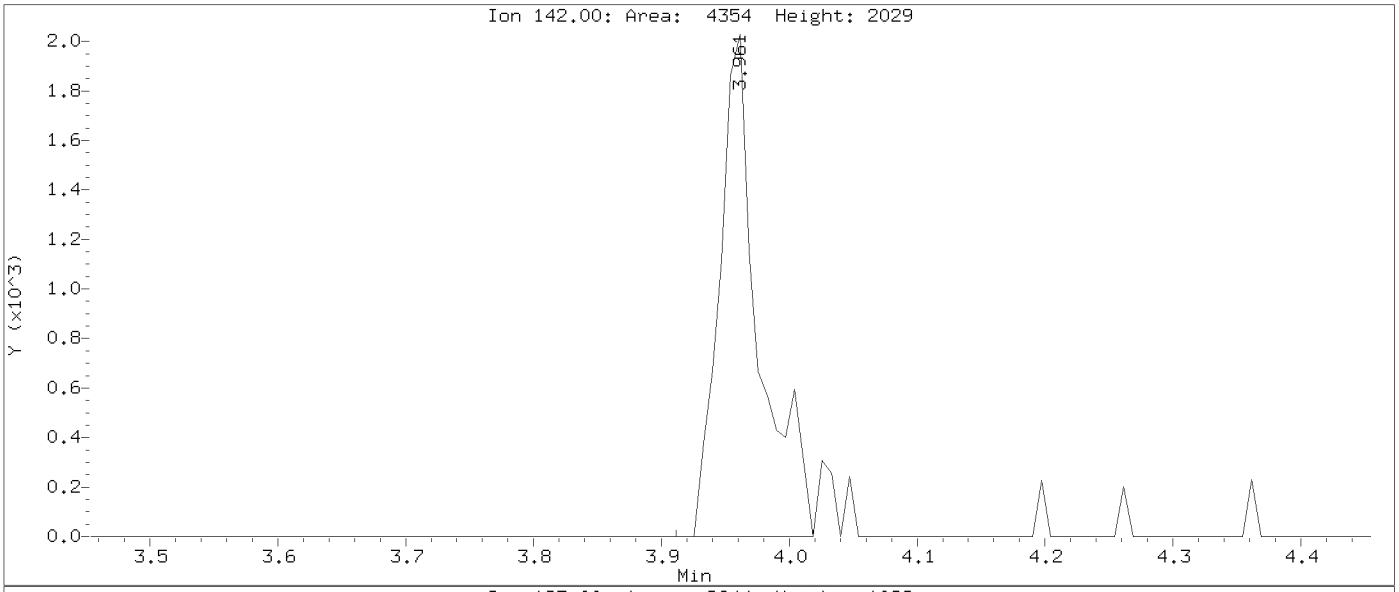
BEFORE MANUAL INTEGRATION

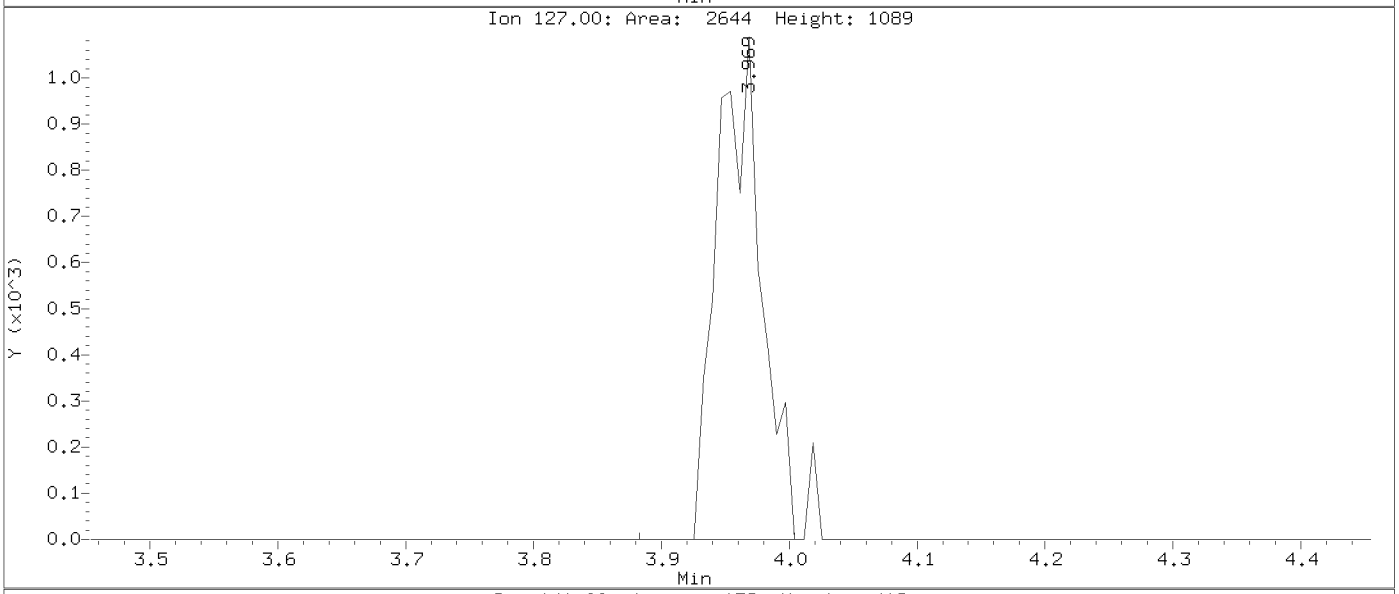


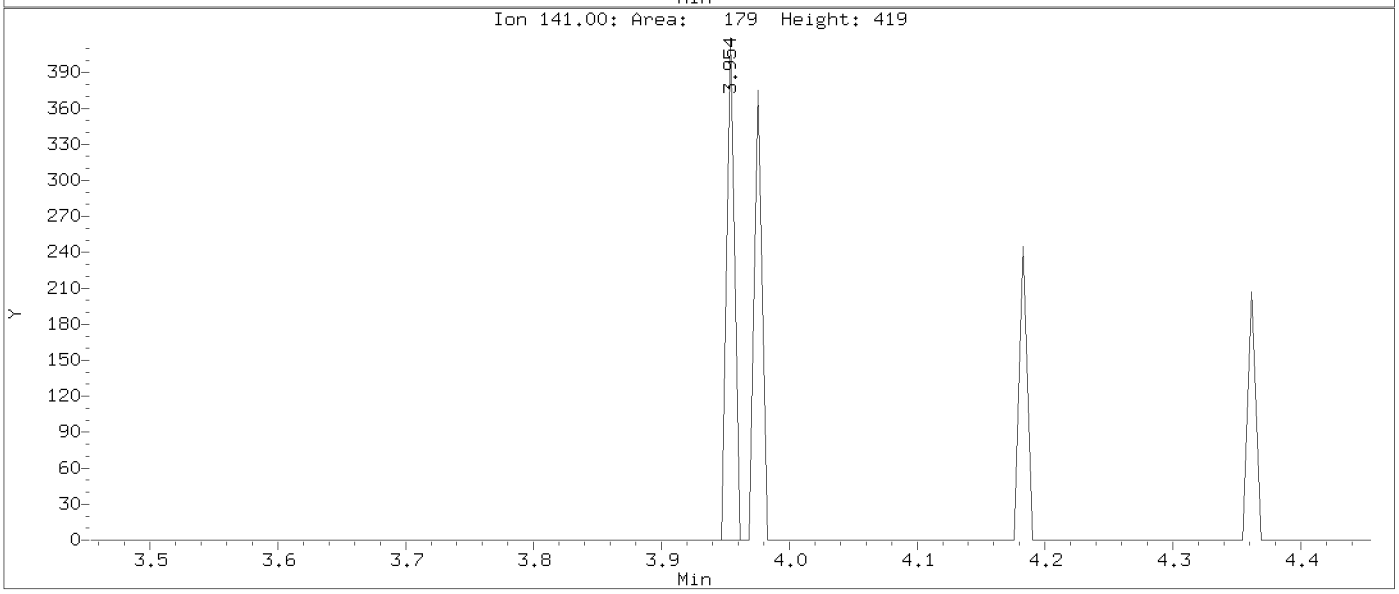
Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Iodomethane
CAS Number: 74-88-4

AFTER MANUAL INTEGRATION



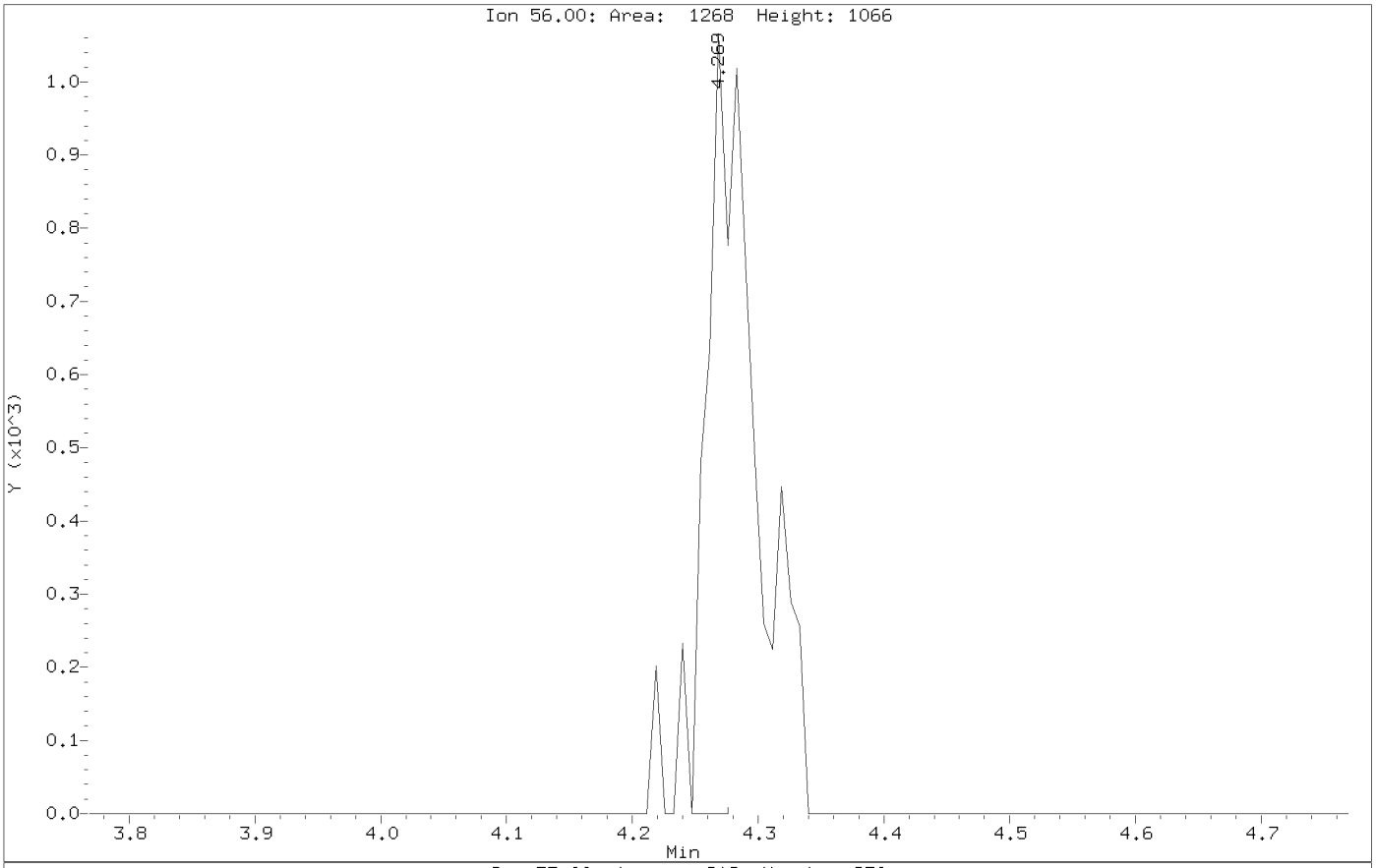


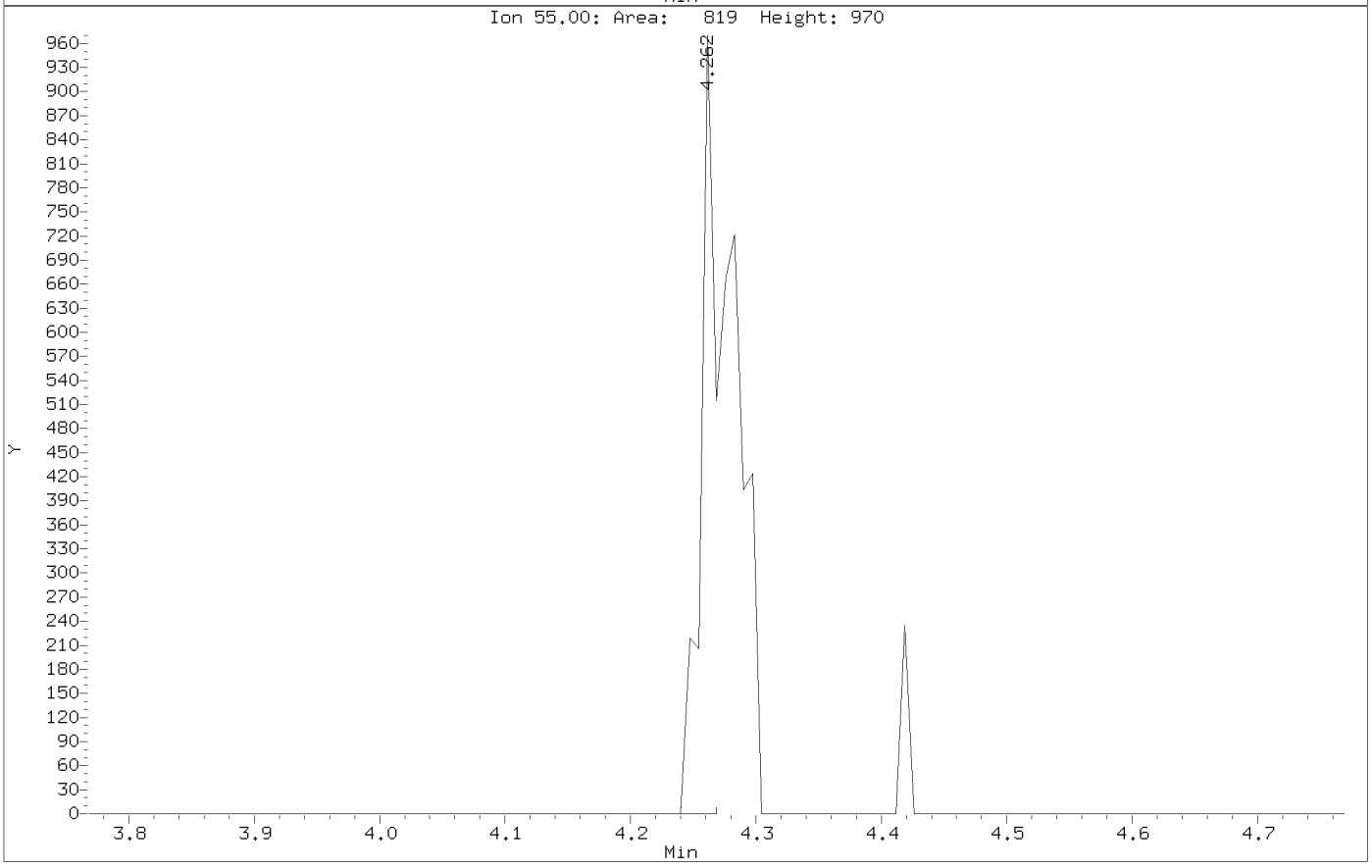


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Acrolein
CAS Number: 107-02-8

BEFORE MANUAL INTEGRATION

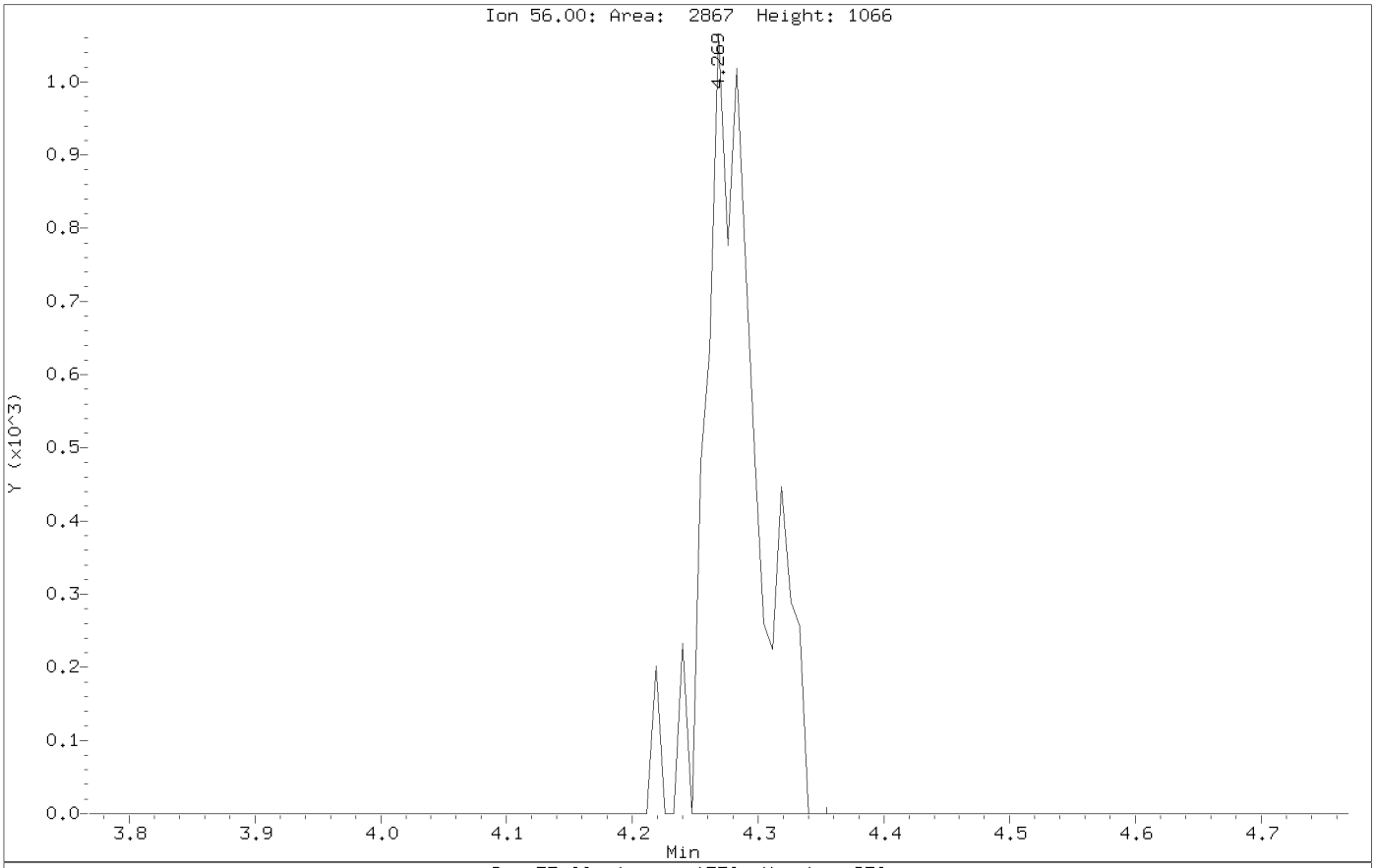


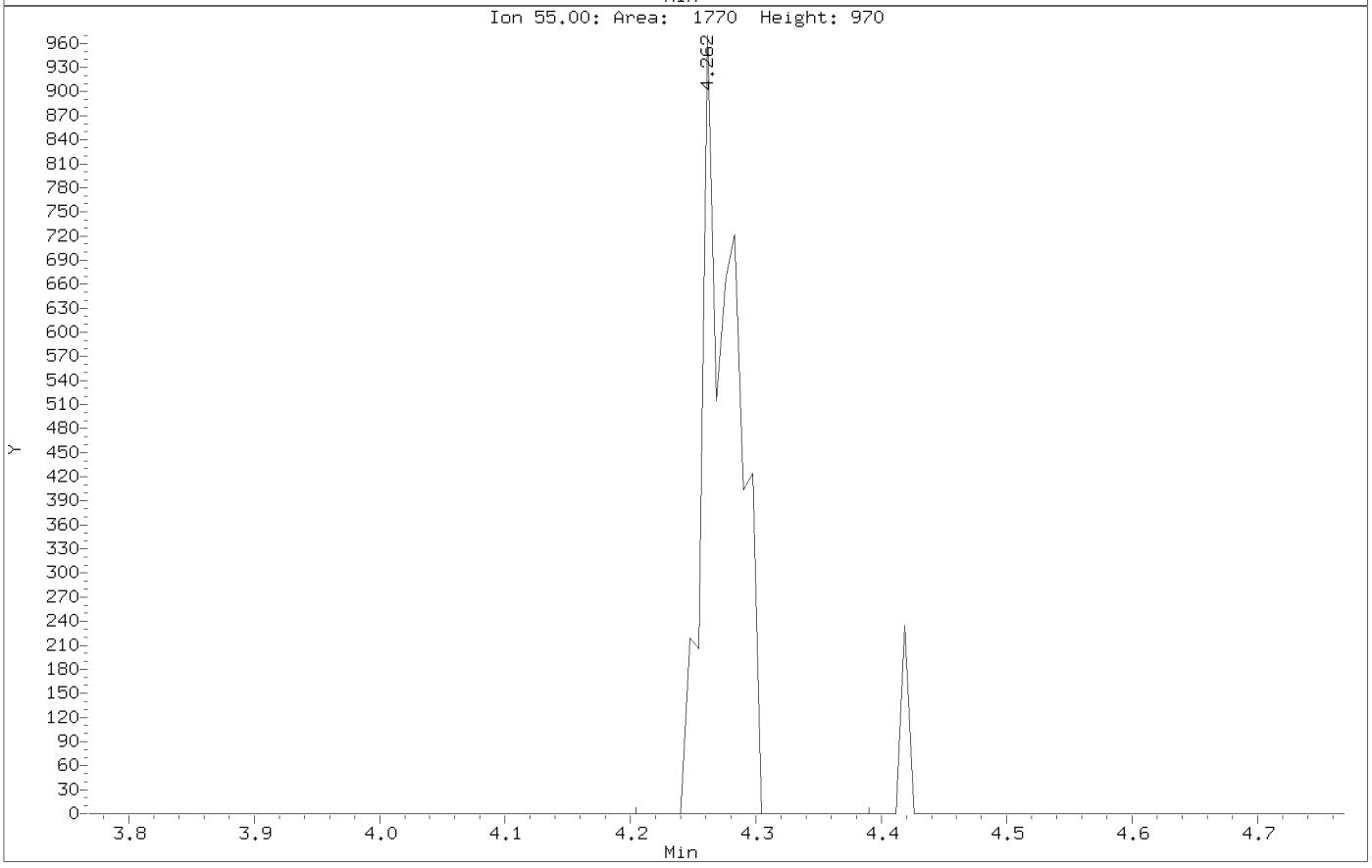


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Acrolein
CAS Number: 107-02-8

AFTER MANUAL INTEGRATION

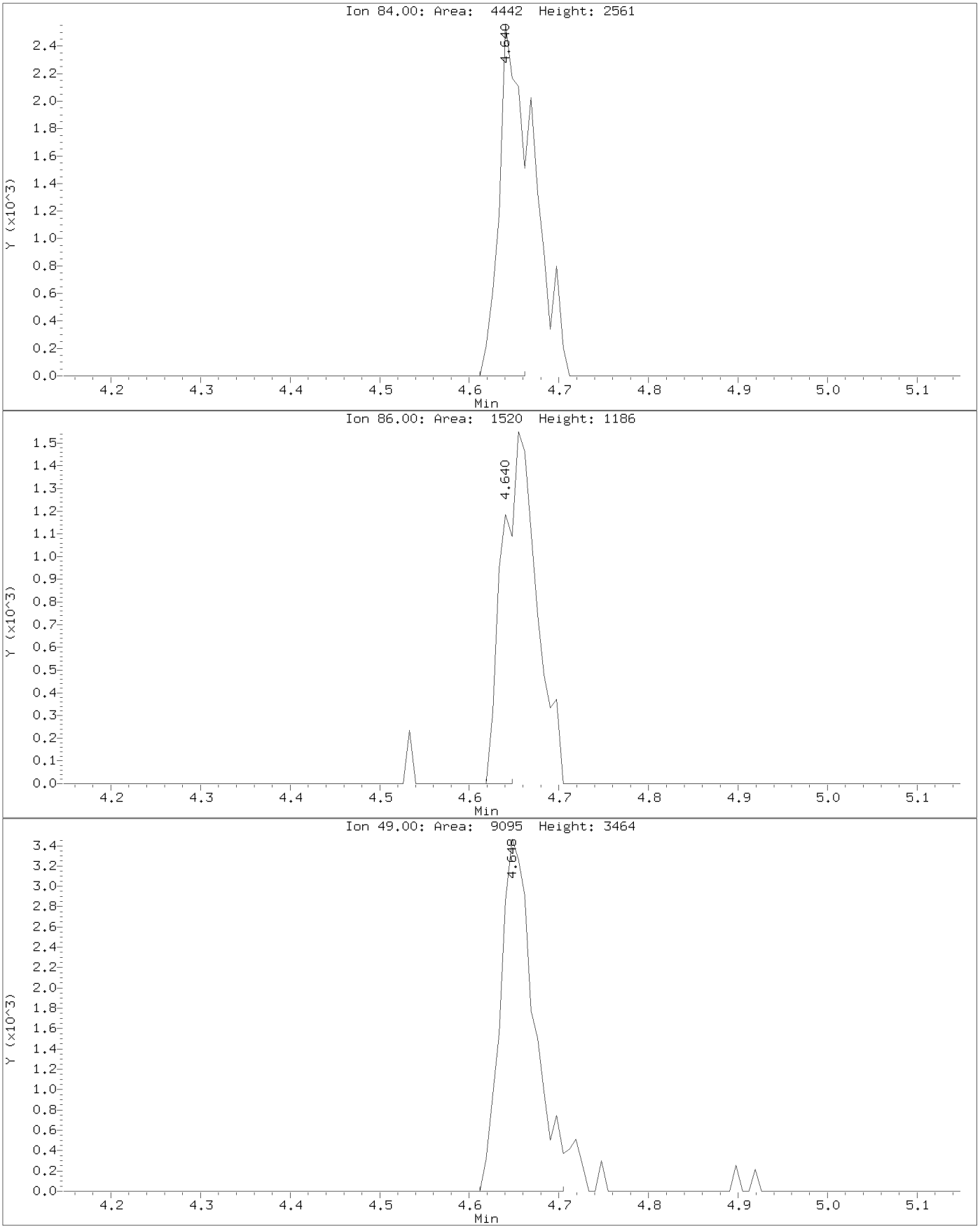




Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Methylene Chloride
CAS Number: 75-09-2

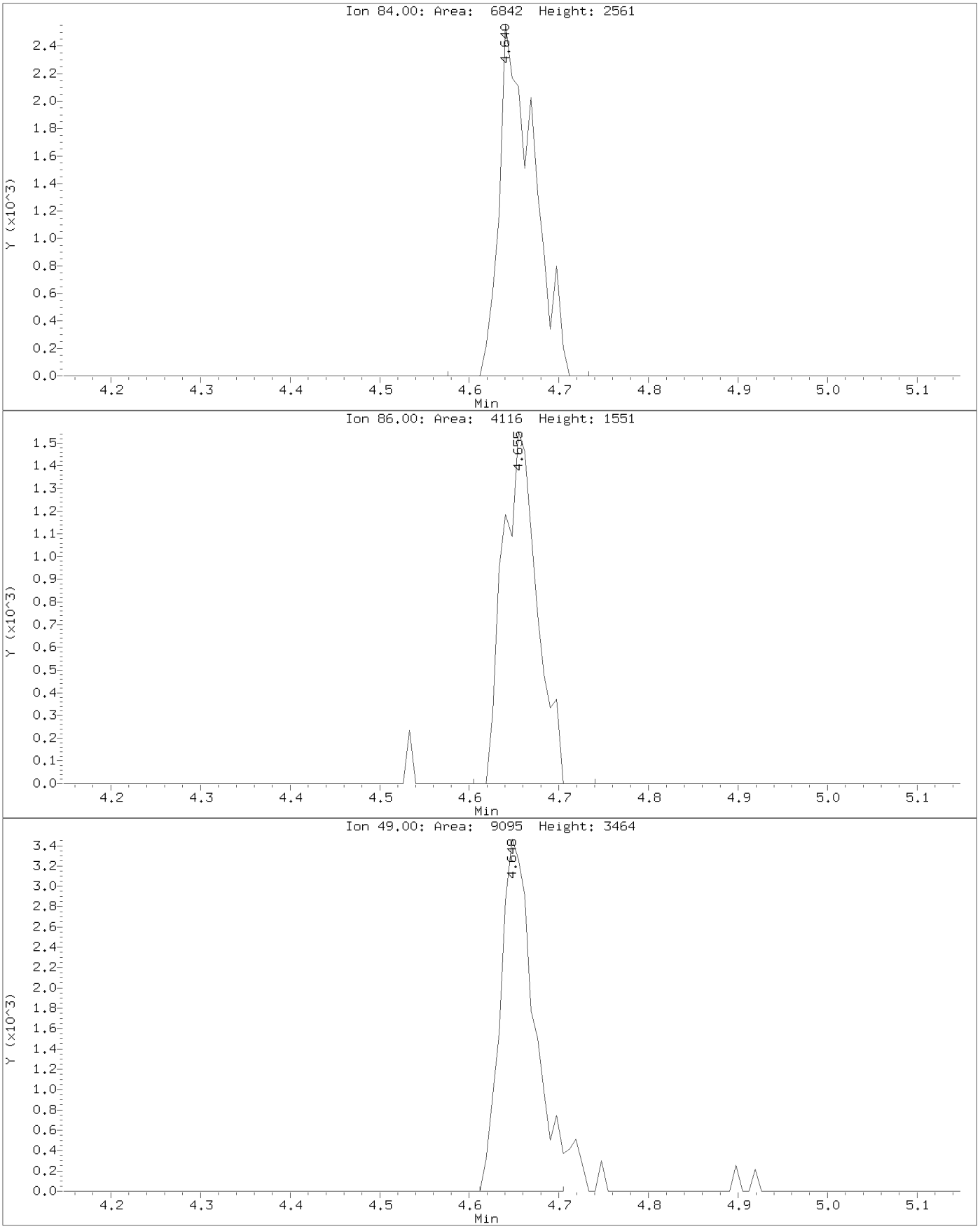
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Methylene Chloride
CAS Number: 75-09-2

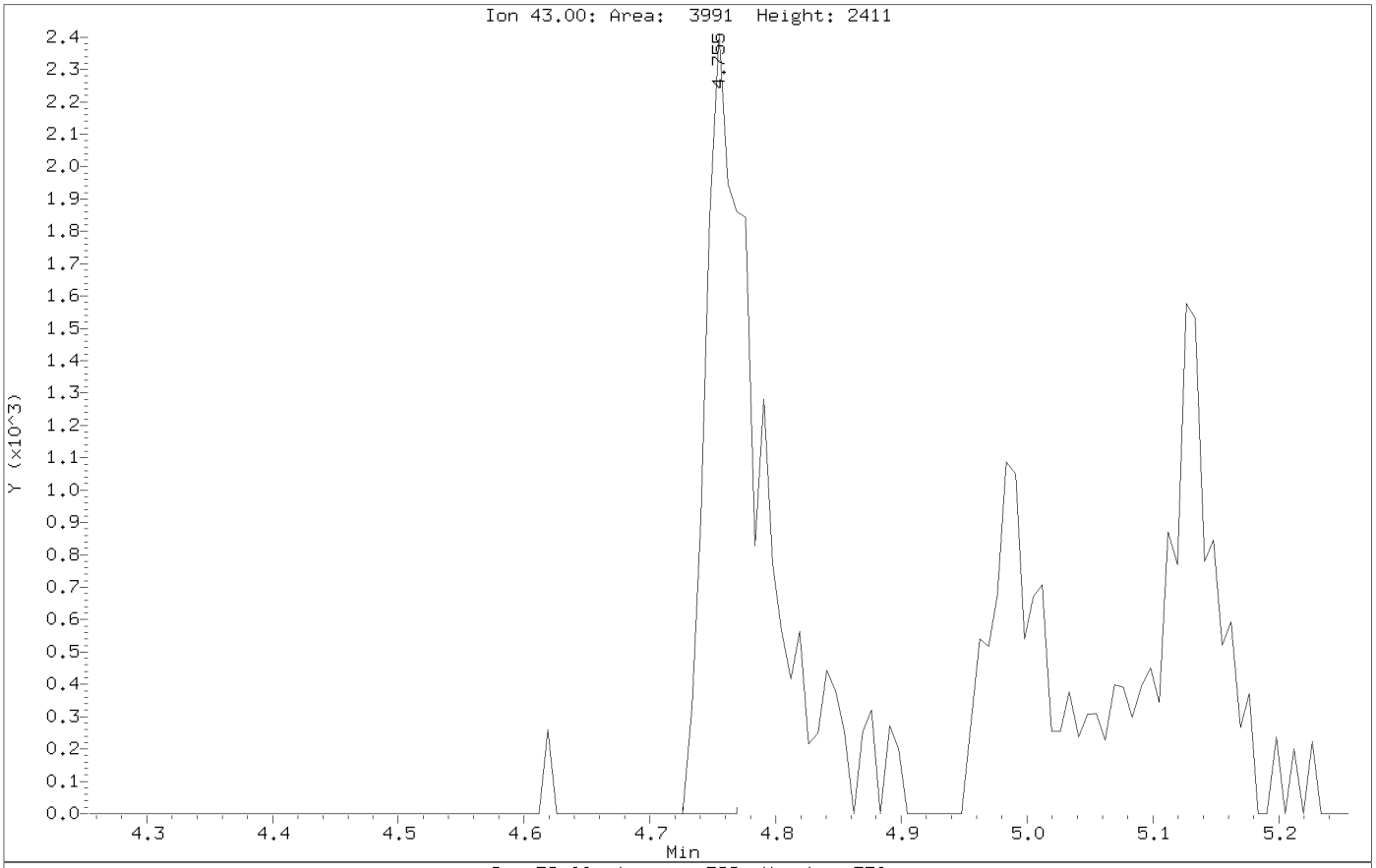
AFTER MANUAL INTEGRATION

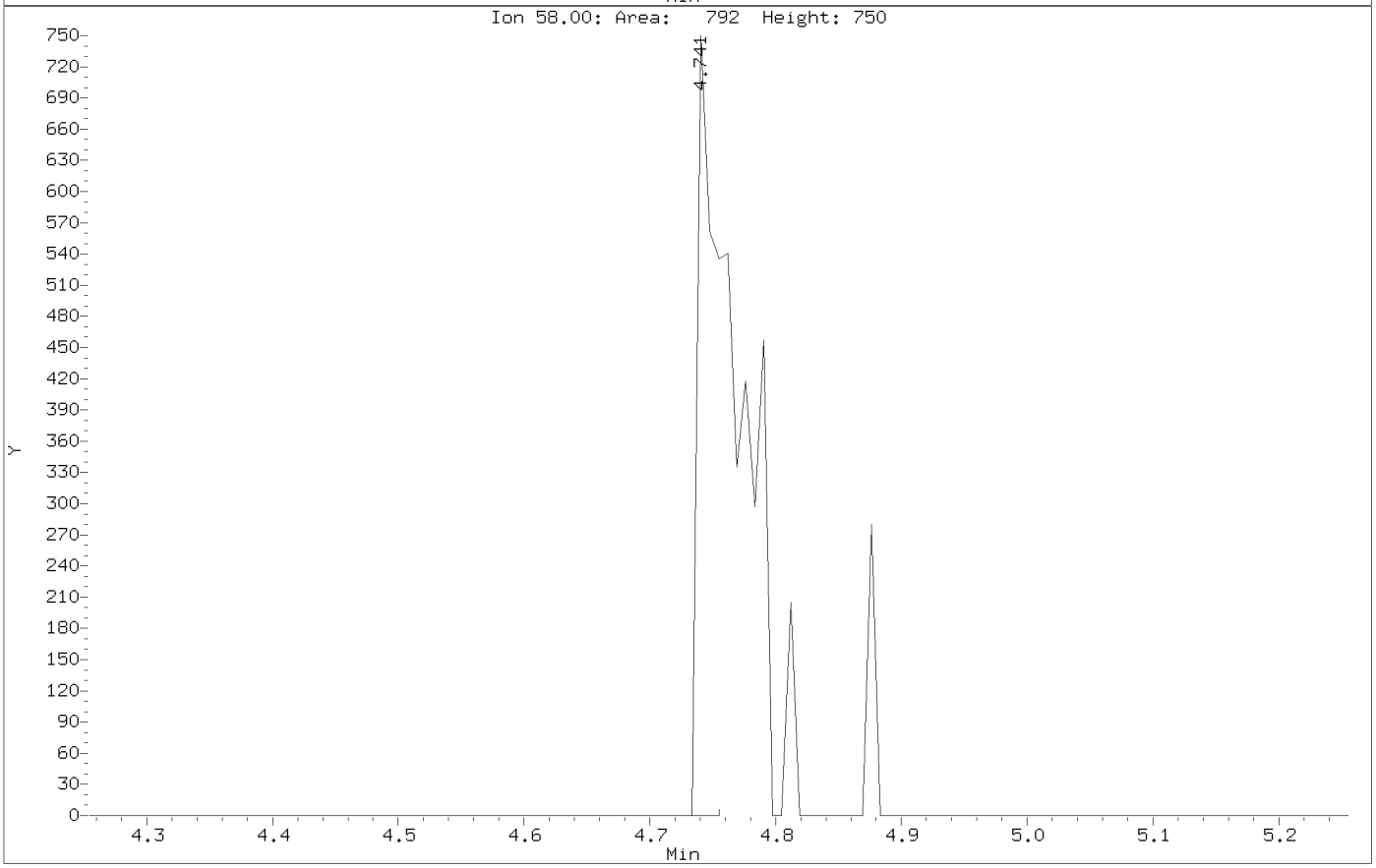


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetone
CAS Number: 67-64-1

BEFORE MANUAL INTEGRATION

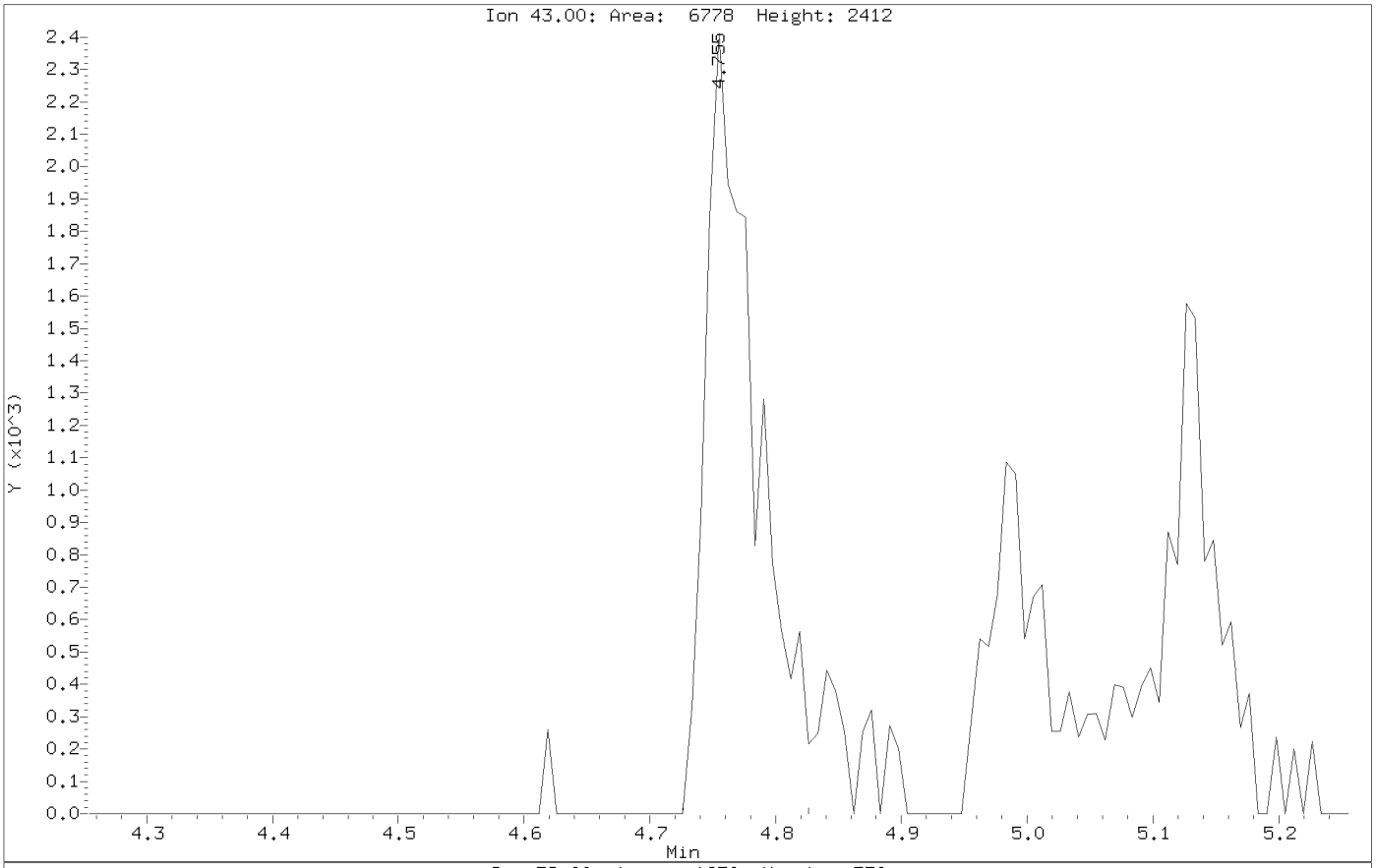


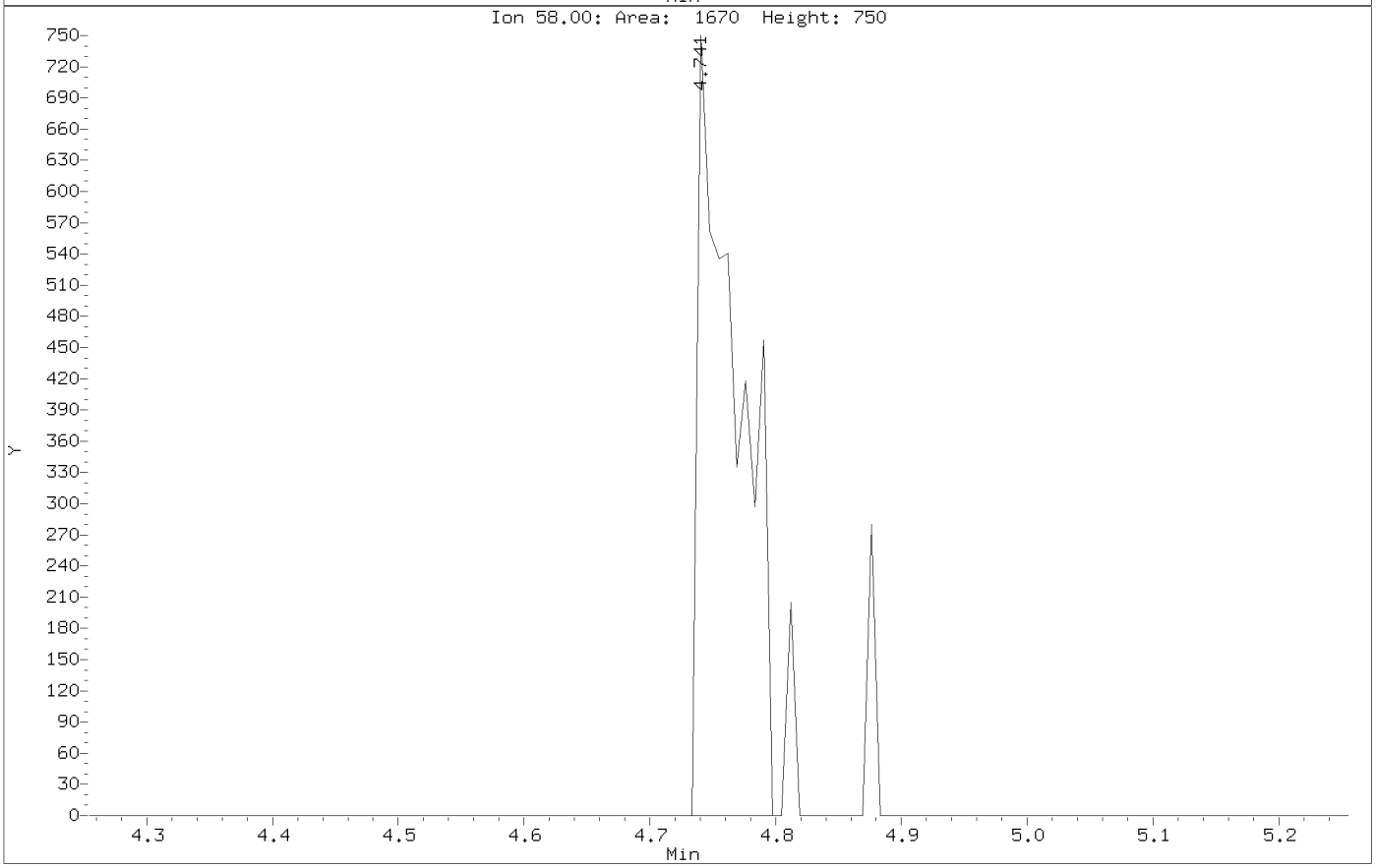


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Acetone
CAS Number: 67-64-1

AFTER MANUAL INTEGRATION

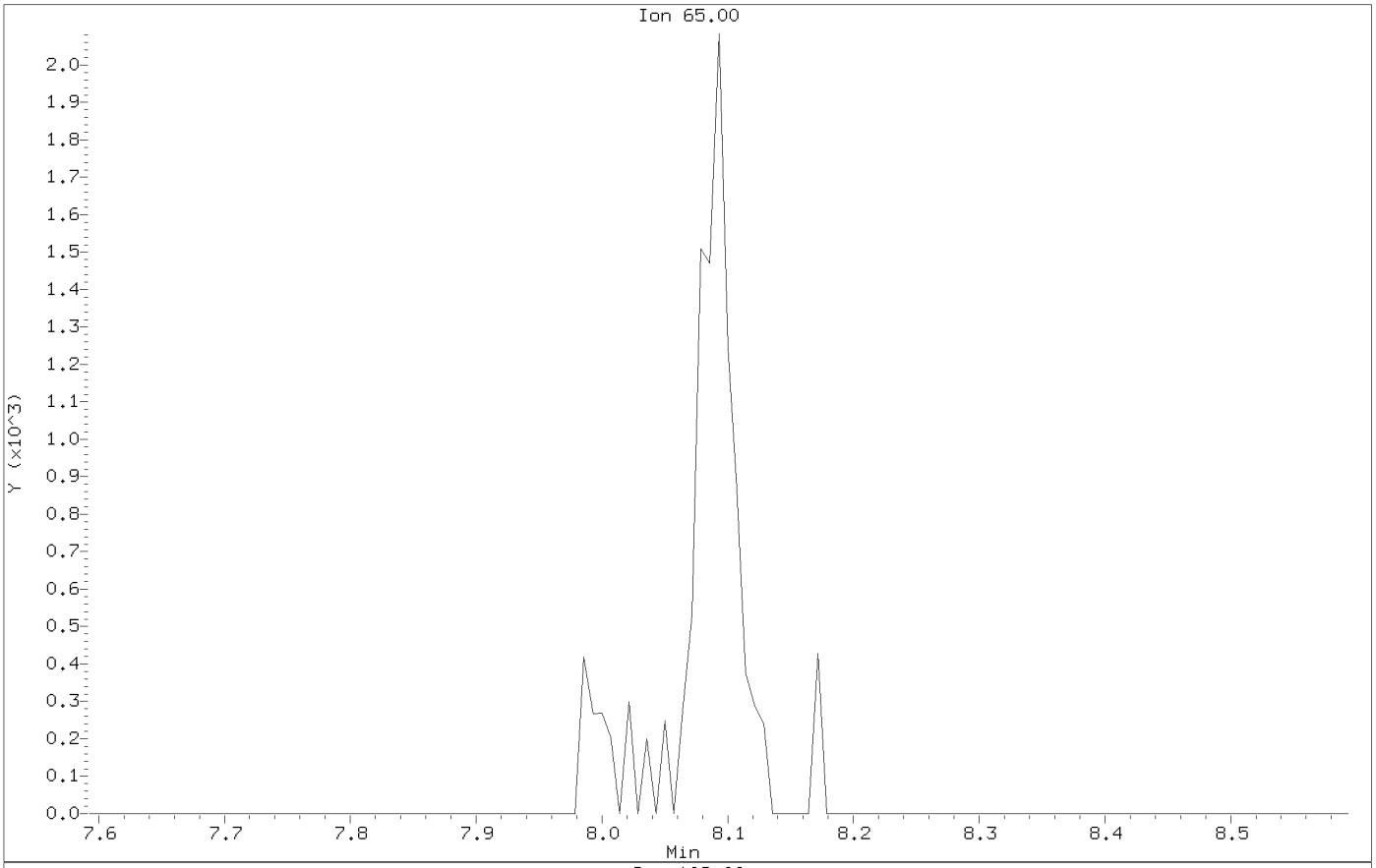


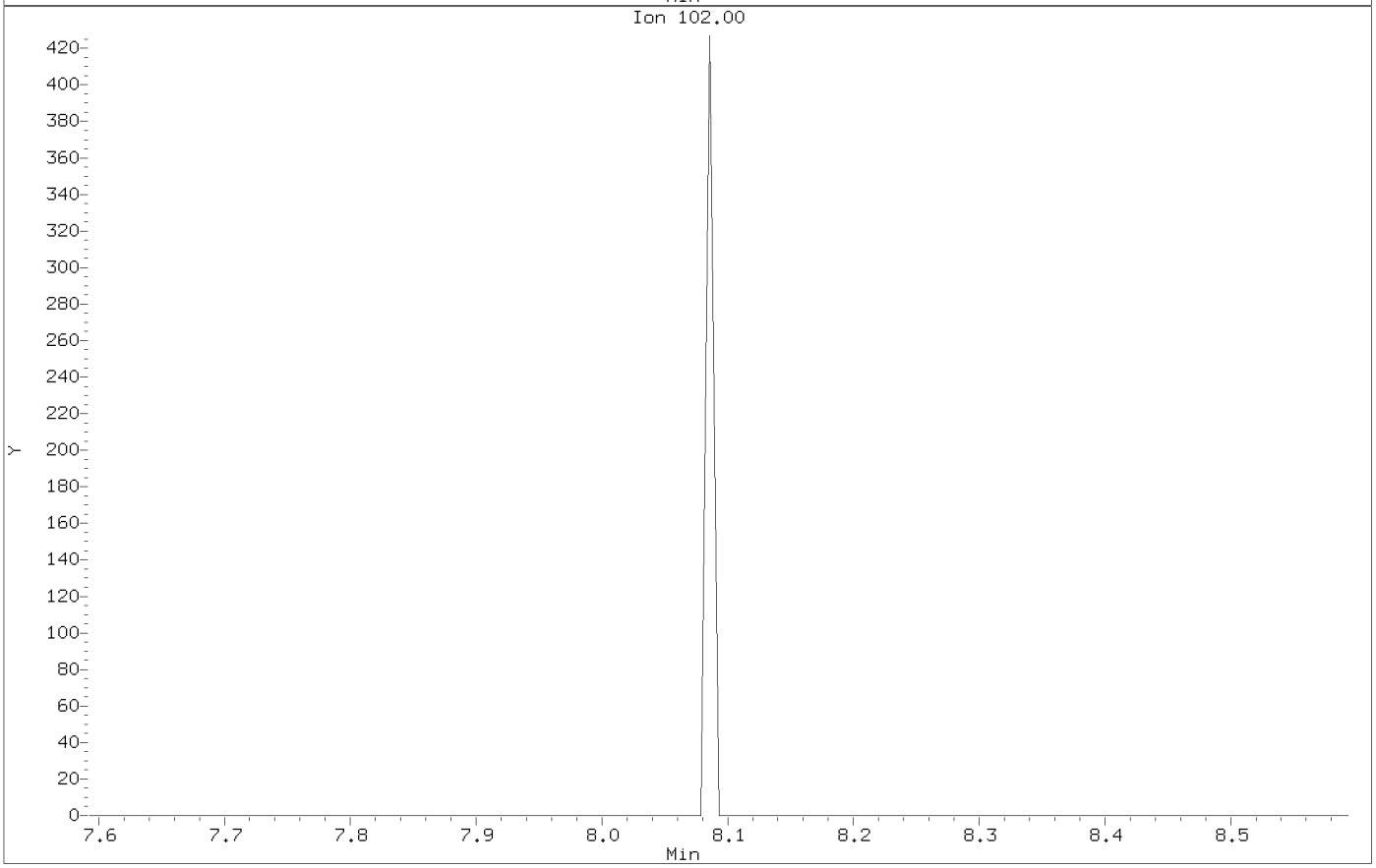


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dichloroethane-D4
CAS Number: 17060-07-0

BEFORE MANUAL INTEGRATION

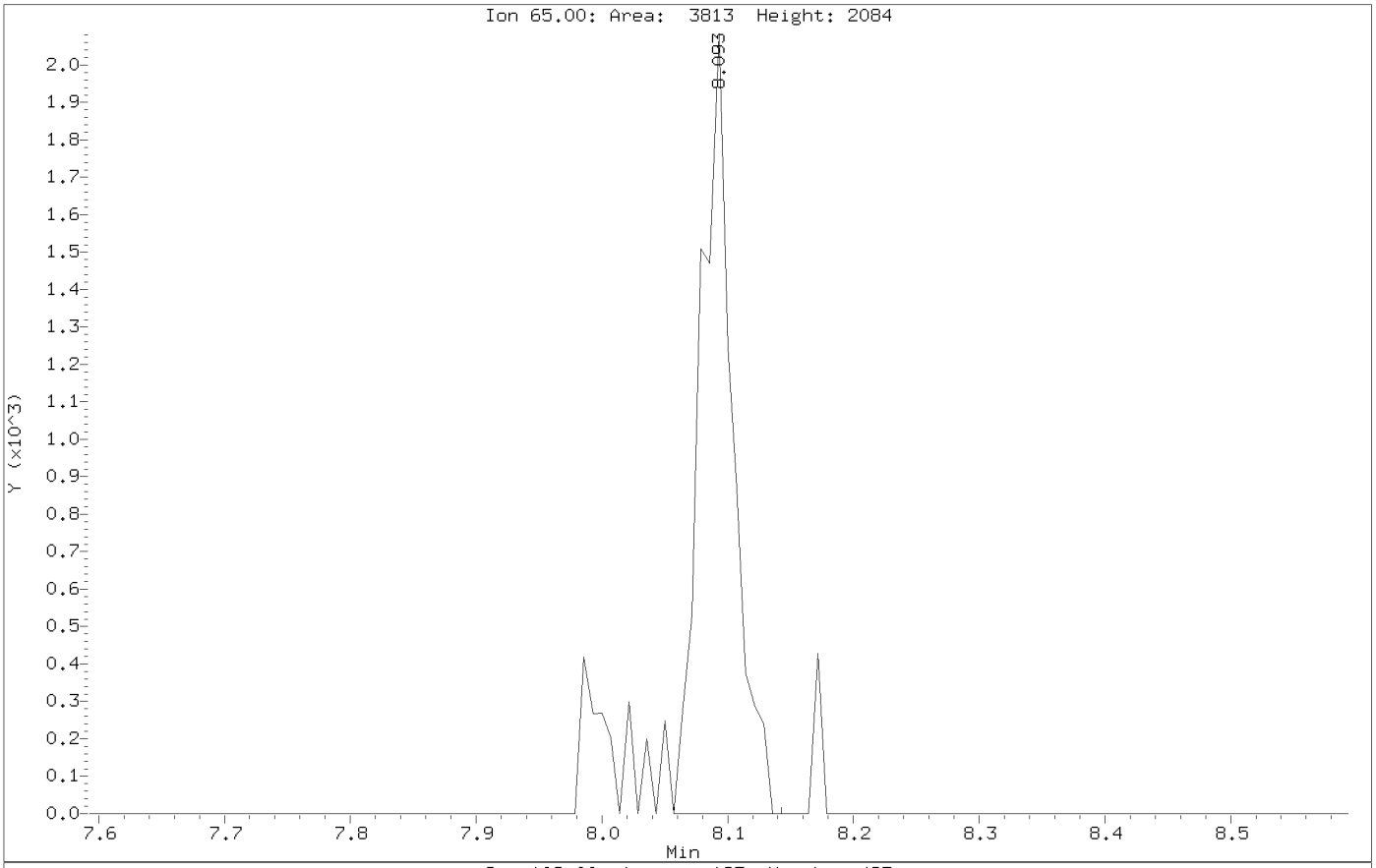


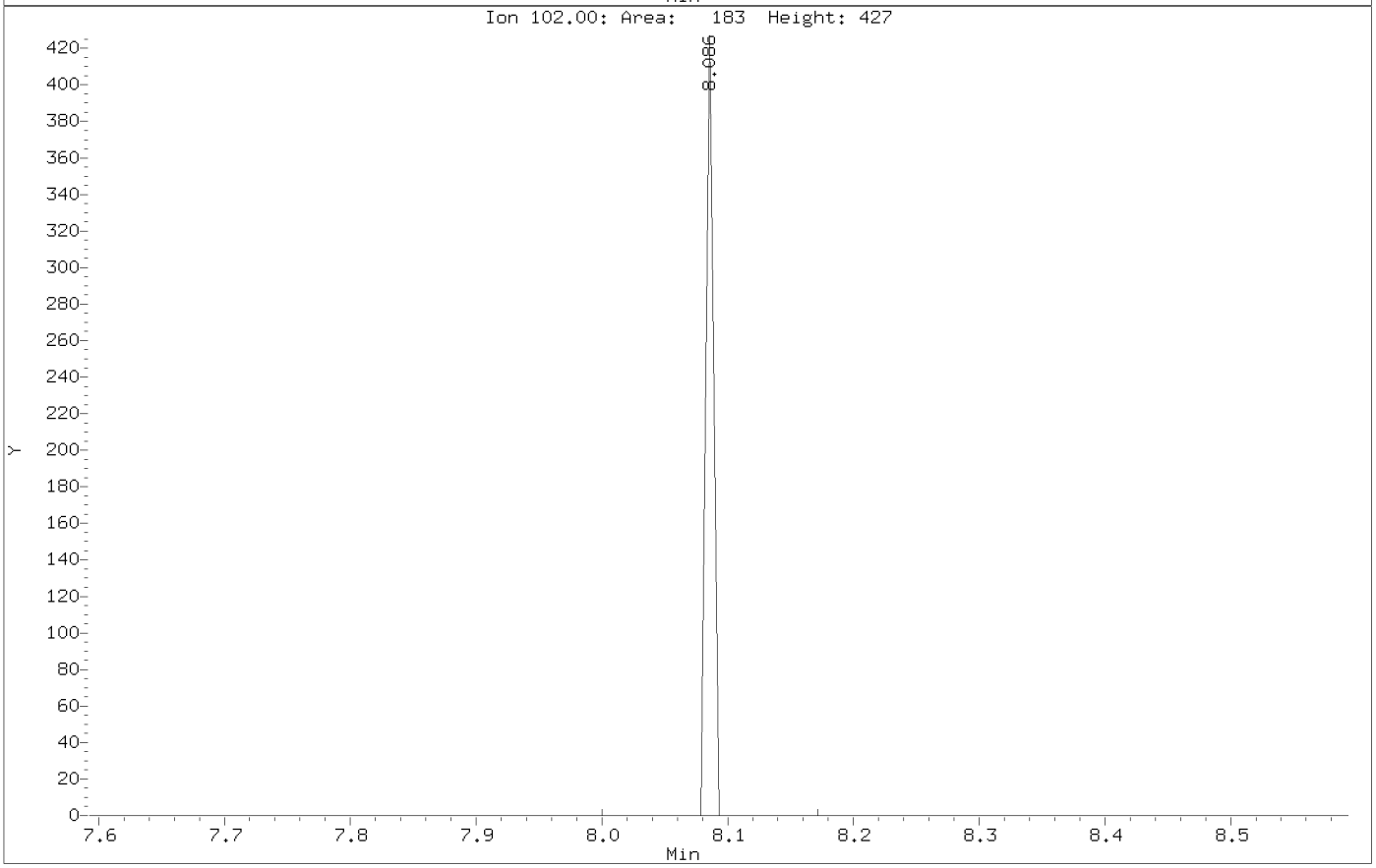


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dichloroethane-D4
CAS Number: 17060-07-0

AFTER MANUAL INTEGRATION

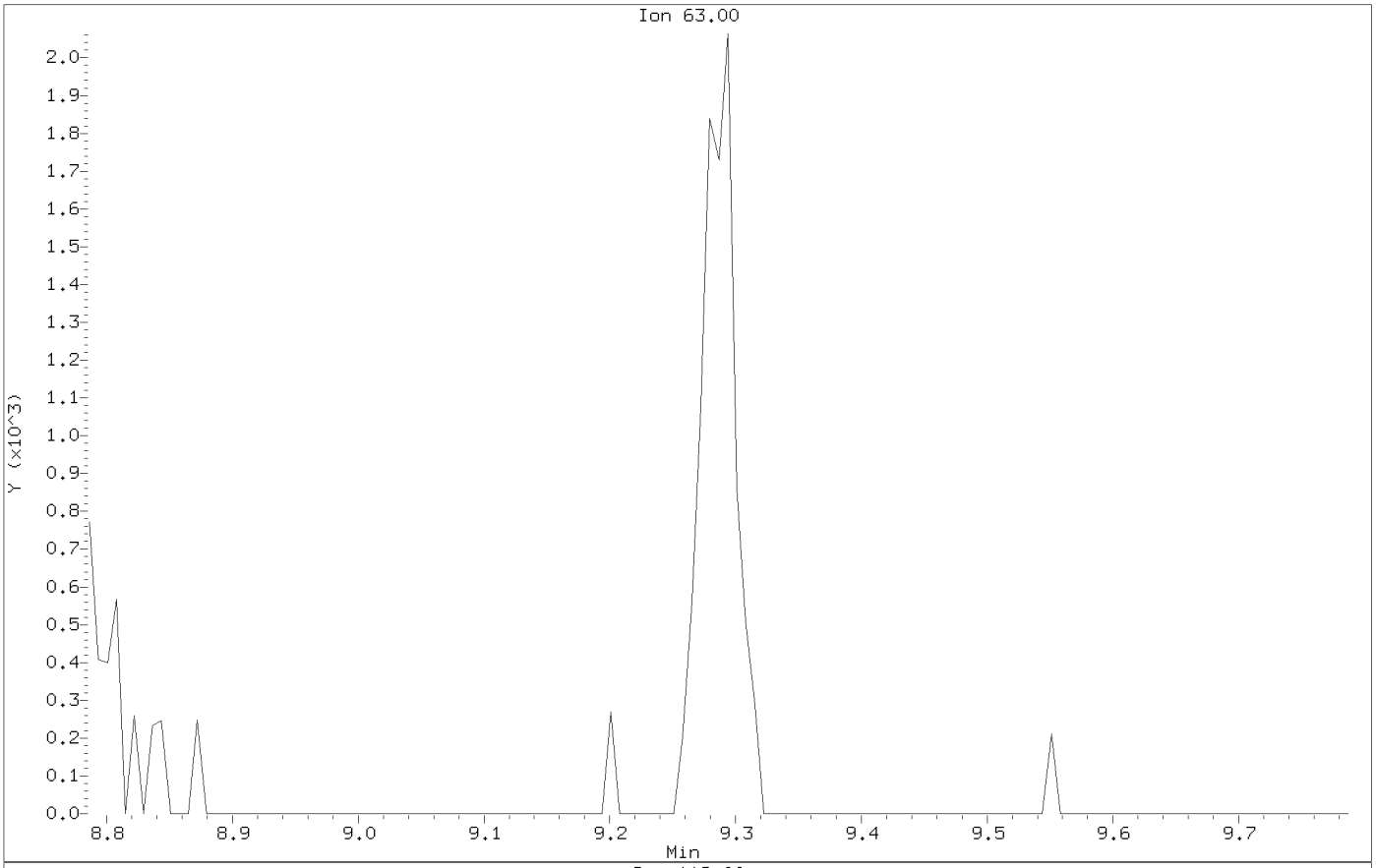


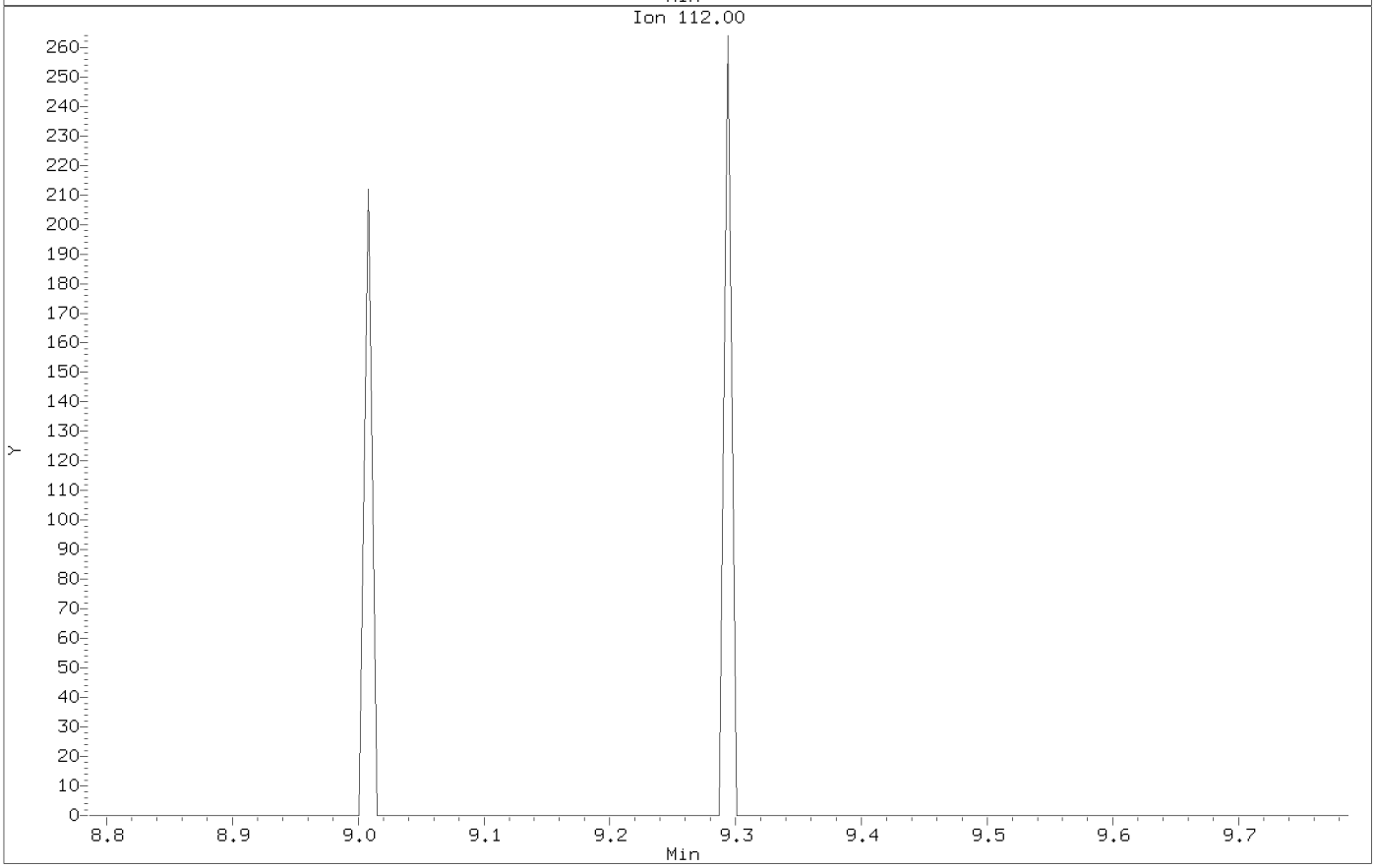


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dichloropropane
CAS Number: 78-87-5

BEFORE MANUAL INTEGRATION

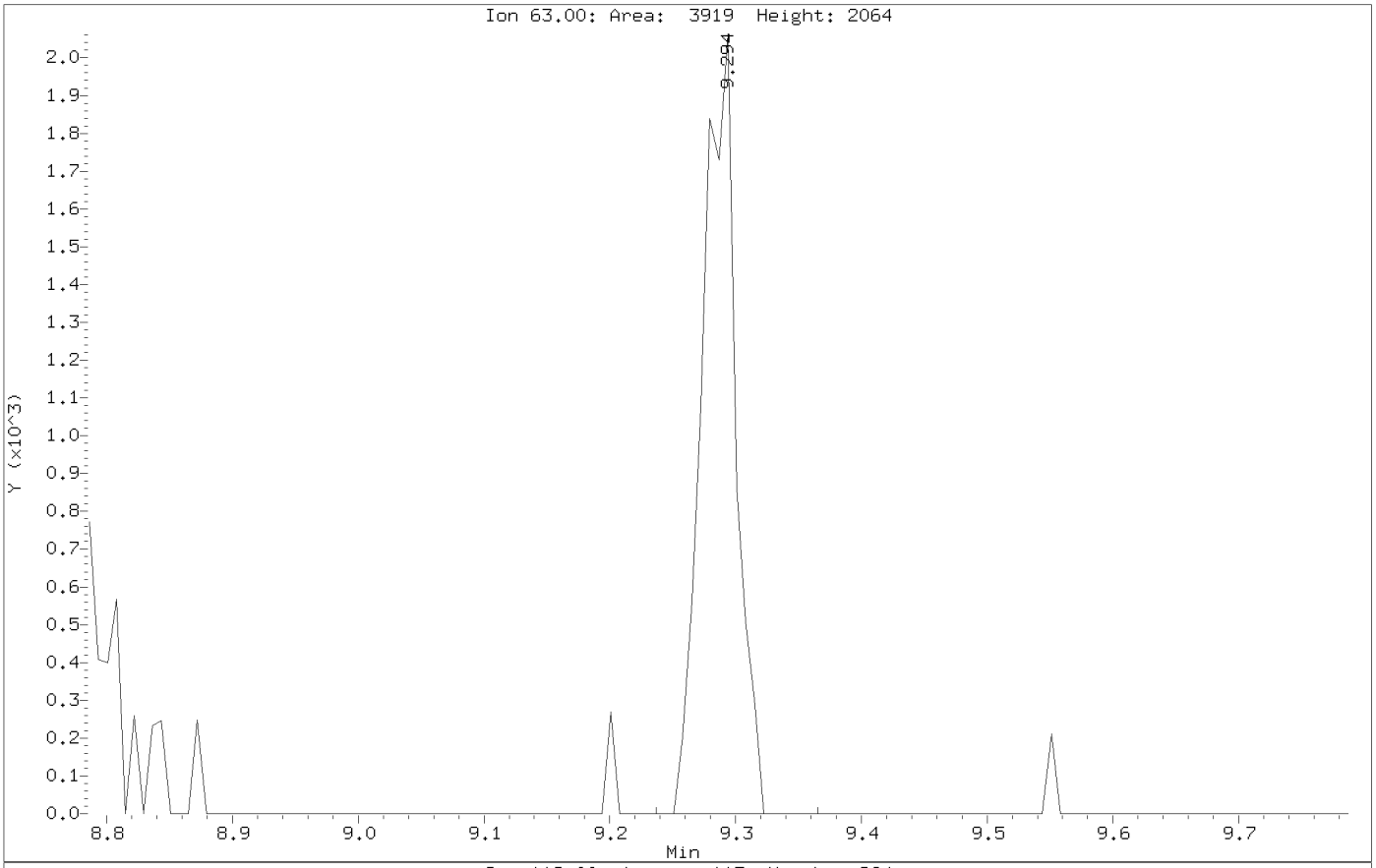


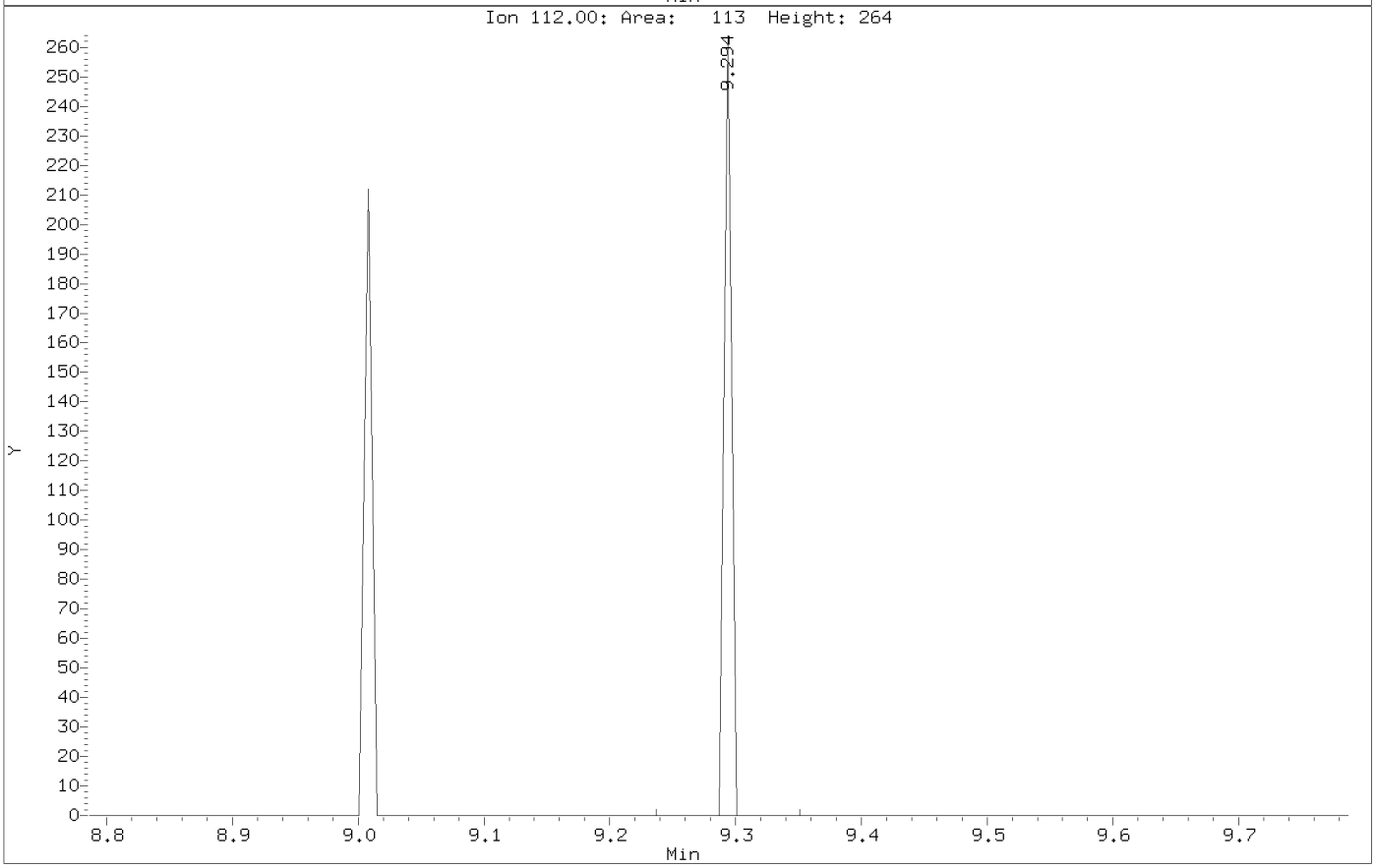


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dichloropropane
CAS Number: 78-87-5

AFTER MANUAL INTEGRATION

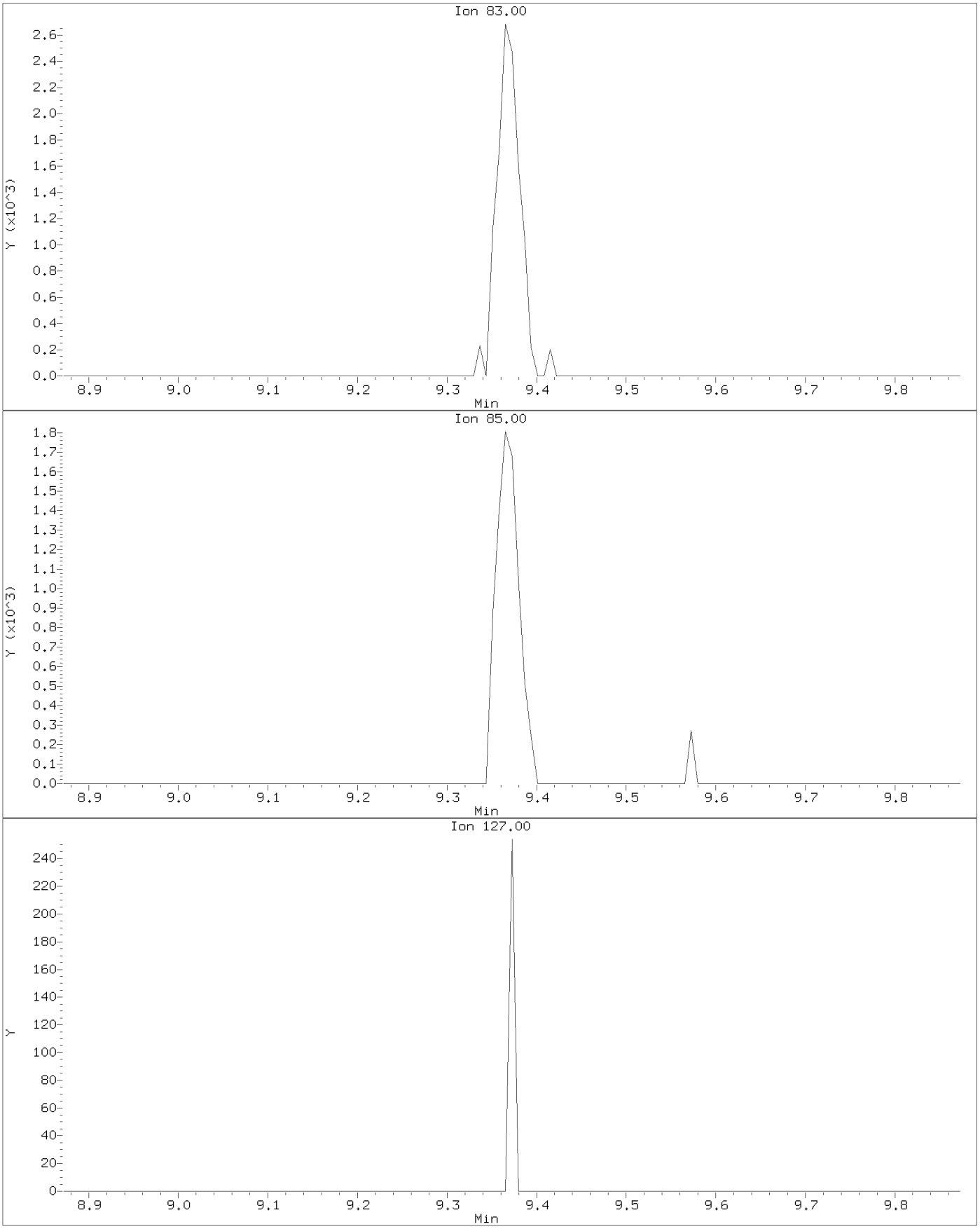




Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromodichloromethane
CAS Number: 75-27-4

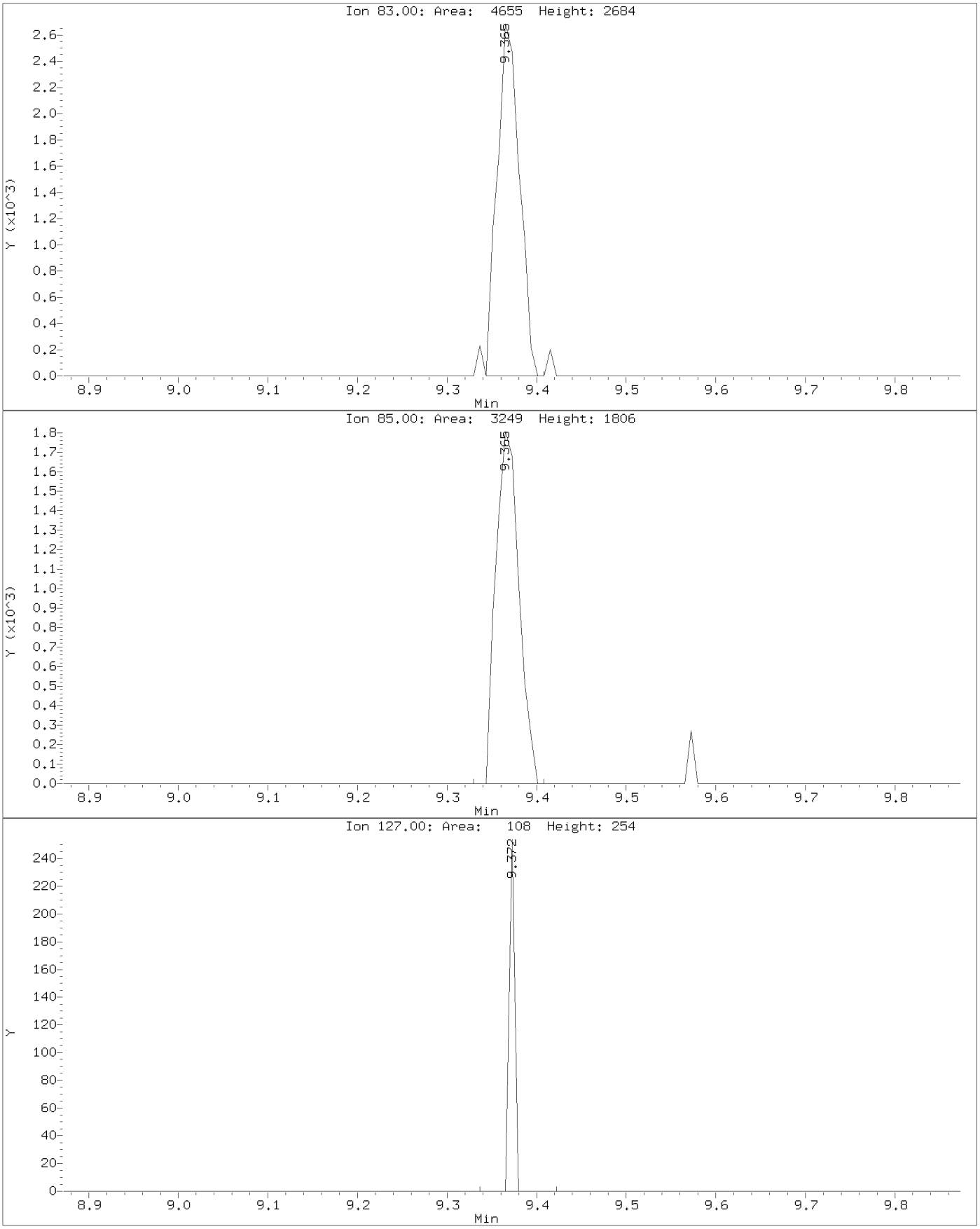
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromodichloromethane
CAS Number: 75-27-4

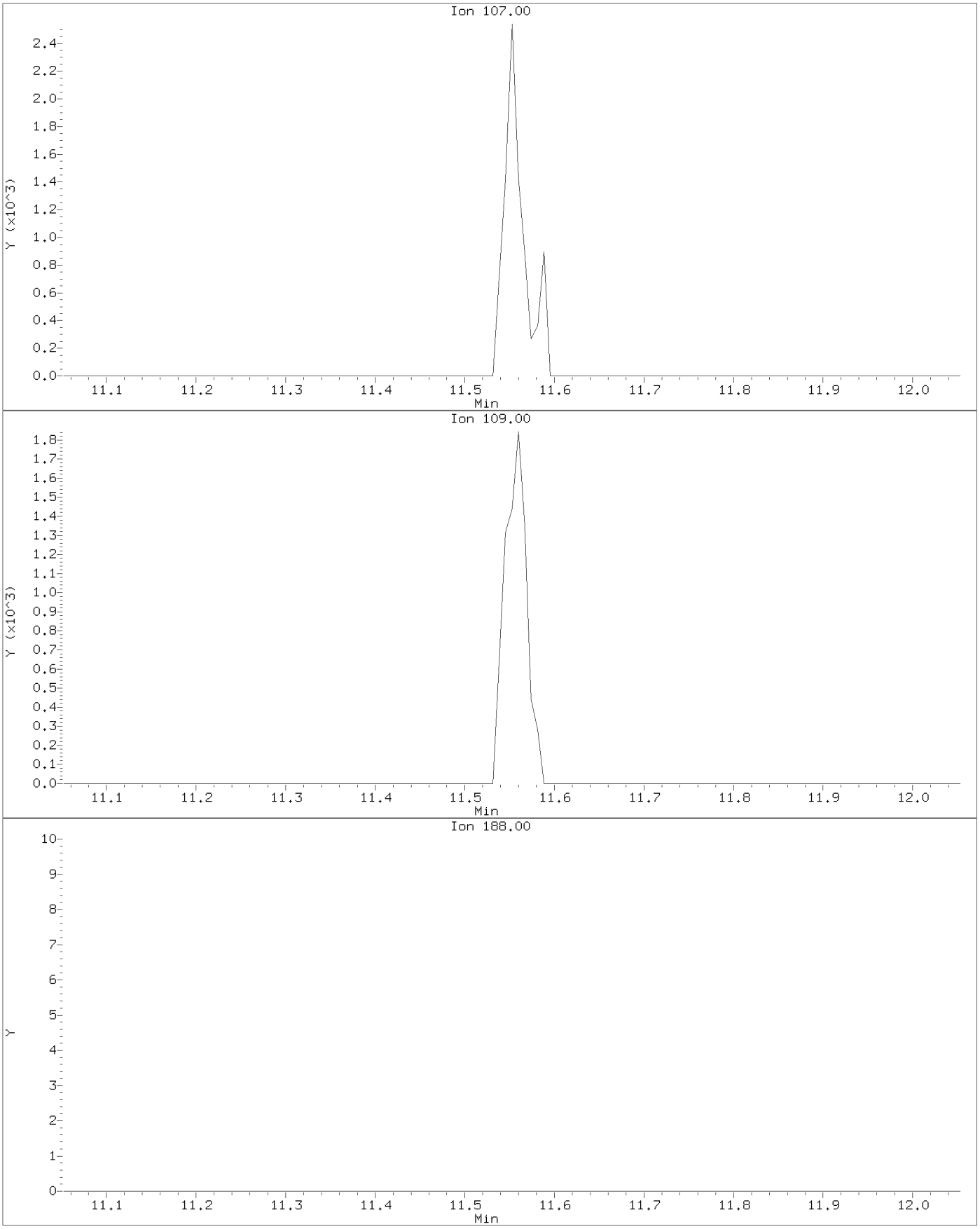
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromoethane
CAS Number: 106-93-4

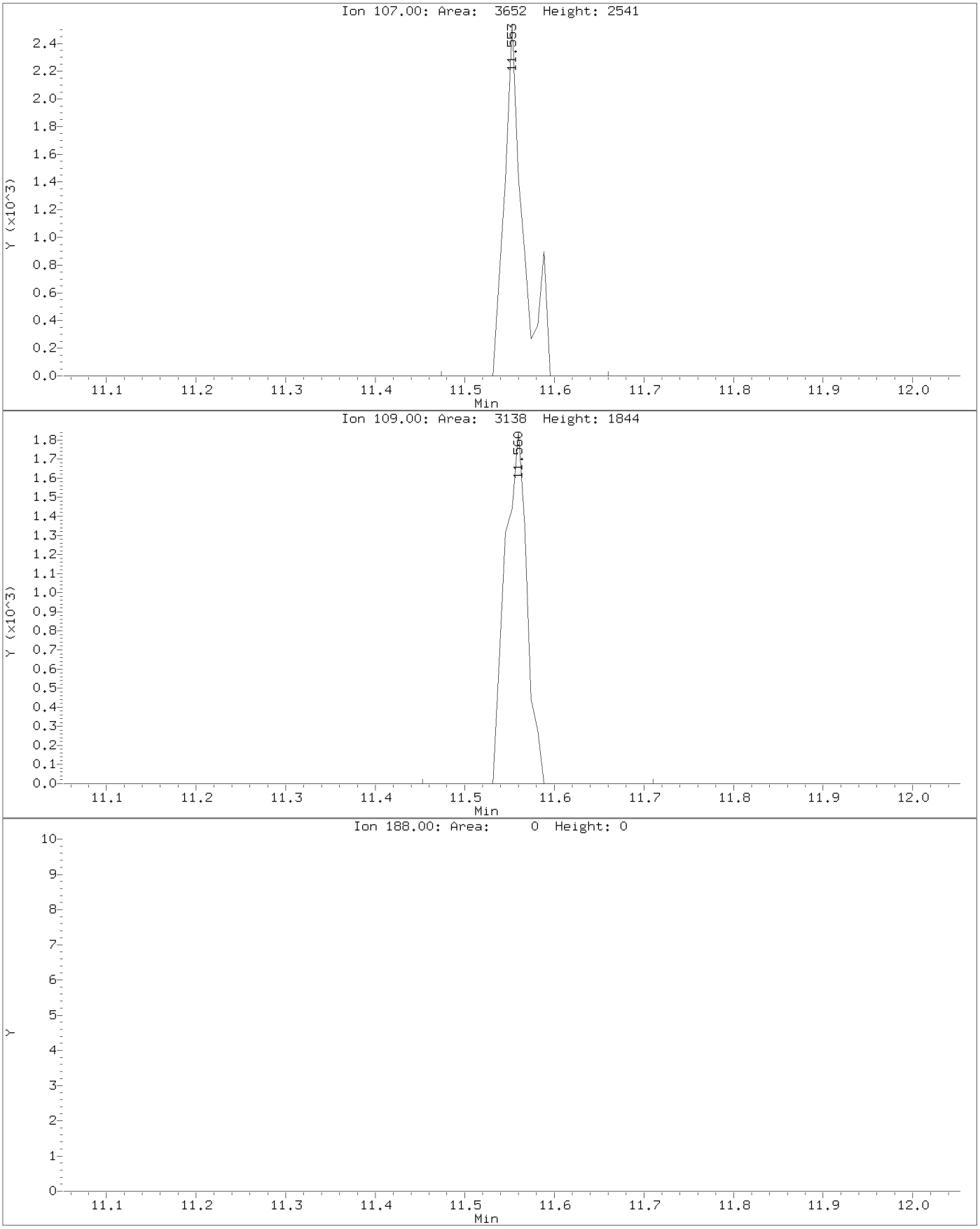
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromoethane
CAS Number: 106-93-4

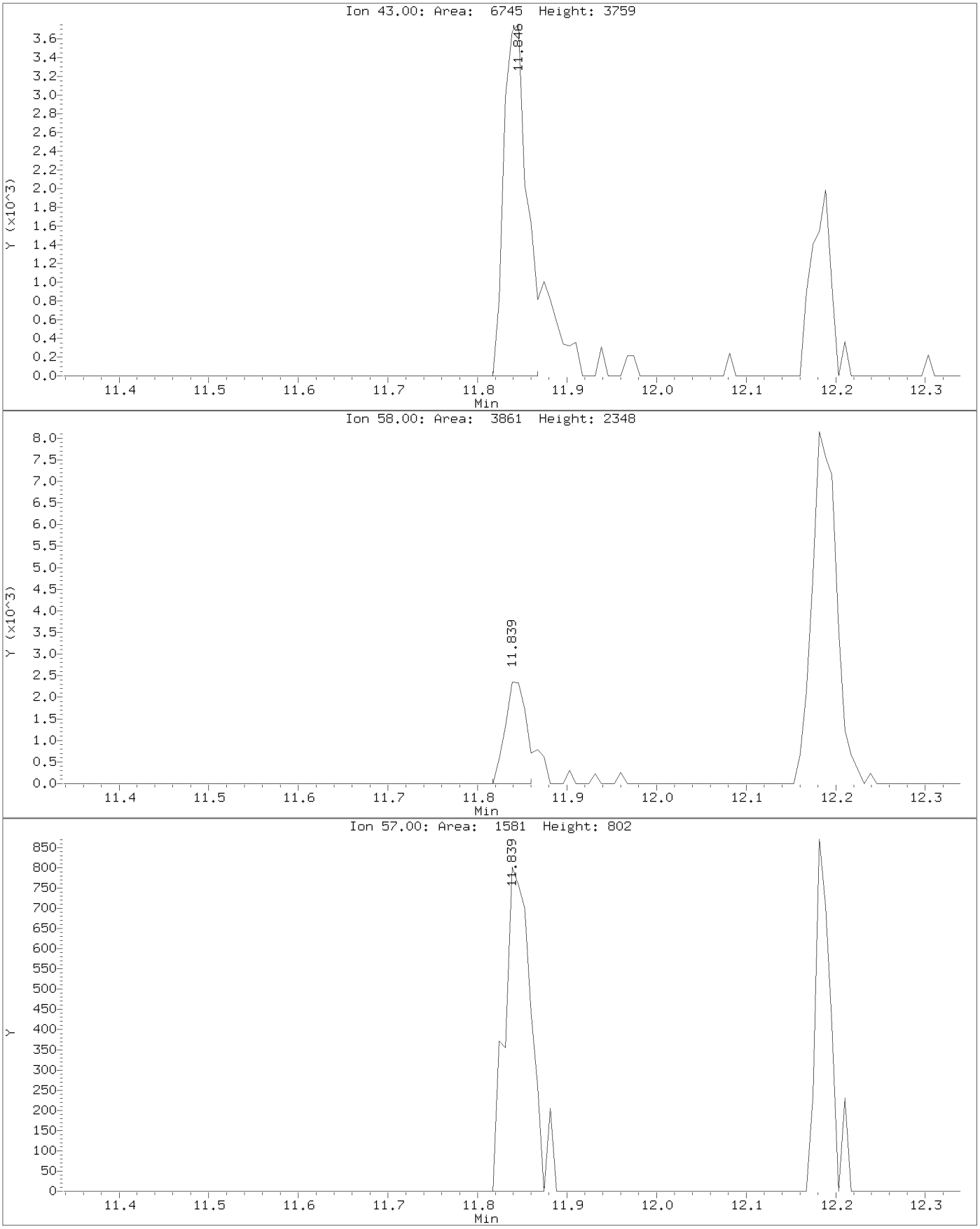
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 2-Hexanone
CAS Number: 591-78-6

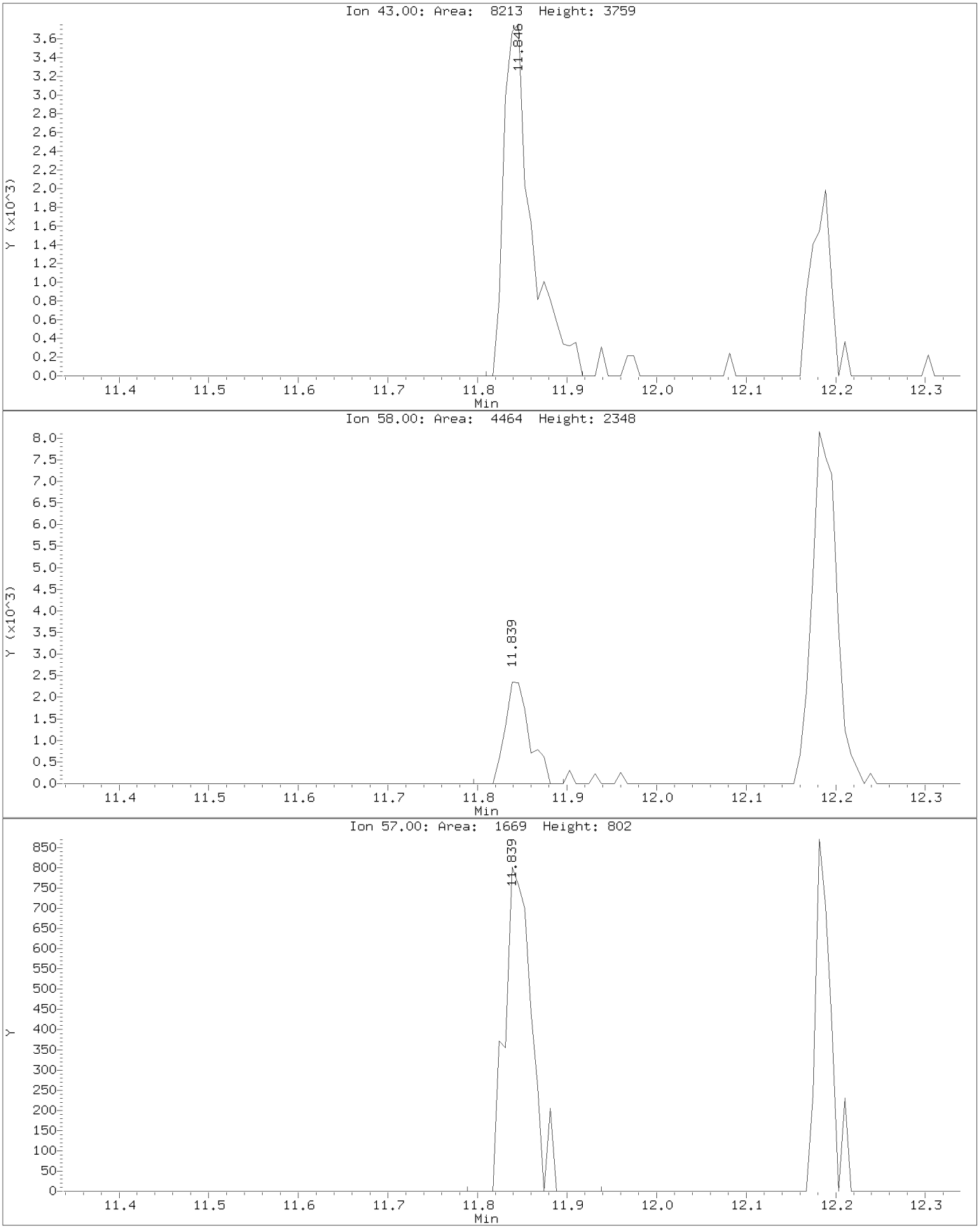
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 2-Hexanone
CAS Number: 591-78-6

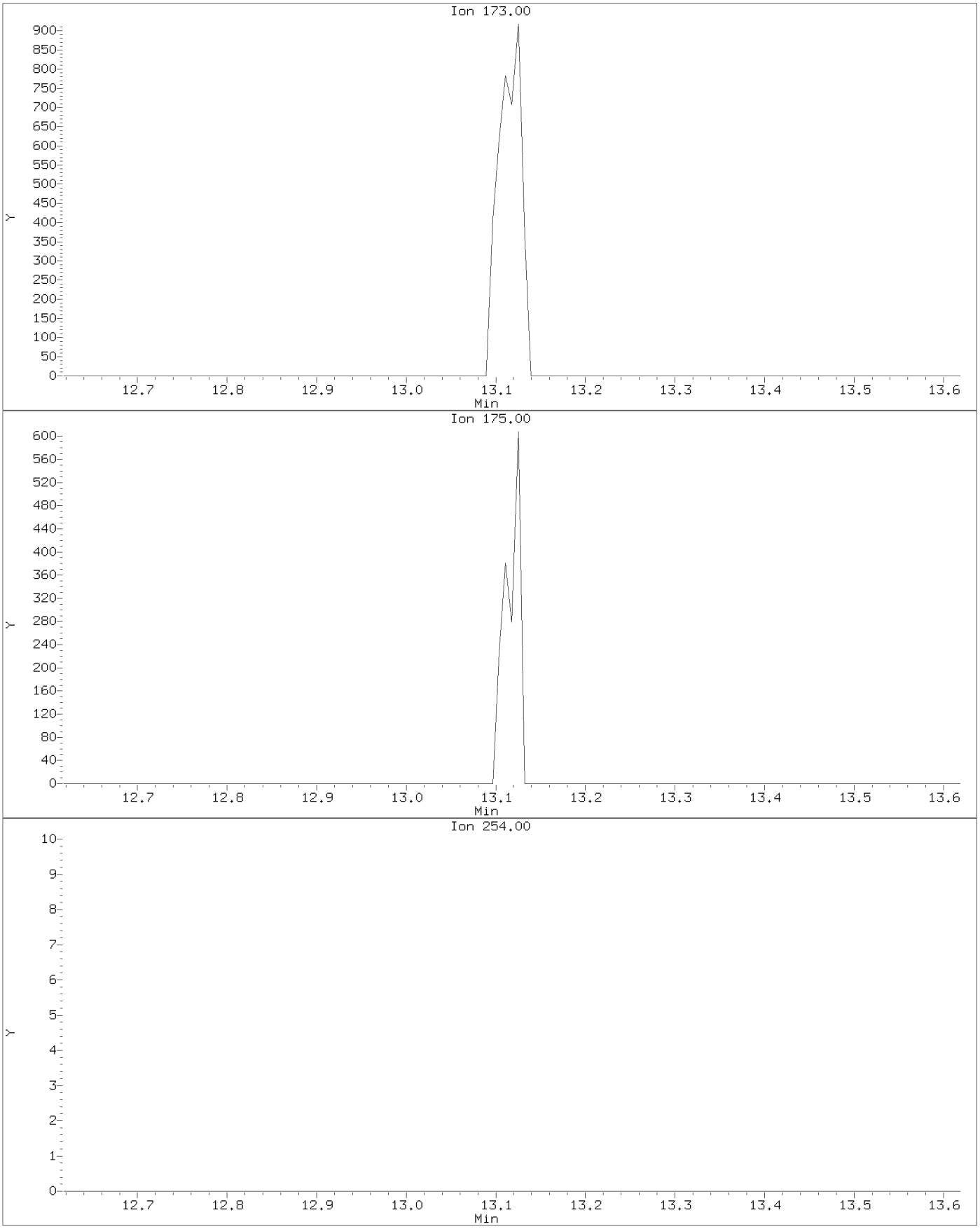
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromoform
CAS Number: 75-25-2

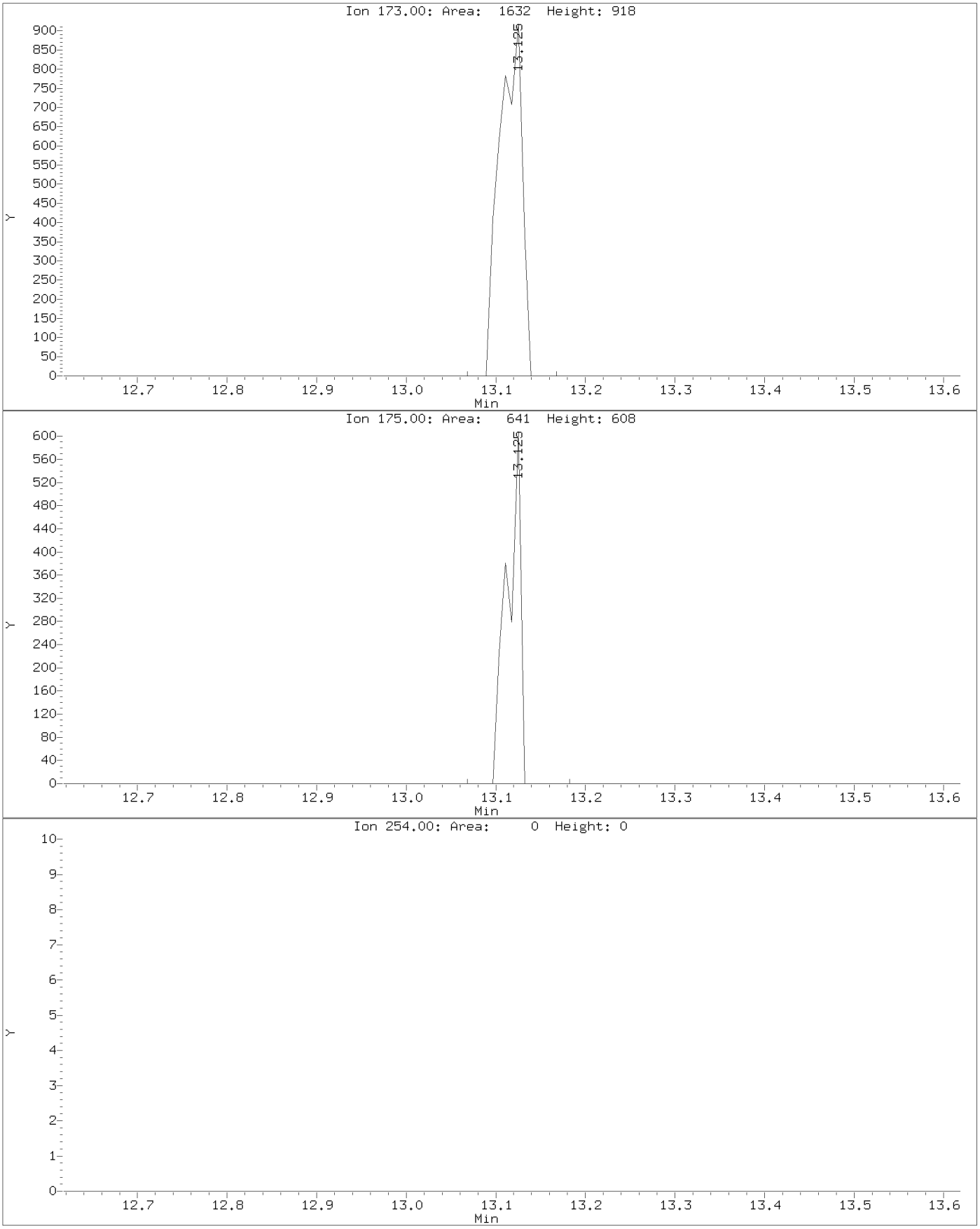
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Bromoform
CAS Number: 75-25-2

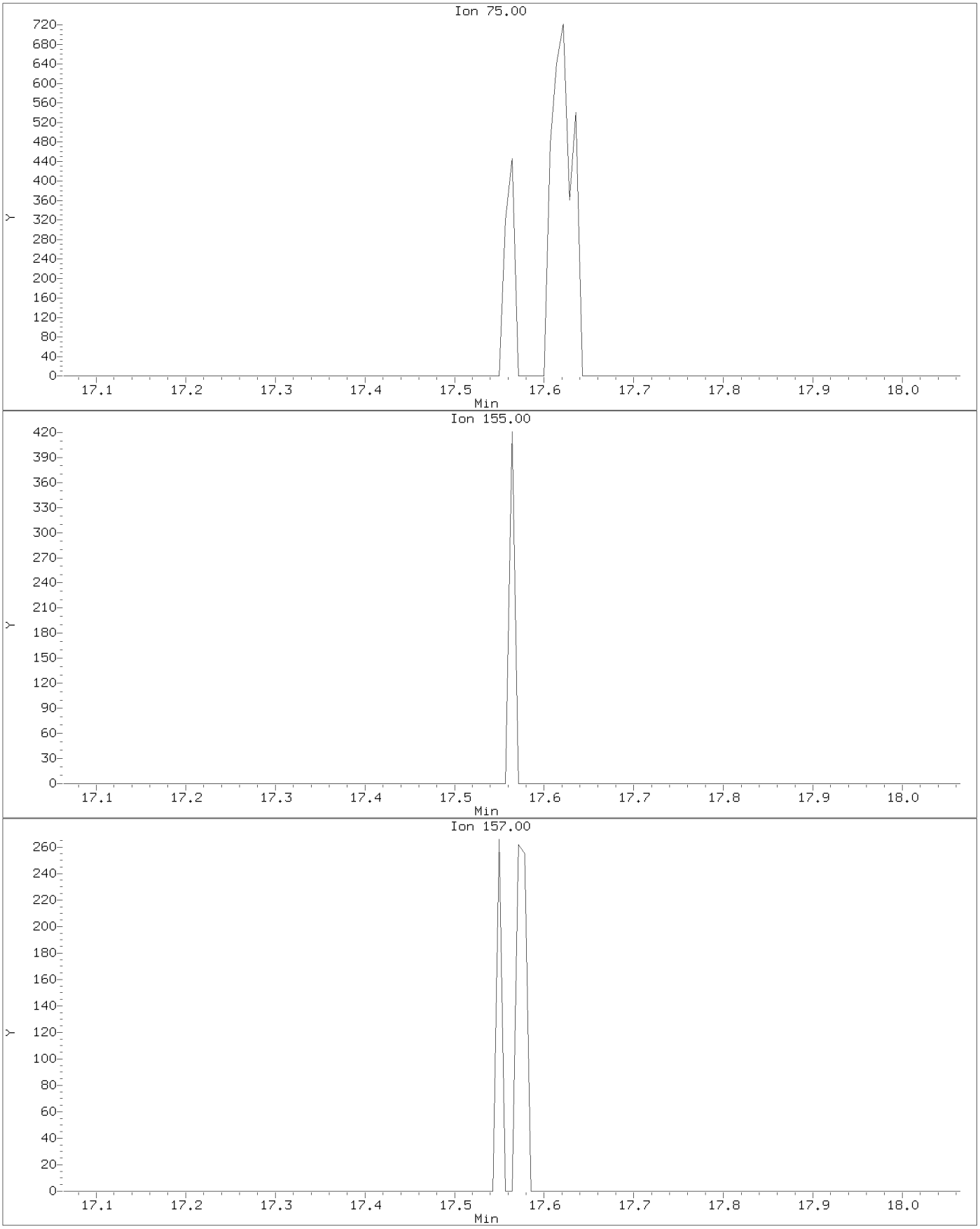
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8

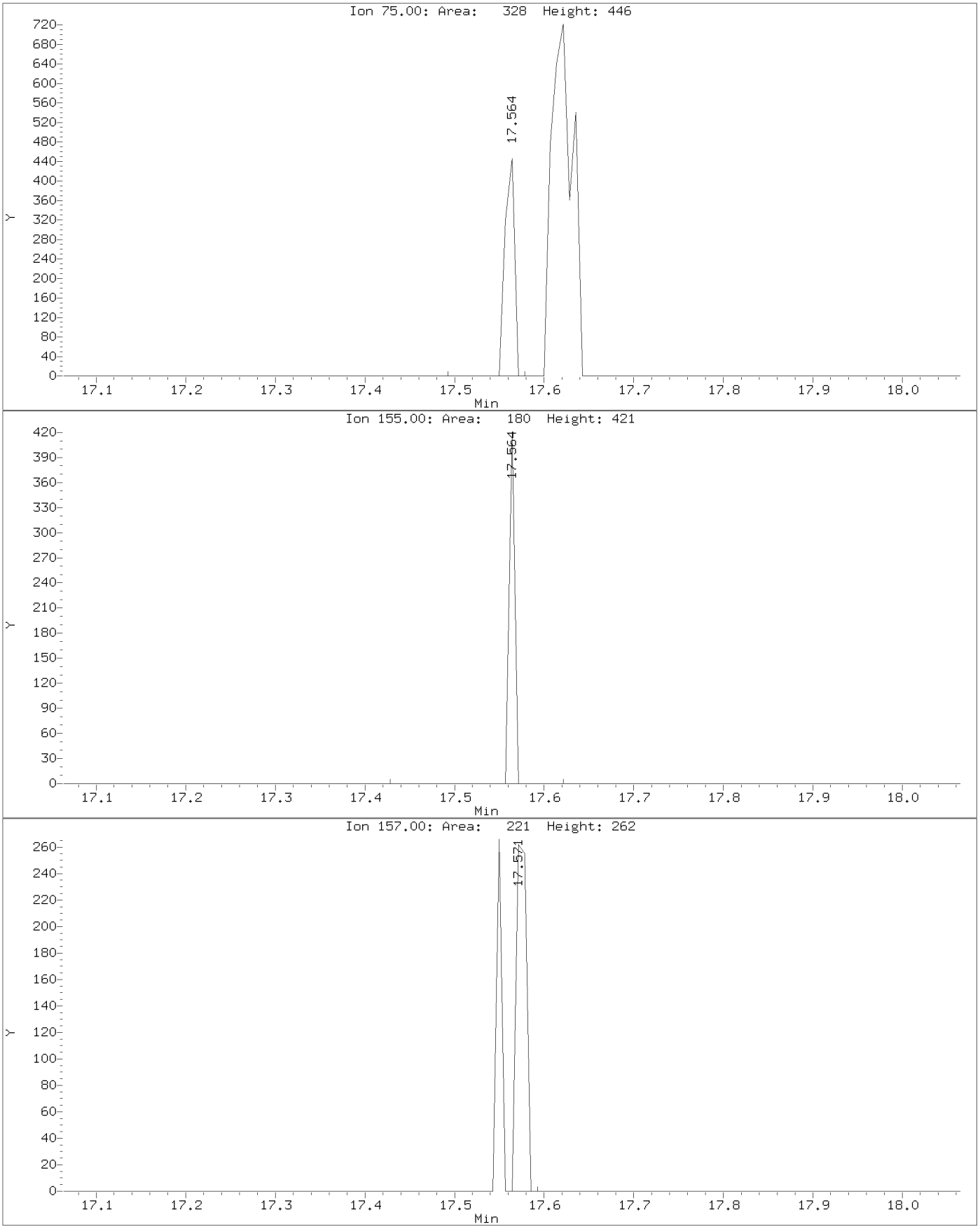
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2-Dibromo-3-Chloropropane
CAS Number: 96-12-8

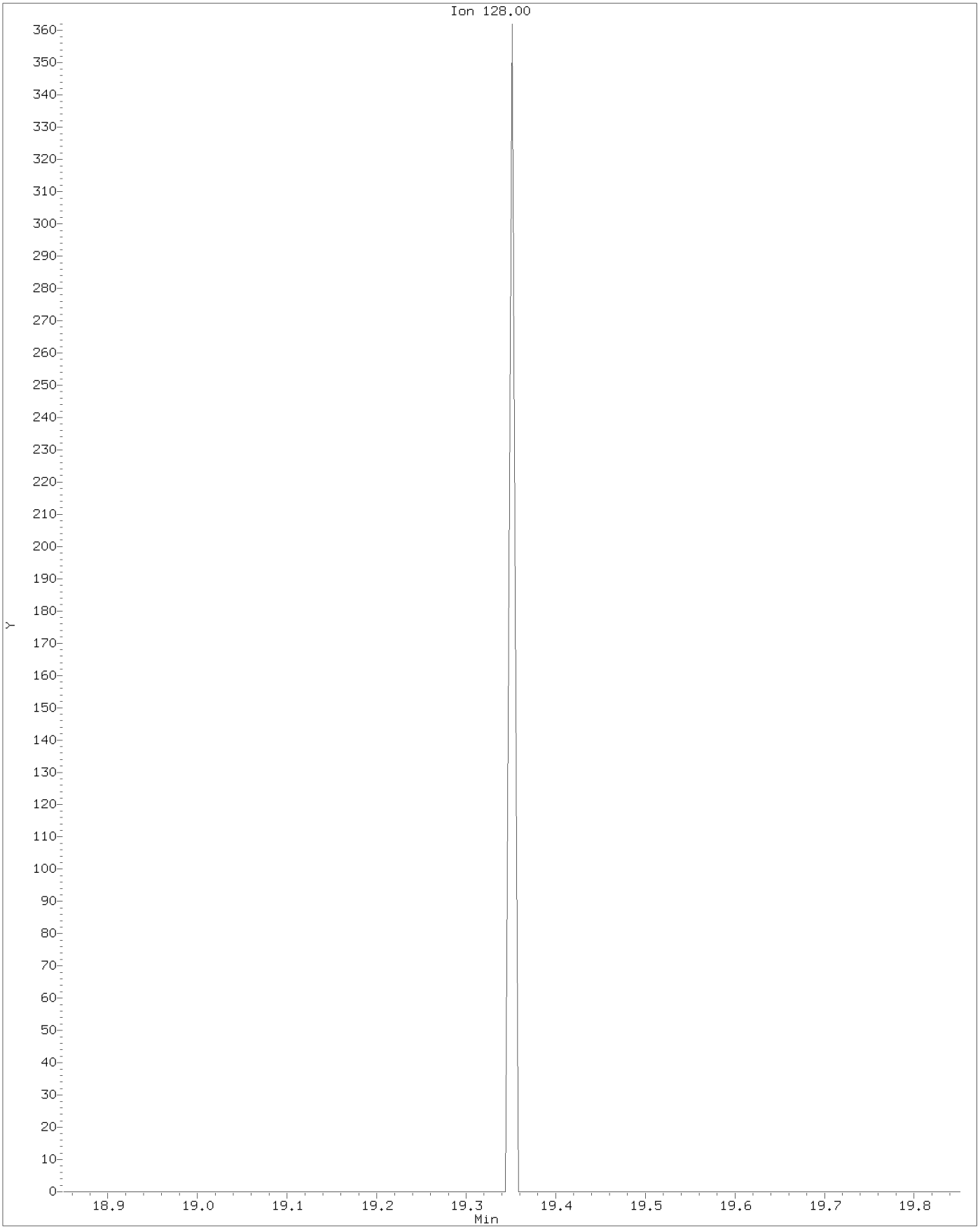
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Naphthalene
CAS Number: 91-20-3

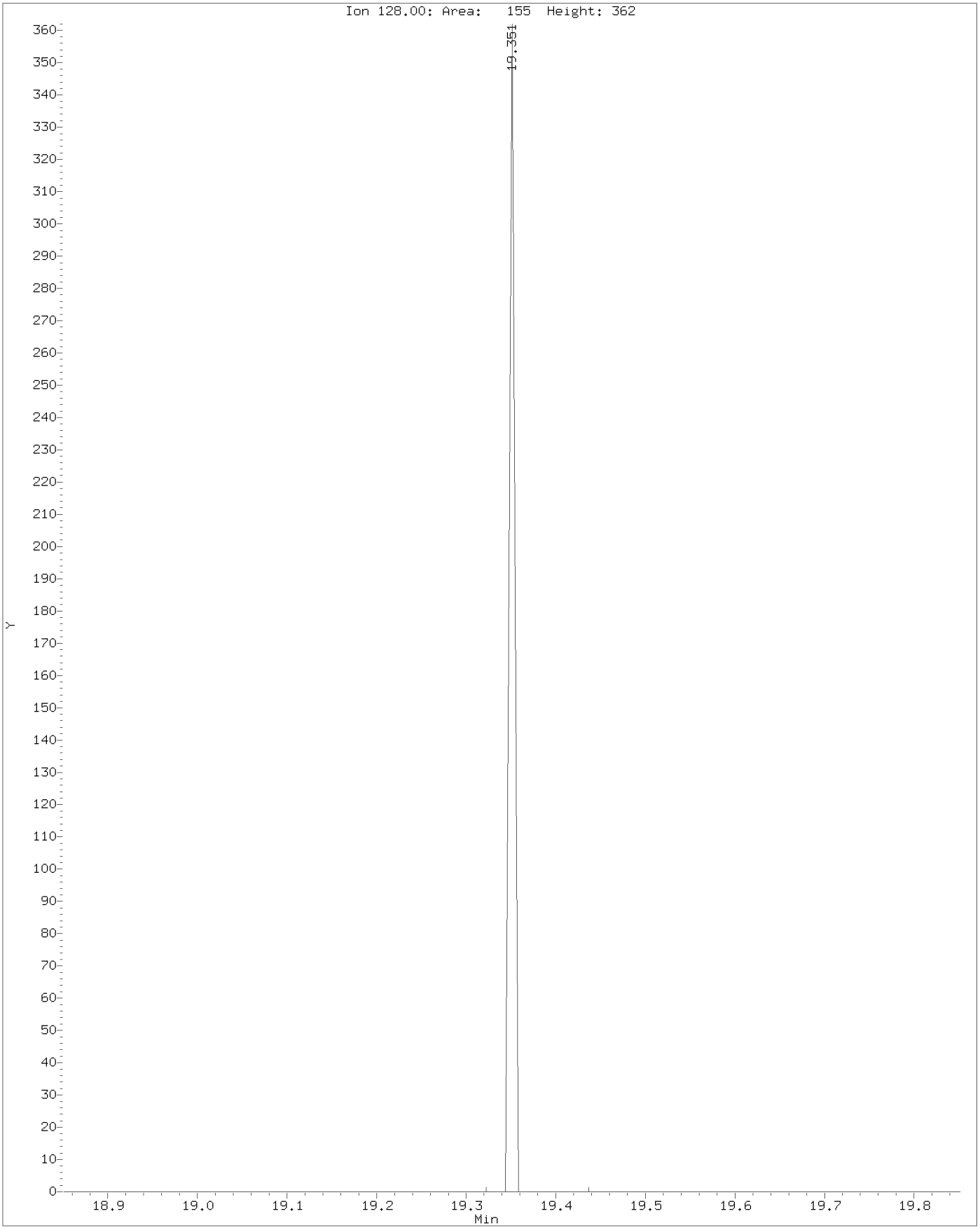
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Naphthalene
CAS Number: 91-20-3

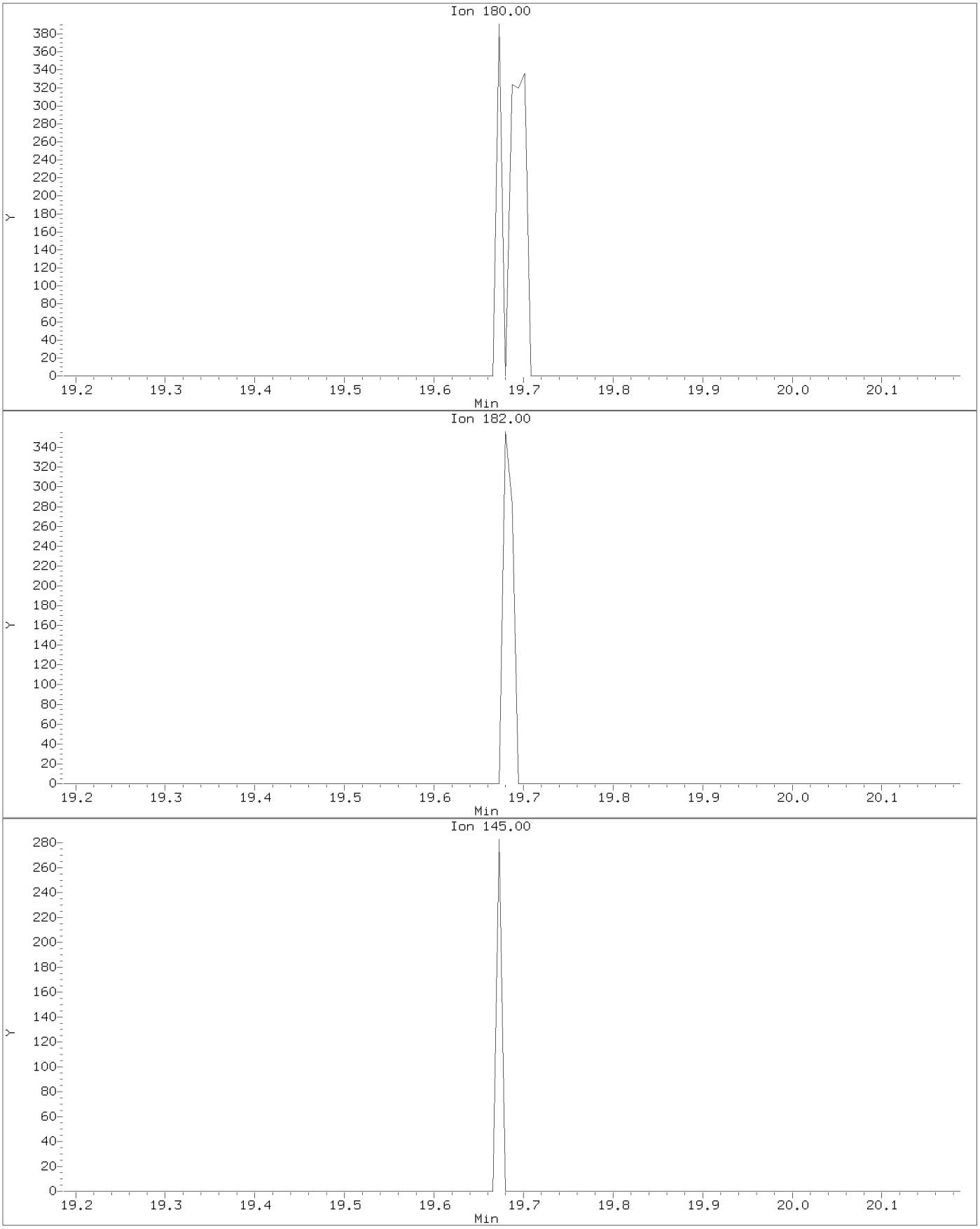
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2,3-Trichlorobenzene
CAS Number: 87-61-6

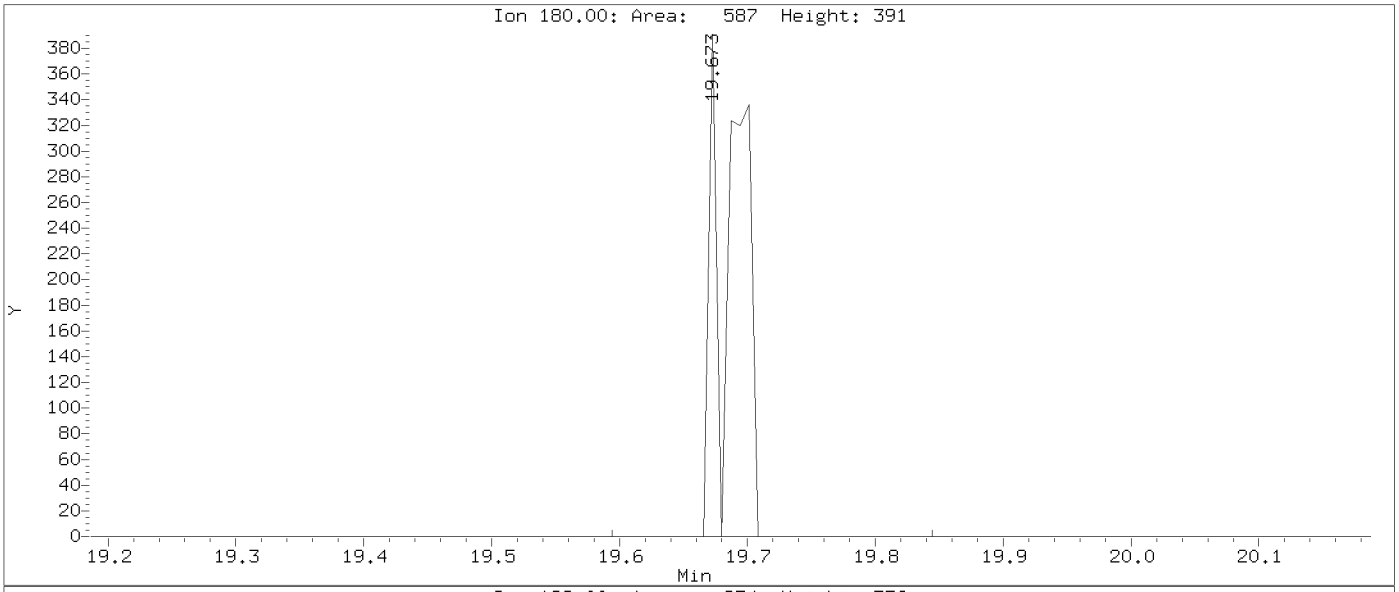
BEFORE MANUAL INTEGRATION

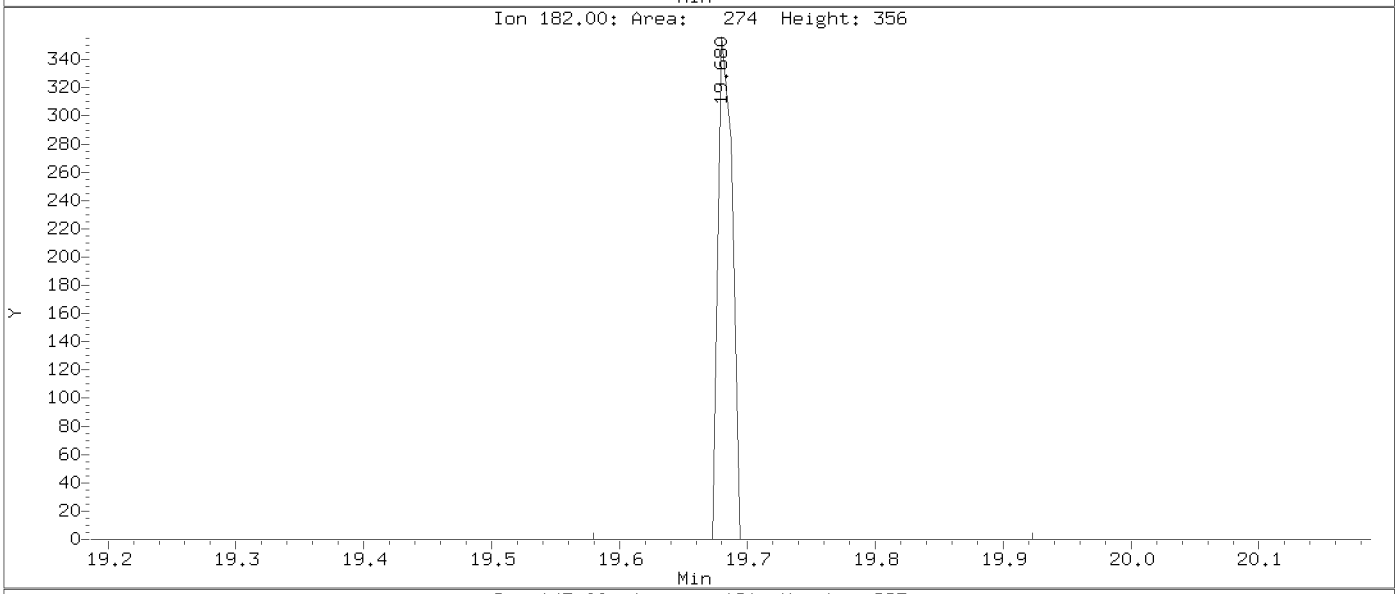


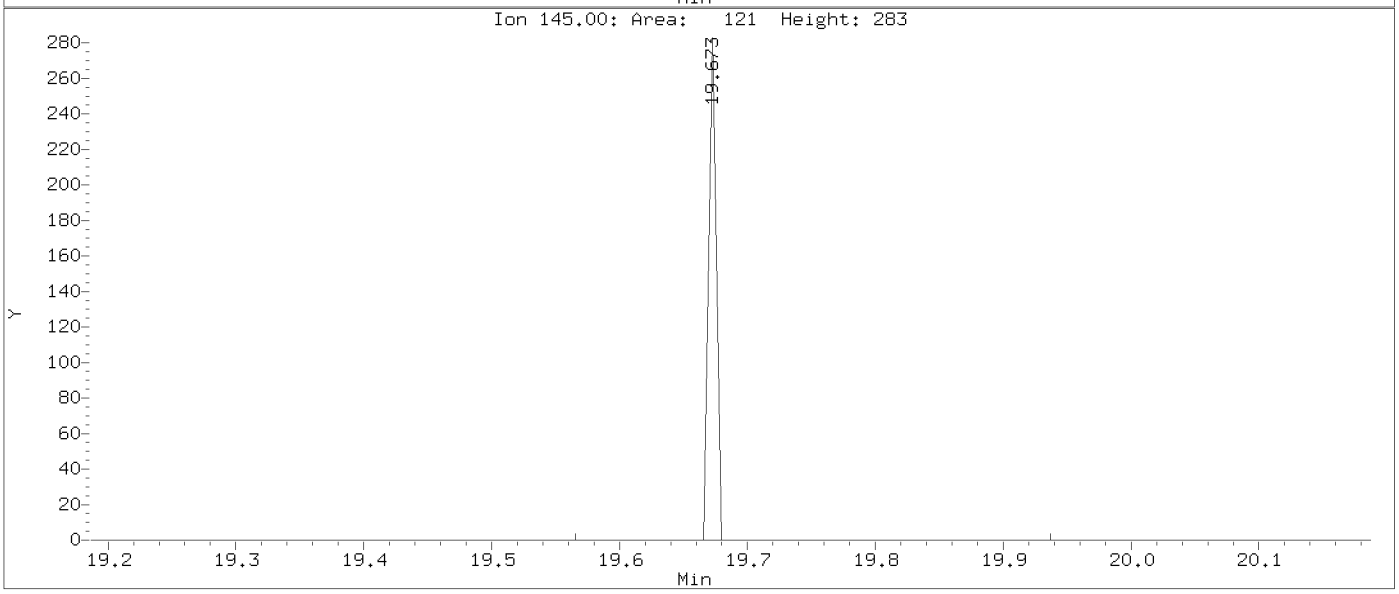
Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: 1,2,3-Trichlorobenzene
CAS Number: 87-61-6

AFTER MANUAL INTEGRATION



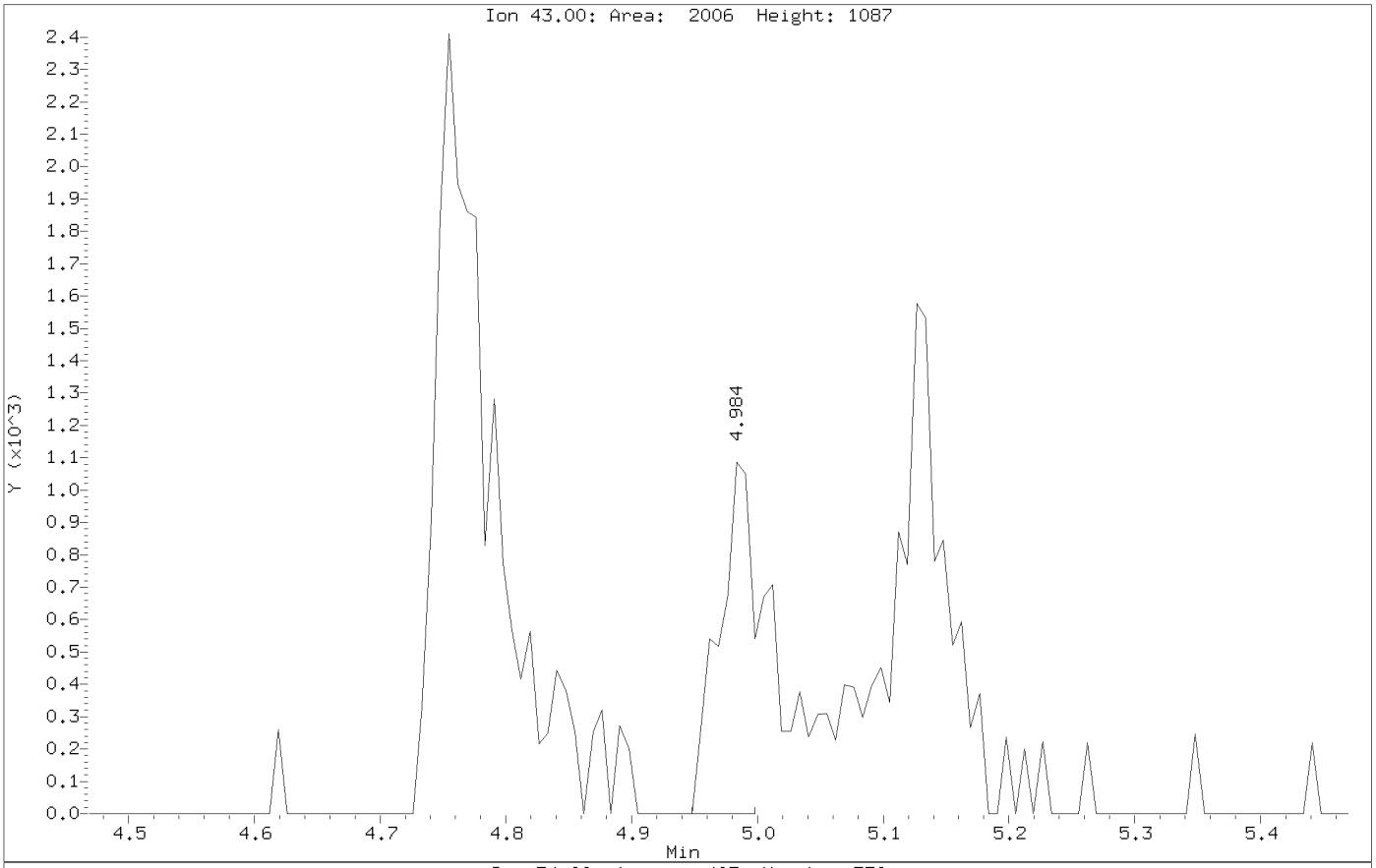


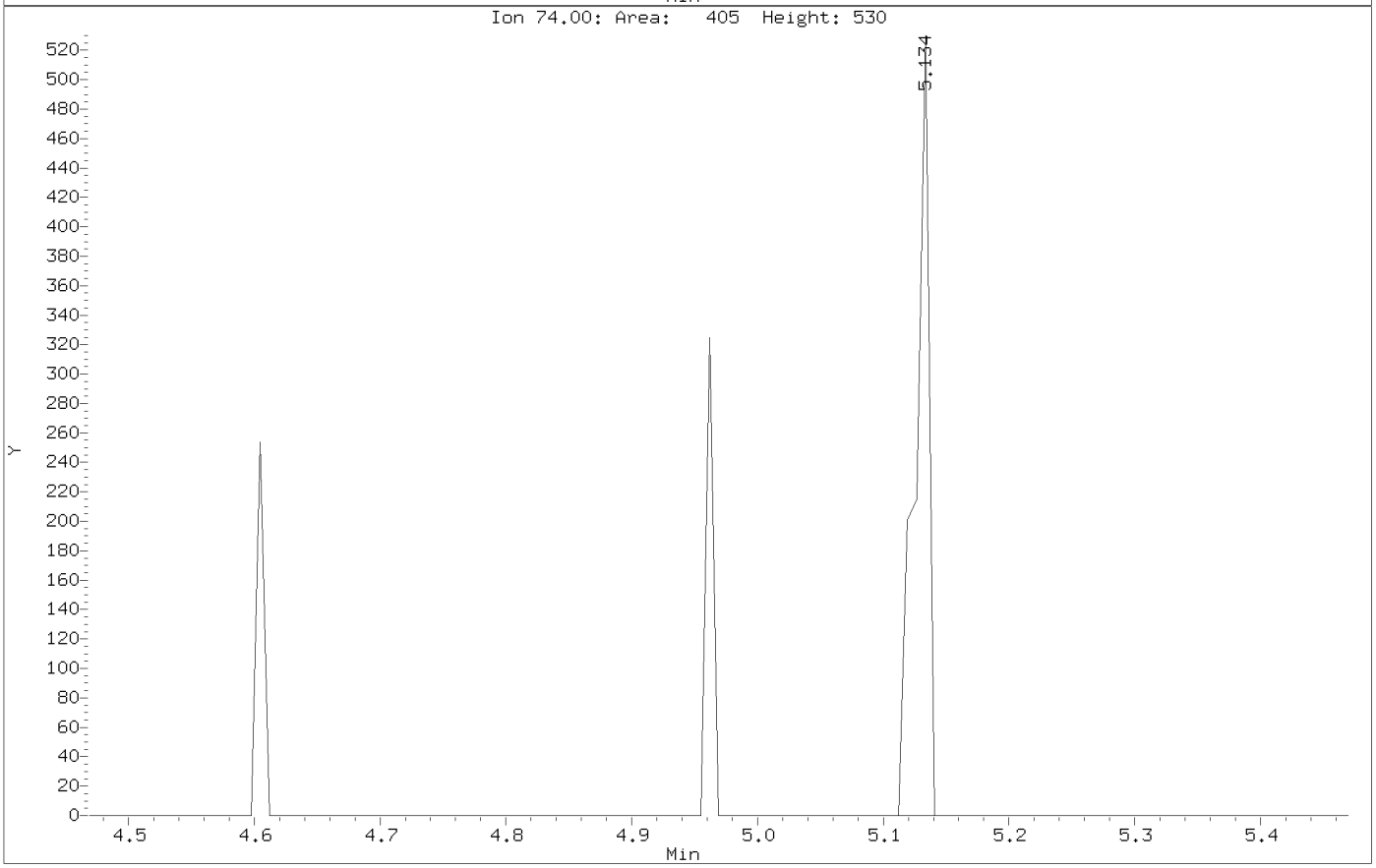


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Methyl Acetate
CAS Number: 79-20-9

BEFORE MANUAL INTEGRATION

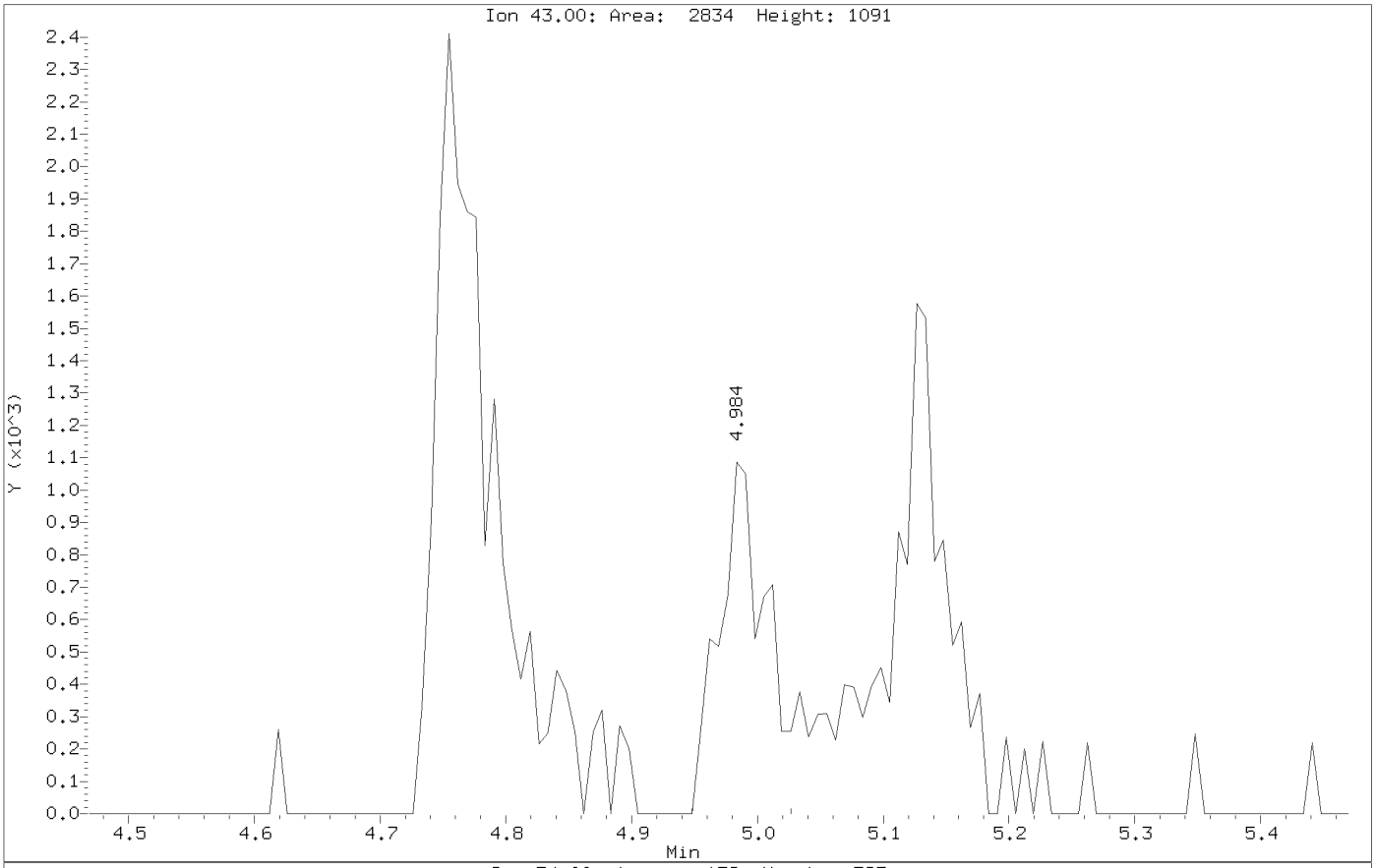


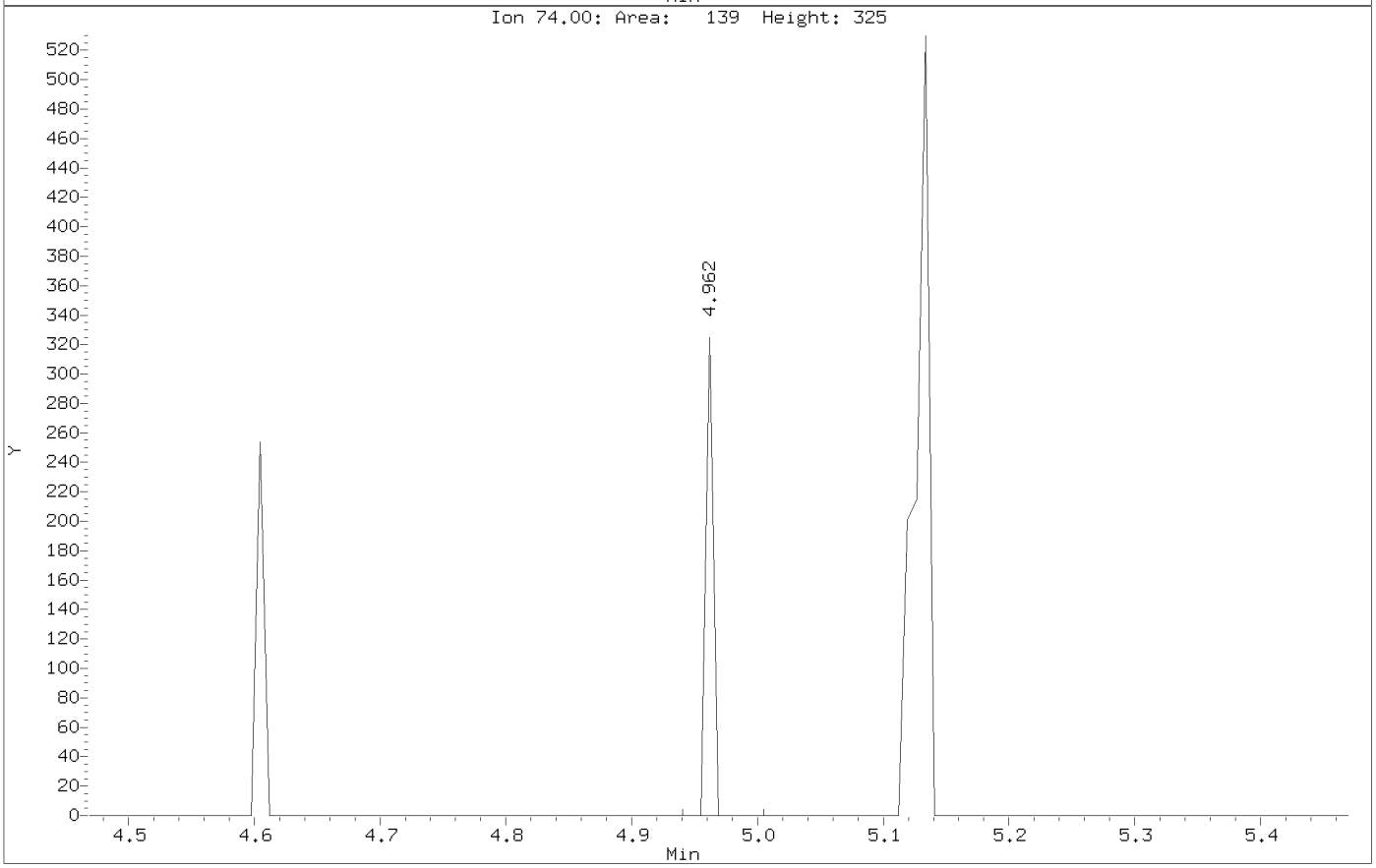


Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2179.D
Injection Date: 08-APR-2015 13:02
Instrument: gcms-c.i
Client Sample ID:

Compound: Methyl Acetate
CAS Number: 79-20-9

AFTER MANUAL INTEGRATION





Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\CB057.D

Date : 08-APR-2015 10:19

Client ID:

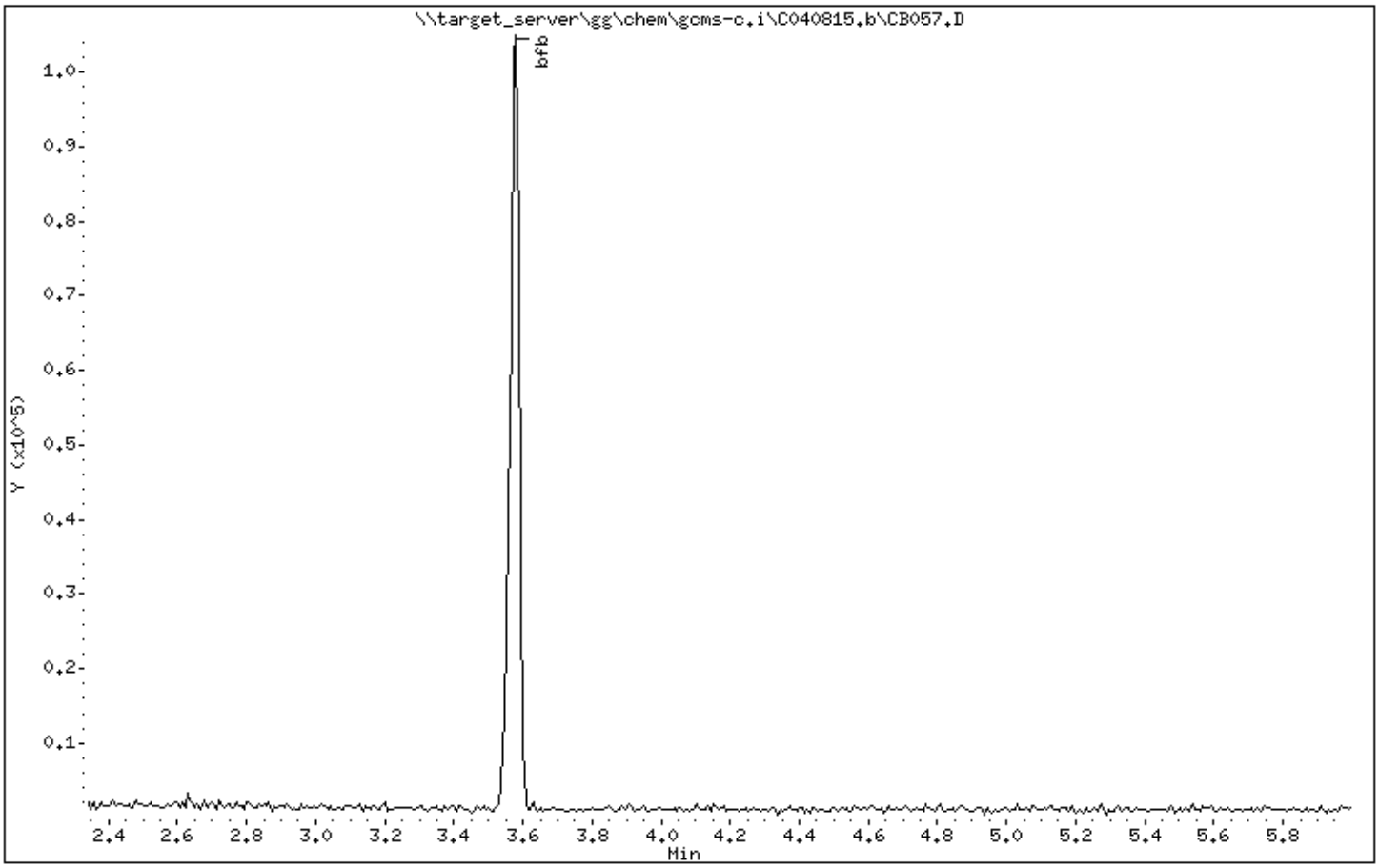
Instrument: gcms-c.i

Sample Info: WG160927-10,SI2069

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\CB057.D

Date : 08-APR-2015 10:19

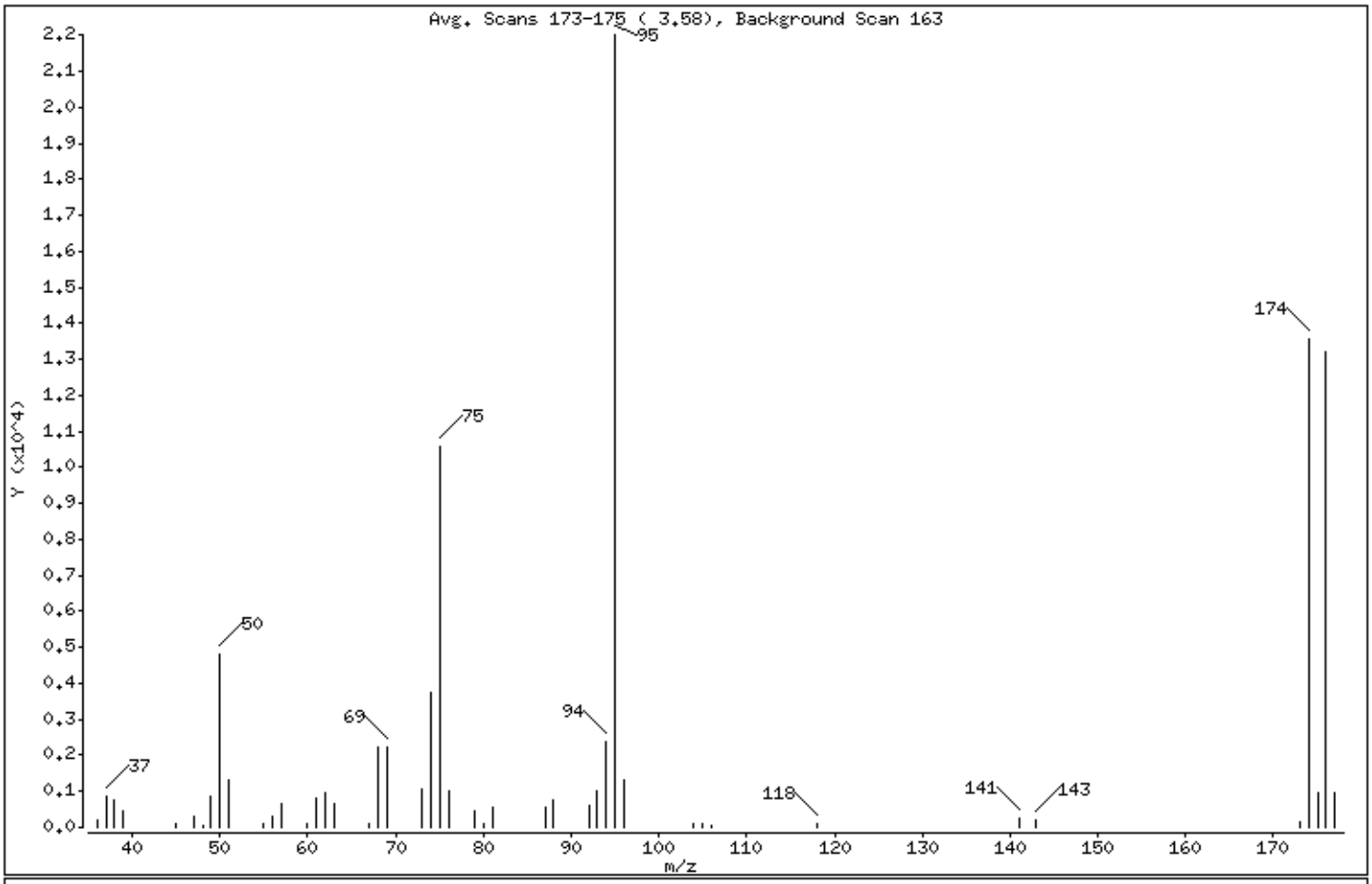
Client ID: Instrument: gcms-c.i

Sample Info: WG160927-10,SI2069

Operator: EME

Column phase: RTX-VMS Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.88
75	30.00 - 60.00% of mass 95	48.03
96	5.00 - 9.00% of mass 95	5.87
173	Less than 2.00% of mass 174	0.58 (0.94)
174	Greater than 50.00% of mass 95	61.69
175	5.00 - 9.00% of mass 174	4.31 (6.99)
176	95.00 - 101.00% of mass 174	60.05 (97.33)
177	5.00 - 9.00% of mass 176	4.30 (7.16)

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\CB057.D

Date : 08-APR-2015 10:19

Client ID:

Instrument: gcms-c.i

Sample Info: WG160927-10,SI2069

Operator: EME

Column phase: RTX-VMS

Column diameter: 0.18

Data File: CB057.D
Spectrum: Avg. Scans 173-175 (3.58), Background Scan 163
Location of Maximum: 95.00
Number of points: 45

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	213	57.00	640	79.00	457	106.00	67
37.00	845	60.00	81	80.00	125	118.00	96
38.00	780	61.00	807	81.00	537	141.00	230
39.00	466	62.00	982	87.00	567	143.00	200
45.00	109	63.00	658	88.00	781	173.00	127
47.00	282	67.00	76	92.00	585	174.00	13582
48.00	67	68.00	2217	93.00	997	175.00	949
49.00	856	69.00	2239	94.00	2396	176.00	13220
50.00	4817	73.00	1085	95.00	22016	177.00	947
51.00	1293	74.00	3742	96.00	1292		
55.00	105	75.00	10574	104.00	76		
56.00	304	76.00	1037	105.00	82		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160924-9
Client ID: Method Blank Sample
Project:
SDG: SI2069
Lab File ID: C2186.D

Sample Date:
Received Date:
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160924-9
Client ID: Method Blank Sample
Project:
SDG: SI2069
Lab File ID: C2186.D

Sample Date:
Received Date:
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Xylenes (total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dibromo-3-Chloropropane	U	0.75	ug/L	1	1	1.0	0.50	0.75
P-Bromofluorobenzene		93.2	%					
Toluene-d8		108.	%					
1,2-Dichloroethane-d4		99.7	%					
Dibromofluoromethane		93.9	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2186.D
Report Date: 09-Apr-2015 08:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2186.D
Lab Smp Id: WG160924-9 Client Smp ID: WG160924-Blank
Inj Date : 08-APR-2015 17:15 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-9,SI2069
Misc Info : WG160924,WG160924-4,SI2069-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 11 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

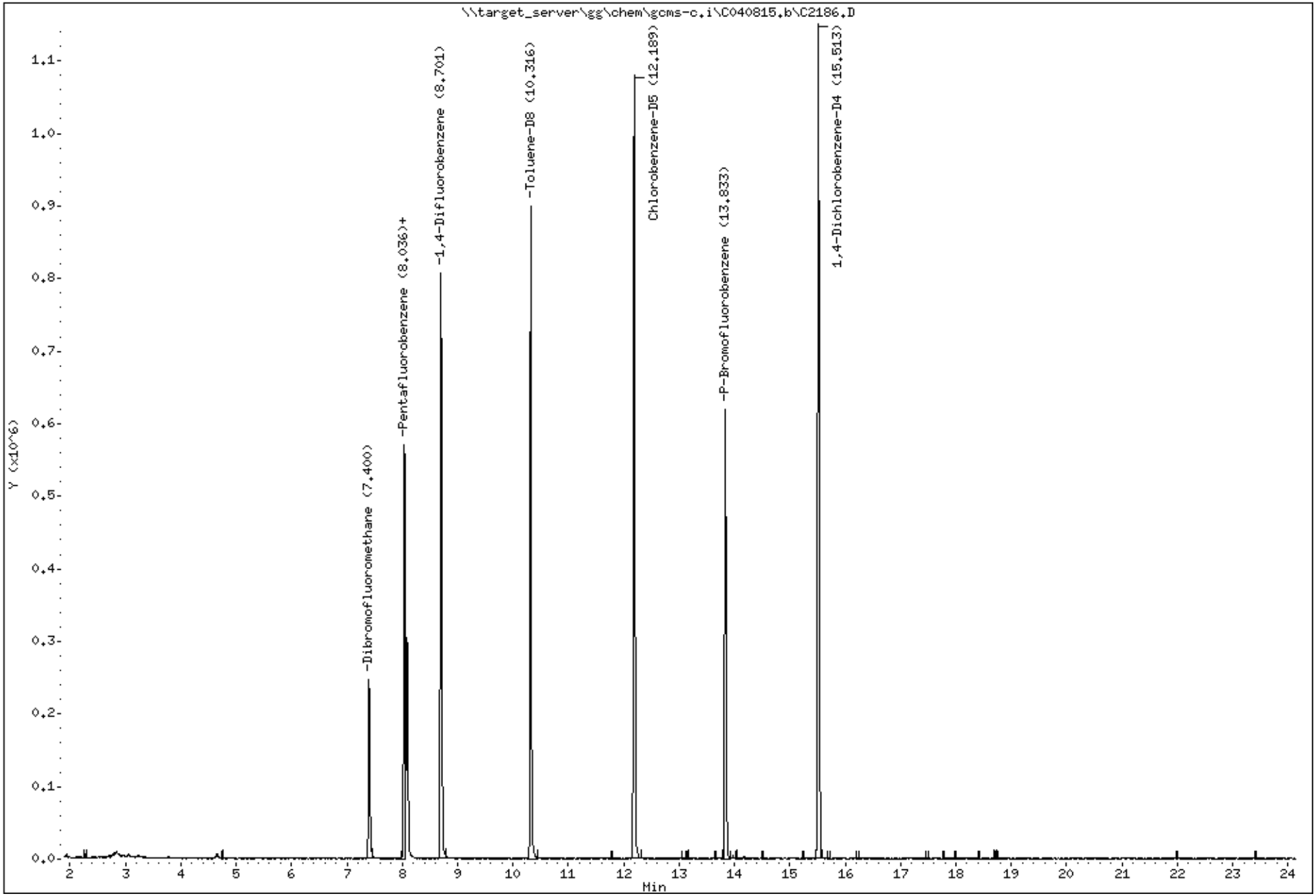
Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 37 Dibromofluoromethane	113	7.399	7.405	(0.921)	156231	46.9593	47.0	
* 42 Pentafluorobenzene	168	8.035	8.041	(1.000)	331637	50.0000		
$ 45 1,2-Dichloroethane-D4	65	8.085	8.090	(1.006)	221844	49.8381	49.8	
* 49 1,4-Difluorobenzene	114	8.700	8.698	(1.000)	553194	50.0000		
$ 55 Toluene-D8	98	10.316	10.321	(1.186)	550651	54.2799	54.3	
* 66 Chlorobenzene-D5	117	12.188	12.187	(1.000)	548098	50.0000		
$ 76 P-Bromofluorobenzene	95	13.832	13.838	(1.590)	248737	46.5986	46.6	
* 91 1,4-Dichlorobenzene-D4	152	15.519	15.518	(1.000)	316723	50.0000		

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2186.D
Date : 08-APR-2015 17:15
Client ID: WG160924-Blank
Sample Info: WG160924-9,SI2069

Instrument: gcms-c.i



0000141

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG160924-8
Client ID: LCS
Project:
SDG: SI2069
LCS File ID: C2182.D

Sample Date:
Received Date:
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	103.	50.0	51.3	ug/L	30-155
Chloromethane	95.8	50.0	47.9	ug/L	40-125
Vinyl Chloride	96.2	50.0	48.1	ug/L	50-145
Bromomethane	101.	50.0	50.5	ug/L	30-145
Chloroethane	92.0	50.0	46.0	ug/L	60-135
Trichlorofluoromethane	87.4	50.0	43.7	ug/L	60-145
1,1-Dichloroethene	102.	50.0	50.9	ug/L	70-130
Carbon Disulfide	106.	50.0	52.8	ug/L	35-160
Freon-113	105.	50.0	52.4	ug/L	73-126
Methylene Chloride	98.6	50.0	49.3	ug/L	55-140
Acetone	129.	50.0	64.6	ug/L	40-140
trans-1,2-Dichloroethene	96.8	50.0	48.4	ug/L	60-140
Methyl tert-butyl Ether	112.	100.	112.	ug/L	65-125
1,1-Dichloroethane	103.	50.0	51.6	ug/L	70-135
cis-1,2-Dichloroethene	98.0	50.0	49.0	ug/L	70-125
Chloroform	99.0	50.0	49.5	ug/L	65-135
1,1,1-Trichloroethane	96.8	50.0	48.4	ug/L	65-130
2-Butanone	108.	50.0	53.9	ug/L	30-150
Cyclohexane	101.	50.0	50.6	ug/L	71-133
Carbon Tetrachloride	105.	50.0	52.7	ug/L	65-140
Benzene	103.	50.0	51.4	ug/L	80-120
1,2-Dichloroethane	94.8	50.0	47.4	ug/L	70-130
Trichloroethene	98.4	50.0	49.2	ug/L	70-125
1,2-Dichloropropane	106.	50.0	53.1	ug/L	75-125
Bromodichloromethane	110.	50.0	54.8	ug/L	75-120
cis-1,3-Dichloropropene	108.	50.0	54.0	ug/L	70-130
Toluene	102.	50.0	50.8	ug/L	75-120
4-Methyl-2-Pentanone	122.	50.0	60.9	ug/L	60-135
trans-1,3-Dichloropropene	109.	50.0	54.7	ug/L	55-140
1,1,2-Trichloroethane	101.	50.0	50.7	ug/L	75-125
Tetrachloroethene	98.4	50.0	49.2	ug/L	45-150
Dibromochloromethane	99.2	50.0	49.6	ug/L	60-135
2-Hexanone	110.	50.0	54.8	ug/L	55-130
Chlorobenzene	107.	50.0	53.6	ug/L	80-120
Ethylbenzene	101.	50.0	50.5	ug/L	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG160924-8
Client ID: LCS
Project:
SDG: SI2069
LCS File ID: C2182.D

Sample Date:
Received Date:
Extract Date: 08-APR-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG160924

Analysis Date: 08-APR-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 15-APR-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Xylenes (total)	111.	150.	166.	ug/L	89-116
Styrene	109.	50.0	54.5	ug/L	65-135
Bromoform	96.8	50.0	48.4	ug/L	70-130
Isopropylbenzene	113.	50.0	56.7	ug/L	75-125
1,1,2,2-Tetrachloroethane	104.	50.0	51.8	ug/L	65-130
1,3-Dichlorobenzene	108.	50.0	54.1	ug/L	75-125
1,4-Dichlorobenzene	99.0	50.0	49.5	ug/L	75-125
1,2-Dichlorobenzene	109.	50.0	54.4	ug/L	70-120
1,2,4-Trichlorobenzene	105.	50.0	52.4	ug/L	65-135
Methyl Acetate	107.	50.0	53.6	ug/L	70-132
Methylcyclohexane	110.	50.0	55.2	ug/L	73-125
o-Xylene	117.	50.0	58.7	ug/L	80-120
M+P-Xylenes	107.	100.	107.	ug/L	75-130
1,2-Dichloroethylene (Total)	97.5	100.	97.5	ug/L	84-121
1,2-Dibromoethane	105.	50.0	52.4	ug/L	80-120
1,2-Dibromo-3-Chloropropane	98.4	50.0	49.2	ug/L	50-130
P-Bromofluorobenzene	105.				75-120
Toluene-d8	119.				85-120
1,2-Dichloroethane-d4	106.				70-120
Dibromofluoromethane	104.				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182.D
Report Date: 09-Apr-2015 08:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-c.i\C040815.b\C2182.D
Lab Smp Id: WG160924-8
Inj Date : 08-APR-2015 14:53 MS Autotune Date: 03-FEB-2015 11:03
Operator : EME Inst ID: gcms-c.i
Smp Info : WG160924-8,SI2069
Misc Info : WG160924,WG160924-4,SI2069-1
Comment : SW846 5030
Method : \\target_server\gg\chem\gcms-c.i\C040815.b\C826A36.m
Meth Date : 08-Apr-2015 14:42 rcrocker Quant Type: ISTD
Cal Date : 08-APR-2015 14:06 Cal File: C2181.D
Als bottle: 7 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Dichlorodifluoromethane	85	1.986	1.986	(0.247)	334890	51.3109	51.3	
2 Chloromethane	50	2.229	2.229	(0.277)	409595	47.8800	47.9	
3 Vinyl chloride	62	2.329	2.322	(0.290)	303019	48.1451	48.1	
4 Bromomethane	94	2.729	2.730	(0.339)	159436	50.5233	50.5	
5 Chloroethane	64	2.879	2.880	(0.358)	115324	45.9998	46.0	
6 Trichlorofluoromethane	101	3.058	3.051	(0.380)	332220	43.7269	43.7	
7 Diethyl Ether	59	3.487	3.487	(0.434)	203825	47.4934	47.5	
8 Tertiary-butyl alcohol	59	5.345	5.353	(0.665)	143553	284.268	284	
9 1,1-Dichloroethene	96	3.744	3.745	(0.466)	225046	50.8899	50.9	
10 Carbon Disulfide	76	3.780	3.780	(0.470)	663440	52.7731	52.8	
11 Freon-113	151	3.808	3.809	(0.474)	159009	52.3502	52.4	
12 Iodomethane	142	3.959	3.952	(0.492)	258055	51.5185	51.5	
13 Acrolein	56	4.266	4.267	(0.531)	182990	274.111	274	
14 Methylene Chloride	84	4.645	4.645	(0.578)	256192	49.3277	49.3	
15 Acetone	43	4.752	4.753	(0.591)	102929	64.5838	64.6(R)	
16 Isobutyl Alcohol	43	8.255	8.255	(1.027)	222348	1214.23	1210(R)	
17 trans-1,2-Dichloroethene	96	4.916	4.917	(0.612)	241758	48.4292	48.4	
18 Allyl Chloride	41	4.473	4.474	(0.556)	251900	52.9651	53.0	
19 Methyl tert-butyl ether	73	5.124	5.124	(0.637)	1244278	112.401	112	
20 Acetonitrile	39	5.545	5.546	(0.690)	60020	479.886	480	
21 Di-isopropyl ether	45	5.781	5.782	(0.719)	765485	54.5492	54.5	
22 Chloroprene	53	5.910	5.911	(0.735)	389627	53.0191	53.0	
23 Propionitrile	54	7.961	7.962	(0.990)	390726	517.729	518	
24 Methacrylonitrile	41	7.983	7.984	(0.993)	1355260	499.152	499	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182.D
Report Date: 09-Apr-2015 08:38

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	25	1,1-Dichloroethane	63	5.946	5.946	(0.740)	499560	51.5814	51.6	
	26	Acrylonitrile	52	6.039	6.039	(0.751)	453062	267.765	268	
	27	Ethyl tertiary-butyl ether	59	6.346	6.347	(0.789)	698592	55.0212	55.0	
	28	Vinyl Acetate	43	6.367	6.368	(0.732)	573133	56.3242	56.3	
	29	cis-1,2-Dichloroethene	96	6.753	6.761	(0.840)	252670	49.0540	49.0	
M	30	1,2-Dichloroethylene (total)	96				494428	97.4832	97.5	
	31	Methyl Methacrylate	41	9.563	9.563	(1.099)	188513	50.8563	50.8	
	32	2,2-Dichloropropane	77	6.904	6.904	(0.859)	403399	50.0355	50.0	
	33	Bromochloromethane	128	7.032	7.033	(0.875)	107473	52.0935	52.1	
	34	Chloroform	83	7.154	7.154	(0.890)	497888	49.4876	49.5	
	35	Carbon Tetrachloride	117	7.311	7.312	(0.841)	314088	52.6918	52.7	
	36	Tetrahydrofuran	42	7.361	7.362	(0.916)	74242	54.4861	54.5	
$	37	Dibromofluoromethane	113	7.397	7.405	(0.920)	196973	52.2656	52.3	
	38	1,1,1-Trichloroethane	97	7.411	7.412	(0.922)	460587	48.4293	48.4	
	39	1,1-Dichloropropene	75	7.583	7.583	(0.872)	374331	53.0899	53.1	
	40	2-Butanone	43	7.583	7.583	(0.943)	127764	53.8998	53.9	
	41	Benzene	78	7.904	7.905	(0.909)	911943	51.4512	51.4	
*	42	Pentafluorobenzene	168	8.040	8.041	(1.000)	375671	50.0000		
	43	Cyclohexane	56	7.018	7.019	(0.873)	416292	50.6438	50.6	
	44	Ethyl Methacrylate	69	11.057	11.057	(1.271)	269189	56.2190	56.2	
$	45	1,2-Dichloroethane-D4	65	8.090	8.090	(1.006)	266821	52.9163	52.9	
	46	Tertiary-amyl methyl ether	73	8.076	8.076	(1.004)	528635	54.5344	54.5	
	47	1,2-Dichloroethane	62	8.176	8.177	(0.940)	399163	47.3851	47.4	
	48	Trichloroethene	95	8.648	8.648	(0.994)	265157	49.1588	49.2	
*	49	1,4-Difluorobenzene	114	8.698	8.698	(1.000)	629003	50.0000		
	50	Dibromomethane	93	9.162	9.163	(1.053)	153275	48.7768	48.8	
	51	1,2-Dichloropropane	63	9.284	9.284	(1.067)	247108	53.1427	53.1	
	52	Bromodichloromethane	83	9.370	9.370	(1.077)	383589	54.8118	54.8	
	53	cis-1,3-dichloropropene	75	10.106	10.106	(1.162)	404692	53.9540	54.0	
	54	1,4-Dioxane	88	9.606	9.606	(1.104)	80020	1090.27	1090	
$	55	Toluene-D8	98	10.320	10.321	(1.187)	688599	59.6972	59.7	
	56	2-Chloroethylvinylether	63	10.042	10.049	(1.154)	10022	77.3026	77.3(R)	
	57	Toluene	92	10.378	10.378	(1.193)	582935	50.7797	50.8	
	58	4-methyl-2-pentanone	43	10.828	10.828	(1.245)	244669	60.9374	60.9(R)	
	59	Tetrachloroethene	164	10.821	10.821	(0.888)	189018	49.1921	49.2	
	60	trans-1,3-Dichloropropene	75	10.864	10.871	(1.249)	384988	54.7366	54.7	
	61	1,1,2-Trichloroethane	83	11.057	11.057	(1.271)	178719	50.6679	50.7	
	62	Dibromochloromethane	129	11.264	11.264	(0.924)	255951	49.5818	49.6	
	63	1,3-Dichloropropane	76	11.378	11.379	(0.934)	400618	52.0124	52.0	
	64	1,2-Dibromoethane	107	11.550	11.550	(1.328)	240298	52.3599	52.4	
	65	2-Hexanone	43	11.836	11.836	(0.971)	186455	54.7843	54.8	
*	66	Chlorobenzene-D5	117	12.186	12.187	(1.000)	601919	50.0000		
	67	Chlorobenzene	112	12.207	12.208	(1.002)	659439	53.5505	53.6	
	152	1-Chlorohexane	91	12.179	12.179	(0.999)	373250	52.6931	52.7	
	68	Ethylbenzene	106	12.243	12.244	(1.005)	352704	50.5032	50.5	
	69	1,1,1,2-Tetrachloroethane	131	12.293	12.294	(1.009)	248073	53.3890	53.4	
M	70	Xylenes (total)	106				1308104	165.707	166	
	71	m+p-Xylenes	106	12.436	12.437	(1.021)	871403	106.995	107	
	72	o-Xylene	106	13.001	13.001	(1.067)	436701	58.7116	58.7	
	73	Styrene	104	13.079	13.080	(1.073)	725014	54.5367	54.5	
	74	Bromoform	173	13.115	13.116	(1.076)	159013	48.4475	48.4	
	75	Isopropylbenzene	105	13.437	13.437	(0.866)	1228311	56.7292	56.7	
$	76	P-Bromofluorobenzene	95	13.837	13.838	(1.591)	317523	52.3157	52.3	
	77	cis-1,4-Dichloro-2-Butene	53	13.937	13.938	(0.898)	114715	48.9440	48.9	

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182.D
Report Date: 09-Apr-2015 08:38

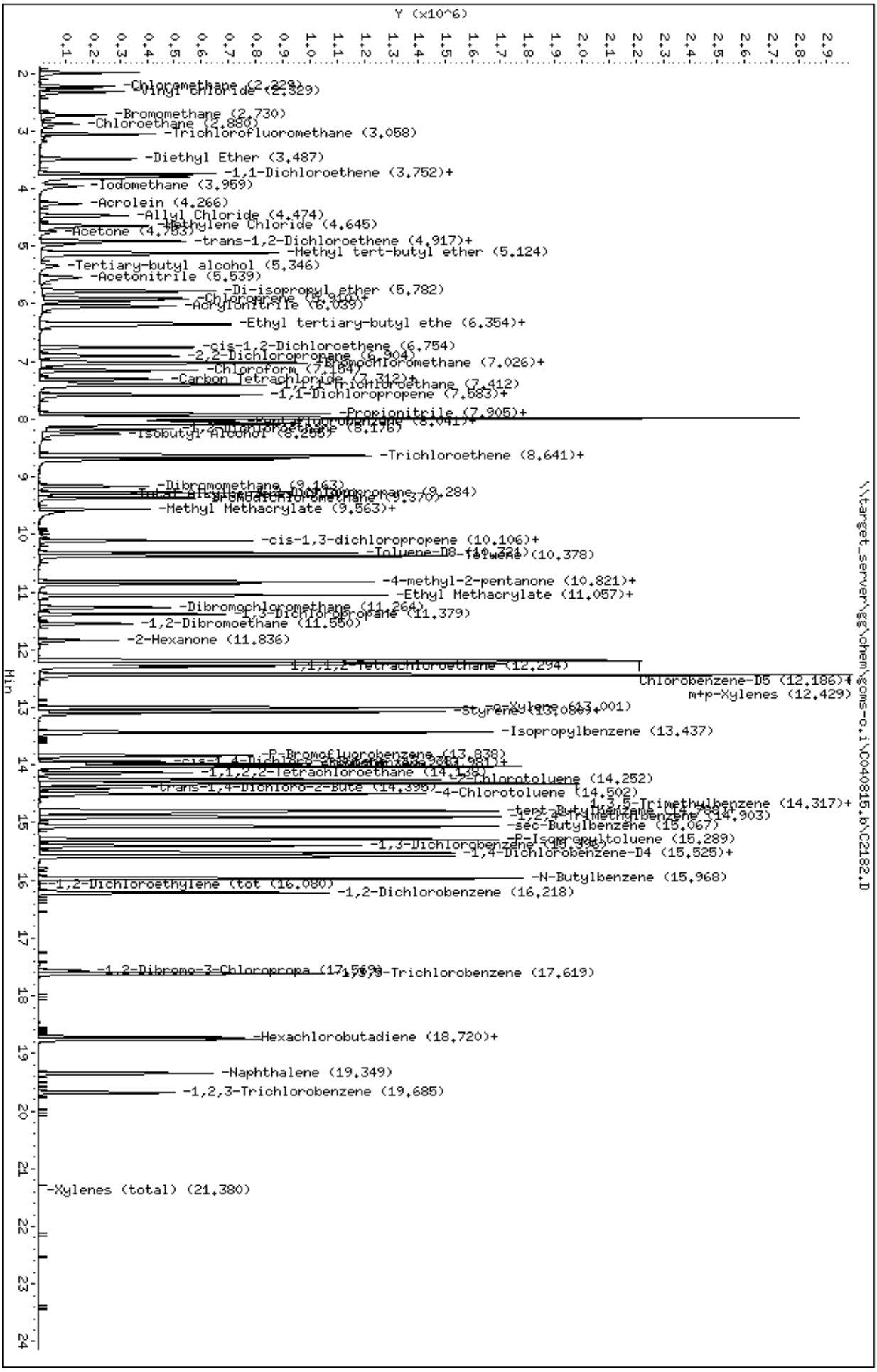
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
78 trans-1,4-Dichloro-2-Butene	53	14.395	14.395	(0.928)	90667	47.8076	47.8	
79 Bromobenzene	156	13.980	13.981	(0.901)	278812	52.7325	52.7	
80 N-Propylbenzene	91	14.023	14.024	(0.904)	1504603	56.9553	57.0	
81 1,1,2,2-Tetrachloroethane	83	14.137	14.131	(0.911)	314450	51.8496	51.8	
82 1,3,5-Trimethylbenzene	105	14.316	14.317	(0.923)	1040475	50.5508	50.6	
83 2-Chlorotoluene	91	14.252	14.252	(0.918)	936724	54.0282	54.0	
84 1,2,3-Trichloropropane	75	14.330	14.331	(0.924)	272757	50.3767	50.4	
85 4-Chlorotoluene	91	14.502	14.502	(0.935)	985937	56.0903	56.1	
86 tert-Butylbenzene	119	14.788	14.788	(0.953)	1018895	56.4543	56.4	
87 Pentachloroethane	117	14.824	14.824	(0.955)	201915	54.2450	54.2	
88 1,2,4-Trimethylbenzene	105	14.902	14.903	(0.960)	1061329	52.6243	52.6	
89 P-Isopropyltoluene	119	15.295	15.296	(0.986)	1105946	56.2885	56.3	
90 1,3-Dichlorobenzene	146	15.395	15.396	(0.992)	516318	54.0932	54.1	
* 91 1,4-Dichlorobenzene-D4	152	15.517	15.518	(1.000)	368395	50.0000		
92 1,4-Dichlorobenzene	146	15.538	15.539	(1.001)	513934	49.5277	49.5	
93 N-Butylbenzene	91	15.967	15.968	(1.029)	1113774	54.1082	54.1	
94 sec-Butylbenzene	105	15.067	15.067	(0.971)	1325087	55.0742	55.1	
95 1,2-Dichlorobenzene	146	16.217	16.218	(1.045)	469845	54.3968	54.4	
96 1,2-Dibromo-3-Chloropropane	75	17.561	17.562	(1.132)	60855	49.2534	49.2	
97 1,3,5-Trichlorobenzene	180	17.618	17.619	(1.135)	348184	53.1550	53.2	
98 Hexachlorobutadiene	225	18.719	18.720	(1.206)	169749	51.8734	51.9	
99 1,2,4-Trichlorobenzene	180	18.762	18.763	(1.209)	272263	52.3652	52.4	
100 1,2,3-Trimethylbenzene	105	15.581	15.582	(1.004)	975931	51.5653	51.6	
101 Naphthalene	128	19.348	19.349	(1.247)	547561	51.5748	51.6	
102 1,2,3-Trichlorobenzene	180	19.684	19.685	(1.269)	175255	52.0281	52.0	
103 Methyl Acetate	43	4.974	4.967	(0.619)	202638	53.6103	53.6	
104 Methylcyclohexane	83	8.626	8.627	(1.073)	445236	55.2186	55.2	
M 153 Total Alkylbenzenes	100				8170109	382.056	382	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-c.i\C040815.b\C2182.D
Date : 08-APR-2015 14:53
Client ID:
Sample Info: WG160924-8,SI2069
Purge Volume: 5.0
Column phase: RTX-VMS

Instrument: gcms-c.i
Operator: EME
Column diameter: 0.18



Logbooks and Supporting Documents

GCMS-C INSTRUMENT RUNLOG

KATAHDIN ANALYTICAL SERVICES

DATE/TIME OF BFB INJECTION: 04-08-15 10:19

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	MCP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB -10 (10)	CB057	1	-1	VOABFBAQ							Y	EME		
VSTD050C08A (4)	C2176A	1	1	C826A36							Y			W6160924-4
VSTD020C08A (3)	77A	1	2								Y			-3
VSTD005C08A (2)	78A	1	3								Y			-2
VSTD001C08A (1)	79A	1	4								Y			-1
VSTD200C08A (6)	80A	1	5								Y			-6
VSTD100C08A (5)	81A	1	6								Y			-5
LCSA (8)	82	1	7								Y			IND -7
LCS20A -8	83	1	8								Y			W6160927 -7 (60ng)
VBLK A	84	1	9								N			↳ 1ISA(DoD)
B	85	1	10								N			
C -9 (9)	86A	1	11								Y			
SI2070-3 B	87	1	12		X				X		Y		<2	
SI2069-1 C	88	1	13								Y		<2	
-2 C	89	1	14								Y		<2	
-3 C	90	1	15								Y		<2	
SI2069-4 C	91	1	16								Y		<2	
-5 C	92	1	17								Y		<2	20:36
Rinse	93	1	18								N			
Rinse	94	1	19								N			
Rinse	95	1	20								N			
SI2070-1DL C	96	4	21								Y		<2	10mL→40mL limited volume
-2 C	97	1	22								Y		<2	Decanted 'C' vial
SI2156-1 A+B	98	1	23								Y		<2	
-2 A+B	99	1	24								Y		<2	
Rinse x2	C20200-20201	1	25								N			

STANDARD	CODE
BFB	V9754
CAL. STD.	V9786, V9792
LCS/MS MIX	V9791
EXTRAS MIX	V9785

STANDARD	CODE
IS MIX	V9780
SS MIX	V9781

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

SEMIVOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE15-03-06 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI2069

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
MW-11-GW-040115	SI2069-1RE		64.4		25.3		56.7		16.7		69.3		93.7	
MW-03-GW-040115	SI2069-2RE		66.9		25.9		63.9		16.2		68.4		85.2	
MW-10-GW-040115	SI2069-3		57.8		23.1		63.0		17.0		41.2		87.0	
MW-04-GW-040115	SI2069-4RE		68.2		20.8		68.5		17.1		48.5		90.4	
MW-01-GW-040215	SI2069-5		72.1		20.5		73.5		18.6		50.4		87.2	
Method Blank Sample	WG160777-1		75.4		34.2		87.9		24.9		54.5		81.2	
Laboratory Control S	WG160777-2		72.3		35.7		74.3		23.6		77.2		84.8	
Laboratory Control S	WG160777-3		65.8		29.1		65.3		19.9		68.4		86.6	
Method Blank Sample	WG160882-1		63.0		28.2		68.9		16.9		62.0		79.2	
Laboratory Control S	WG160882-2		63.1		27.3		64.1		16.8		64.9		77.3	
Laboratory Control S	WG160882-3		76.1		39.0		75.1		24.9		78.9		87.8	

		QC Limits
2FBP	2-FLUOROBIPHENYL	50-110
2FP	2-FLUOROPHENOL	20-110
PHL	PHENOL-D6	10-115
TPH	TERPHENYL-D14	50-135
NBZ	NITROBENZENE-D5	40-110
TBP	2,4,6-TRIBROMOPHENOL	40-125

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
SDG : SI2069
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab Sample ID : WG160777-1
Lab File ID : U9933.D
Date Extracted : 06-APR-15
Instrument ID : GCMS-U
Date Analyzed : 06-APR-15
Matrix : AQ
Time Analyzed : 15:39

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG160777-2	U9934.D	04/06/15	16:05
Laboratory Control S	WG160777-3	U9935.D	04/06/15	16:31
MW-10-GW-040115	SI2069-3	U9949.D	04/06/15	22:30
MW-01-GW-040215	SI2069-5	U9951.D	04/06/15	23:21

Method Blank Summary

Lab Name : Katahdin Analytical Services
SDG : SI2069
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab Sample ID : WG160882-1
Lab File ID : U9983.D
Date Extracted : 08-APR-15
Instrument ID : GCMS-U
Date Analyzed : 08-APR-15
Matrix : AQ
Time Analyzed : 14:03

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG160882-2	U9984.D	04/08/15	14:29
Laboratory Control S	WG160882-3	U9985.D	04/08/15	14:55
MW-03-GW-040115	SI2069-2RE	U9988.D	04/08/15	16:12
MW-04-GW-040115	SI2069-4RE	U9989.D	04/08/15	16:39
MW-11-GW-040115	SI2069-1RE	U9990.D	04/08/15	17:05

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Lab File ID : UD340.D
Instrument ID : GCMS-U

SDG : SI2069
Date Analyzed : 23-MAR-15
Time Analyzed : 14:55

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.4		
68	Less than 2.0% of mass 69	0.5	1.33	1
69	Less than 100.0% of mass 198	38.7		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	53.0		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.9		
275	10.0 - 30.0% of mass 198	23.3		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	13.9	81.06	2
442	40.0 - 100.0% of mass 198	90.6		
443	17.0 - 23.0% of mass 442	17.1	18.93	3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG160080-4	U9721.D	03/23/15	15:13
Initial Calibration	WG160080-2	U9722.D	03/23/15	15:39
Initial Calibration	WG160080-3	U9723.D	03/23/15	16:05
Initial Calibration	WG160080-5	U9724.D	03/23/15	16:31
Initial Calibration	WG160080-6	U9725.D	03/23/15	16:57
Initial Calibration	WG160080-7	U9726.D	03/23/15	17:23
Independent Source	WG160080-8	U9727.D	03/23/15	17:49

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SI2069
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Date Analyzed : 06-APR-15
Lab File ID : UD349.D
Time Analyzed : 14:49
Instrument ID : GCMS-U

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	33.1		
68	Less than 2.0% of mass 69	0.2	0.63	1
69	Less than 100.0% of mass 198	38.9		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	52.2		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	21.7		
365	1.0 - 100.0% of mass 198	2.7		
441	0.0 - 100.0% of mass 443	13.6	82.94	2
442	40.0 - 100.0% of mass 198	86.5		
443	17.0 - 23.0% of mass 442	16.4	19.00	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG160781-2	U9932.D	04/06/15	15:10
Method Blank Sample	WG160777-1	U9933.D	04/06/15	15:39
Laboratory Control S	WG160777-2	U9934.D	04/06/15	16:05
Laboratory Control S	WG160777-3	U9935.D	04/06/15	16:31
MW-10-GW-040115	SI2069-3	U9949.D	04/06/15	22:30
MW-01-GW-040215	SI2069-5	U9951.D	04/06/15	23:21

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SI2069
Project : Navy Clean WE15-03-06 NWIRP Bethpage,
Date Analyzed : 08-APR-15
Lab File ID : UD351.D
Time Analyzed : 12:54
Instrument ID : GCMS-U

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.8		
68	Less than 2.0% of mass 69	0.5	1.23	1
69	Less than 100.0% of mass 198	40.1		
70	Less than 2.0% of mass 69	0.2	0.41	1
127	40.0 - 60.0% of mass 198	53.3		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.3		
275	10.0 - 30.0% of mass 198	21.7		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	14.3	86.78	2
442	40.0 - 100.0% of mass 198	89.5		
443	17.0 - 23.0% of mass 442	16.5	18.44	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG160877-2	U9982.D	04/08/15	13:30
Method Blank Sample	WG160882-1	U9983.D	04/08/15	14:03
Laboratory Control S	WG160882-2	U9984.D	04/08/15	14:29
Laboratory Control S	WG160882-3	U9985.D	04/08/15	14:55
MW-03-GW-040115	SI2069-2RE	U9988.D	04/08/15	16:12
MW-04-GW-040115	SI2069-4RE	U9989.D	04/08/15	16:39
MW-11-GW-040115	SI2069-1RE	U9990.D	04/08/15	17:05

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160080-4
Lab File ID : U9721.D

SDG: SI2069
Analytical Date: 03/23/15 15:13
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	331260		4.05		1286125		5.40		649262		7.48	
	Upper Limit	662520		4.55		2572250		5.90		1298524		7.98	
	Lower Limit	165630		3.55		643062.5		4.90		324631		6.98	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG160781-2	300552		4.02		1159234		5.37		602802		7.45	
Method Blank Sample	WG160777-1	349246		4.02		1212683		5.36		677147		7.45	
Laboratory Control S	WG160777-2	326652		4.02		1231963		5.37		671009		7.45	
Laboratory Control S	WG160777-3	316118		4.02		1220728		5.37		660932		7.45	
MW-10-GW-040115	SI2069-3	332590		4.02		1201511		5.36		645006		7.45	
MW-01-GW-040215	SI2069-5	360445		4.02		1338676		5.36		710753		7.45	
Continuing Calibrati	WG160877-2	361138		4.01		1363286		5.36		697597		7.45	
Method Blank Sample	WG160882-1	381394		4.01		1361815		5.35		706801		7.45	
Laboratory Control S	WG160882-2	356981		4.01		1342662		5.36		703335		7.44	
Laboratory Control S	WG160882-3	339701		4.01		1237431		5.36		634075		7.44	
MW-03-GW-040115	SI2069-2RE	369425		4.01		1297899		5.35		663965		7.43	
MW-04-GW-040115	SI2069-4RE	366825		4.01		1305420		5.36		662125		7.44	
MW-11-GW-040115	SI2069-1RE	359362		4.01		1332151		5.35		662525		7.43	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIR
Lab ID : WG160080-4
Lab File ID : U9721.D

SDG: SI2069
Analytical Date: 03/23/15 15:13
Instrument ID: GCMS-U

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	983961		9.31		559989		12.85		314600		15.78	
	Upper Limit	1967922		9.81		1119978		13.35		629200		16.28	
	Lower Limit	491980.5		8.81		279994.5		12.35		157300		15.28	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG160781-2	964198		9.27		546045		12.81		330380		15.74	
Method Blank Sample	WG160777-1	996678		9.27		778301		12.80		521755		15.74	
Laboratory Control S	WG160777-2	1046969		9.27		676020		12.81		421595		15.75	
Laboratory Control S	WG160777-3	1017668		9.27		603142		12.81		359121		15.73	
MW-10-GW-040115	SI2069-3	936215		9.26		676242		12.80		370518		15.74	
MW-01-GW-040215	SI2069-5	956415		9.27		512023		12.79		249026		15.73	
Continuing Calibrati	WG160877-2	972646		9.26		559488		12.78		353696		15.71	
Method Blank Sample	WG160882-1	984920		9.25		658592		12.78		384362		15.72	
Laboratory Control S	WG160882-2	974376		9.24		645757		12.77		396422		15.71	
Laboratory Control S	WG160882-3	913817		9.25		572851		12.78		329346		15.71	
MW-03-GW-040115	SI2069-2RE	882977		9.25		424425		12.76		216948		15.70	
MW-04-GW-040115	SI2069-4RE	1001422		9.25		557774		12.77		266648		15.71	
MW-11-GW-040115	SI2069-1RE	856104		9.24		405290		12.76		175407		15.70	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-1RE
Client ID: MW-11-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: U9990.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.1	ug/L	1	10	9.4	1.7	7.1
Bis(2-Chloroethyl)Ether	U	7.1	ug/L	1	10	9.4	1.9	7.1
2-Chlorophenol	U	7.1	ug/L	1	10	9.4	3.0	7.1
1,3-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
1,4-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.1	7.1
1,2-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.3	7.1
2-Methylphenol	U	7.1	ug/L	1	10	9.4	3.6	7.1
2,2'-Oxybis(1-Chloropropane)	U	7.1	ug/L	1	10	9.4	2.0	7.1
3&4-Methylphenol	U	7.1	ug/L	1	10	9.4	5.3	7.1
N-Nitroso-Di-N-Propylamine	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachloroethane	U	7.1	ug/L	1	10	9.4	2.2	7.1
Nitrobenzene	U	7.1	ug/L	1	10	9.4	2.9	7.1
Isophorone	U	7.1	ug/L	1	10	9.4	1.6	7.1
2-Nitrophenol	U	7.1	ug/L	1	10	9.4	2.5	7.1
2,4-Dimethylphenol	U	7.1	ug/L	1	10	9.4	4.2	7.1
Bis(2-Chloroethoxy)Methane	U	7.1	ug/L	1	10	9.4	2.0	7.1
2,4-Dichlorophenol	U	7.1	ug/L	1	10	9.4	2.8	7.1
1,2,4-Trichlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
Naphthalene	U	7.1	ug/L	1	10	9.4	2.1	7.1
4-Chloroaniline	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachlorobutadiene	U	7.1	ug/L	1	10	9.4	1.7	7.1
4-Chloro-3-Methylphenol	U	7.1	ug/L	1	10	9.4	3.4	7.1
2-Methylnaphthalene	U	7.1	ug/L	1	10	9.4	3.0	7.1
Hexachlorocyclopentadiene	U	7.1	ug/L	1	10	9.4	1.1	7.1
2,4,6-Trichlorophenol	U	7.1	ug/L	1	10	9.4	2.5	7.1
2,4,5-Trichlorophenol	U	18	ug/L	1	25	24.	3.4	18.
2-Chloronaphthalene	U	7.1	ug/L	1	10	9.4	2.7	7.1
2-Nitroaniline	U	18	ug/L	1	25	24.	1.7	18.
Dimethyl Phthalate	U	7.1	ug/L	1	10	9.4	1.9	7.1
Acenaphthylene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2,6-Dinitrotoluene	U	7.1	ug/L	1	10	9.4	1.9	7.1
3-Nitroaniline	U	18	ug/L	1	25	24.	1.4	18.
Acenaphthene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2,4-Dinitrophenol	U	18	ug/L	1	25	24.	0.94	18.
4-Nitrophenol	U	18	ug/L	1	25	24.	1.7	18.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-1RE
Client ID: MW-11-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: U9990.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.1	ug/L	1	10	9.4	1.5	7.1
2,4-Dinitrotoluene	U	7.1	ug/L	1	10	9.4	2.1	7.1
Diethylphthalate	U	7.1	ug/L	1	10	9.4	1.9	7.1
4-Chlorophenyl-Phenylether	U	7.1	ug/L	1	10	9.4	2.1	7.1
Fluorene	U	7.1	ug/L	1	10	9.4	2.0	7.1
4-Nitroaniline	U	18	ug/L	1	25	24.	1.5	18.
4,6-Dinitro-2-Methylphenol	U	18	ug/L	1	25	24.	1.9	18.
N-Nitrosodiphenylamine	U	7.1	ug/L	1	10	9.4	3.5	7.1
4-Bromophenyl-Phenylether	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
Pentachlorophenol	U	18	ug/L	1	25	24.	2.2	18.
Phenanthrene	U	7.1	ug/L	1	10	9.4	2.3	7.1
Anthracene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Carbazole	U	7.1	ug/L	1	10	9.4	2.0	7.1
Di-N-Butylphthalate	U	7.1	ug/L	1	10	9.4	2.4	7.1
Fluoranthene	U	7.1	ug/L	1	10	9.4	2.3	7.1
Pyrene	U	7.1	ug/L	1	10	9.4	1.8	7.1
Butylbenzylphthalate	U	7.1	ug/L	1	10	9.4	1.8	7.1
3,3'-Dichlorobenzidine	U	7.1	ug/L	1	10	9.4	1.0	7.1
Benzo(a)anthracene	U	7.1	ug/L	1	10	9.4	1.5	7.1
Chrysene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Bis(2-Ethylhexyl)Phthalate	U	7.1	ug/L	1	10	9.4	1.7	7.1
Di-N-Octylphthalate	U	7.1	ug/L	1	10	9.4	1.7	7.1
Benzo(b)fluoranthene	J	1.2	ug/L	1	10	9.4	1.1	7.1
Benzo(k)fluoranthene	U	7.1	ug/L	1	10	9.4	1.5	7.1
Benzo(a)pyrene	U	7.1	ug/L	1	10	9.4	1.1	7.1
Indeno(1,2,3-cd)pyrene	U	7.1	ug/L	1	10	9.4	1.8	7.1
Dibenzo(a,h)anthracene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Benzo(g,h,i)perylene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2-Fluorophenol		25.3	%					
Phenol-d6		16.7	%					
Nitrobenzene-d5		56.7	%					
2-Fluorobiphenyl		64.4	%					
2,4,6-Tribromophenol		69.3	%					
Terphenyl-d14		93.7	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9990.D
Report Date: 09-Apr-2015 15:55

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9990.D
Lab Smp Id: SI2069-1RE Client Smp ID: MW-11-GW-040115
Inj Date : 08-APR-2015 17:05 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2069-1RE
Misc Info : WG160877,WG160882,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

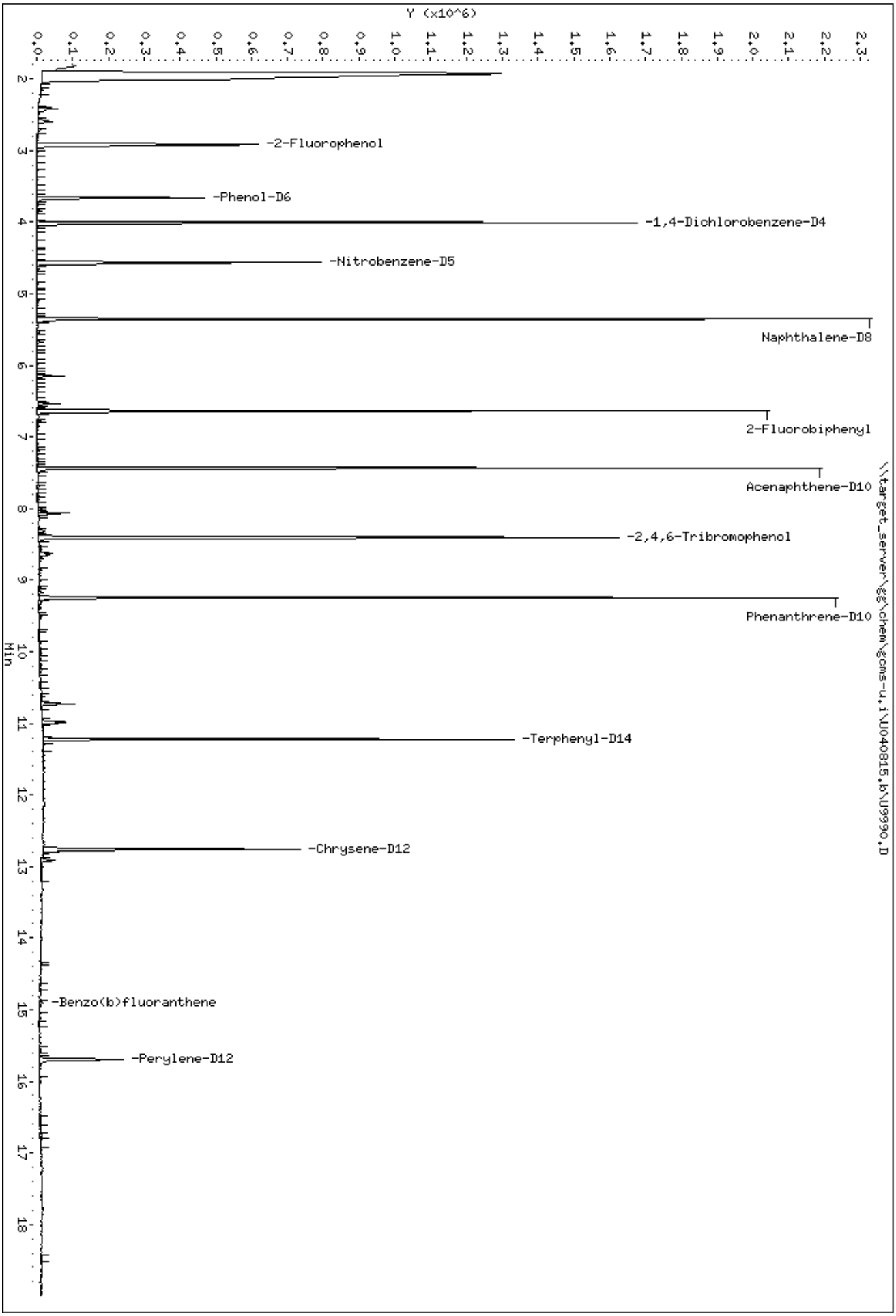
Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.910	2.911	(0.726)	344396	25.3421	23.9	
$ 12 Phenol-D6	99	3.655	3.656	(0.912)	262887	16.6797	15.7	
* 19 1,4-Dichlorobenzene-D4	152	4.007	4.008	(1.000)	359362	40.0000		
$ 33 Nitrobenzene-D5	82	4.566	4.578	(0.853)	337851	28.3438	26.7	
* 45 Naphthalene-D8	136	5.353	5.364	(1.000)	1332151	40.0000		
$ 63 2-Fluorobiphenyl	172	6.636	6.637	(0.893)	620322	32.2266	30.4	
* 78 Acenaphthene-D10	164	7.433	7.445	(1.000)	662525	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.406	8.417	(1.131)	241785	69.2954	65.4	
* 114 Phenanthrene-D10	188	9.244	9.256	(1.000)	856104	40.0000		
$ 129 Terphenyl-D14	244	11.221	11.222	(0.879)	451899	46.8635	44.2	
* 141 Chrysene-D12	240	12.763	12.775	(1.000)	405290	40.0000		
145 Benzo(b)fluoranthene	252	14.896	14.928	(0.949)	6835	1.27435	1.20(a)	
* 150 Perylene-D12	264	15.703	15.714	(1.000)	175407	40.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9990,D
Date : 08-APR-2015 17:05
Client ID: MW-11-GW-040115
Sample Info: SI2069-1RE
Instrument: gcms-u,i
\\target_server\gg\chem\gcms-u,i\U040815,b\U9990,D
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Benzo(b)fluoranthene
-Perylene-D12

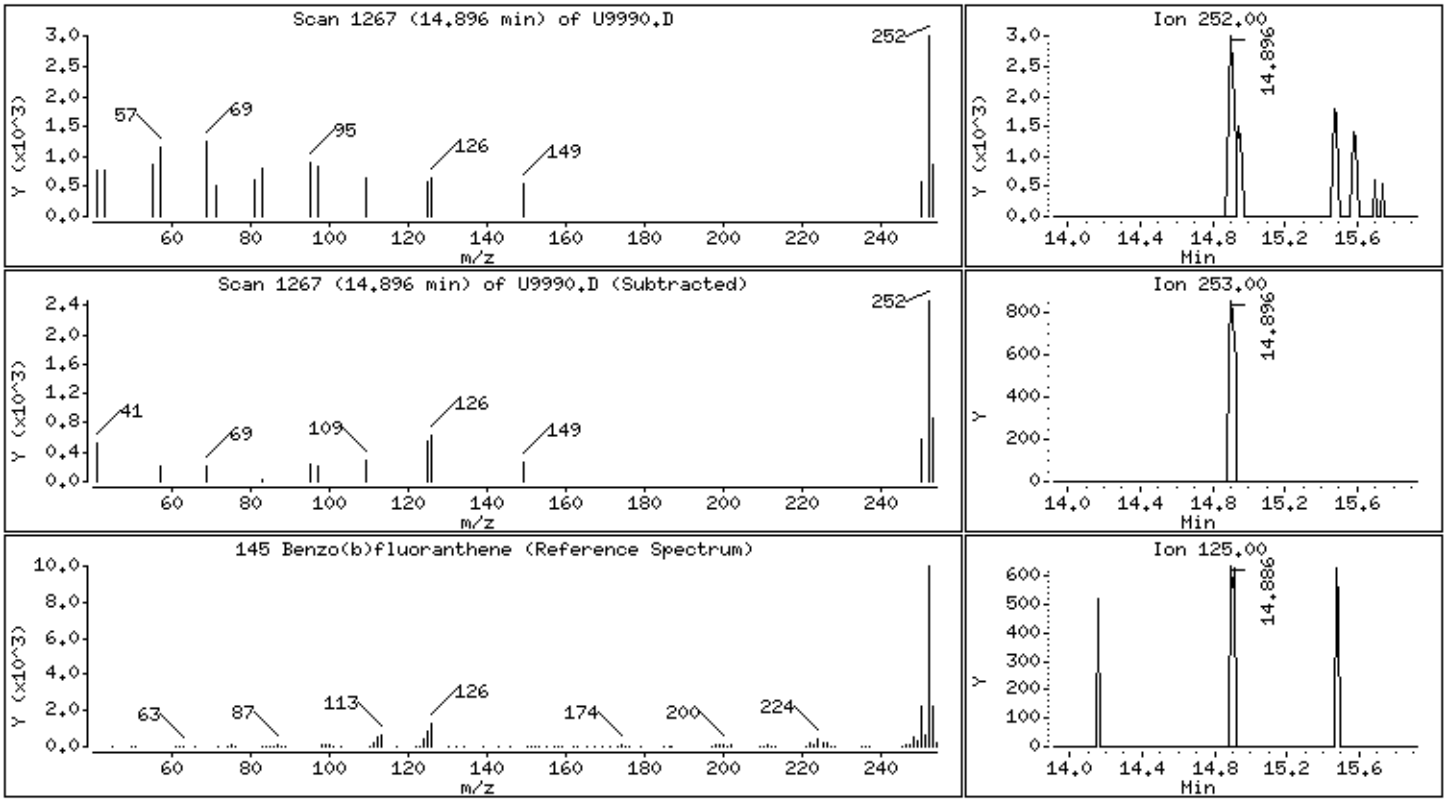
Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9990.D

Date : 08-APR-2015 17:05

Client ID: MW-11-GW-040115 Instrument: gcms-u.i

Sample Info: SI2069-1RE

145 Benzo(b)fluoranthene Concentration: 1.20 ug/L



Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-2RE
Client ID: MW-03-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: U9988.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.3	ug/L	1	10	9.7	1.7	7.3
Bis(2-Chloroethyl)Ether	U	7.3	ug/L	1	10	9.7	1.9	7.3
2-Chlorophenol	U	7.3	ug/L	1	10	9.7	3.1	7.3
1,3-Dichlorobenzene	U	7.3	ug/L	1	10	9.7	2.0	7.3
1,4-Dichlorobenzene	U	7.3	ug/L	1	10	9.7	2.1	7.3
1,2-Dichlorobenzene	U	7.3	ug/L	1	10	9.7	2.3	7.3
2-Methylphenol	U	7.3	ug/L	1	10	9.7	3.7	7.3
2,2'-Oxybis(1-Chloropropane)	U	7.3	ug/L	1	10	9.7	2.0	7.3
3&4-Methylphenol	U	7.3	ug/L	1	10	9.7	5.4	7.3
N-Nitroso-Di-N-Propylamine	U	7.3	ug/L	1	10	9.7	1.8	7.3
Hexachloroethane	U	7.3	ug/L	1	10	9.7	2.2	7.3
Nitrobenzene	U	7.3	ug/L	1	10	9.7	3.0	7.3
Isophorone	U	7.3	ug/L	1	10	9.7	1.6	7.3
2-Nitrophenol	U	7.3	ug/L	1	10	9.7	2.6	7.3
2,4-Dimethylphenol	U	7.3	ug/L	1	10	9.7	4.3	7.3
Bis(2-Chloroethoxy)Methane	U	7.3	ug/L	1	10	9.7	2.0	7.3
2,4-Dichlorophenol	U	7.3	ug/L	1	10	9.7	2.9	7.3
1,2,4-Trichlorobenzene	U	7.3	ug/L	1	10	9.7	2.0	7.3
Naphthalene	U	7.3	ug/L	1	10	9.7	2.1	7.3
4-Chloroaniline	U	7.3	ug/L	1	10	9.7	1.8	7.3
Hexachlorobutadiene	U	7.3	ug/L	1	10	9.7	1.7	7.3
4-Chloro-3-Methylphenol	U	7.3	ug/L	1	10	9.7	3.5	7.3
2-Methylnaphthalene	U	7.3	ug/L	1	10	9.7	3.1	7.3
Hexachlorocyclopentadiene	U	7.3	ug/L	1	10	9.7	1.2	7.3
2,4,6-Trichlorophenol	U	7.3	ug/L	1	10	9.7	2.6	7.3
2,4,5-Trichlorophenol	U	18	ug/L	1	25	24.	3.5	18.
2-Chloronaphthalene	U	7.3	ug/L	1	10	9.7	2.8	7.3
2-Nitroaniline	U	18	ug/L	1	25	24.	1.7	18.
Dimethyl Phthalate	U	7.3	ug/L	1	10	9.7	2.0	7.3
Acenaphthylene	U	7.3	ug/L	1	10	9.7	1.4	7.3
2,6-Dinitrotoluene	U	7.3	ug/L	1	10	9.7	1.9	7.3
3-Nitroaniline	U	18	ug/L	1	25	24.	1.4	18.
Acenaphthene	U	7.3	ug/L	1	10	9.7	1.4	7.3
2,4-Dinitrophenol	U	18	ug/L	1	25	24.	0.97	18.
4-Nitrophenol	U	18	ug/L	1	25	24.	1.7	18.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-2RE
Client ID: MW-03-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: U9988.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.3	ug/L	1	10	9.7	1.6	7.3
2,4-Dinitrotoluene	U	7.3	ug/L	1	10	9.7	2.1	7.3
Diethylphthalate	U	7.3	ug/L	1	10	9.7	1.9	7.3
4-Chlorophenyl-Phenylether	U	7.3	ug/L	1	10	9.7	2.1	7.3
Fluorene	U	7.3	ug/L	1	10	9.7	2.0	7.3
4-Nitroaniline	U	18	ug/L	1	25	24.	1.6	18.
4,6-Dinitro-2-Methylphenol	U	18	ug/L	1	25	24.	1.9	18.
N-Nitrosodiphenylamine	U	7.3	ug/L	1	10	9.7	3.6	7.3
4-Bromophenyl-Phenylether	U	7.3	ug/L	1	10	9.7	1.8	7.3
Hexachlorobenzene	U	7.3	ug/L	1	10	9.7	2.0	7.3
Pentachlorophenol	U	18	ug/L	1	25	24.	2.2	18.
Phenanthrene	U	7.3	ug/L	1	10	9.7	2.3	7.3
Anthracene	U	7.3	ug/L	1	10	9.7	1.6	7.3
Carbazole	U	7.3	ug/L	1	10	9.7	2.0	7.3
Di-N-Butylphthalate	U	7.3	ug/L	1	10	9.7	2.4	7.3
Fluoranthene	U	7.3	ug/L	1	10	9.7	2.3	7.3
Pyrene	U	7.3	ug/L	1	10	9.7	1.8	7.3
Butylbenzylphthalate	U	7.3	ug/L	1	10	9.7	1.8	7.3
3,3'-Dichlorobenzidine	U	7.3	ug/L	1	10	9.7	1.1	7.3
Benzo(a)anthracene	U	7.3	ug/L	1	10	9.7	1.6	7.3
Chrysene	U	7.3	ug/L	1	10	9.7	1.6	7.3
Bis(2-Ethylhexyl)Phthalate	U	7.3	ug/L	1	10	9.7	1.7	7.3
Di-N-Octylphthalate	U	7.3	ug/L	1	10	9.7	1.7	7.3
Benzo(b)fluoranthene	U	7.3	ug/L	1	10	9.7	1.2	7.3
Benzo(k)fluoranthene	U	7.3	ug/L	1	10	9.7	1.6	7.3
Benzo(a)pyrene	U	7.3	ug/L	1	10	9.7	1.2	7.3
Indeno(1,2,3-cd)pyrene	U	7.3	ug/L	1	10	9.7	1.8	7.3
Dibenzo(a,h)anthracene	U	7.3	ug/L	1	10	9.7	1.6	7.3
Benzo(g,h,i)perylene	U	7.3	ug/L	1	10	9.7	1.4	7.3
2-Fluorophenol		25.9	%					
Phenol-d6		16.2	%					
Nitrobenzene-d5		63.9	%					
2-Fluorobiphenyl		66.9	%					
2,4,6-Tribromophenol		68.4	%					
Terphenyl-d14		85.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9988.D
Report Date: 09-Apr-2015 15:55

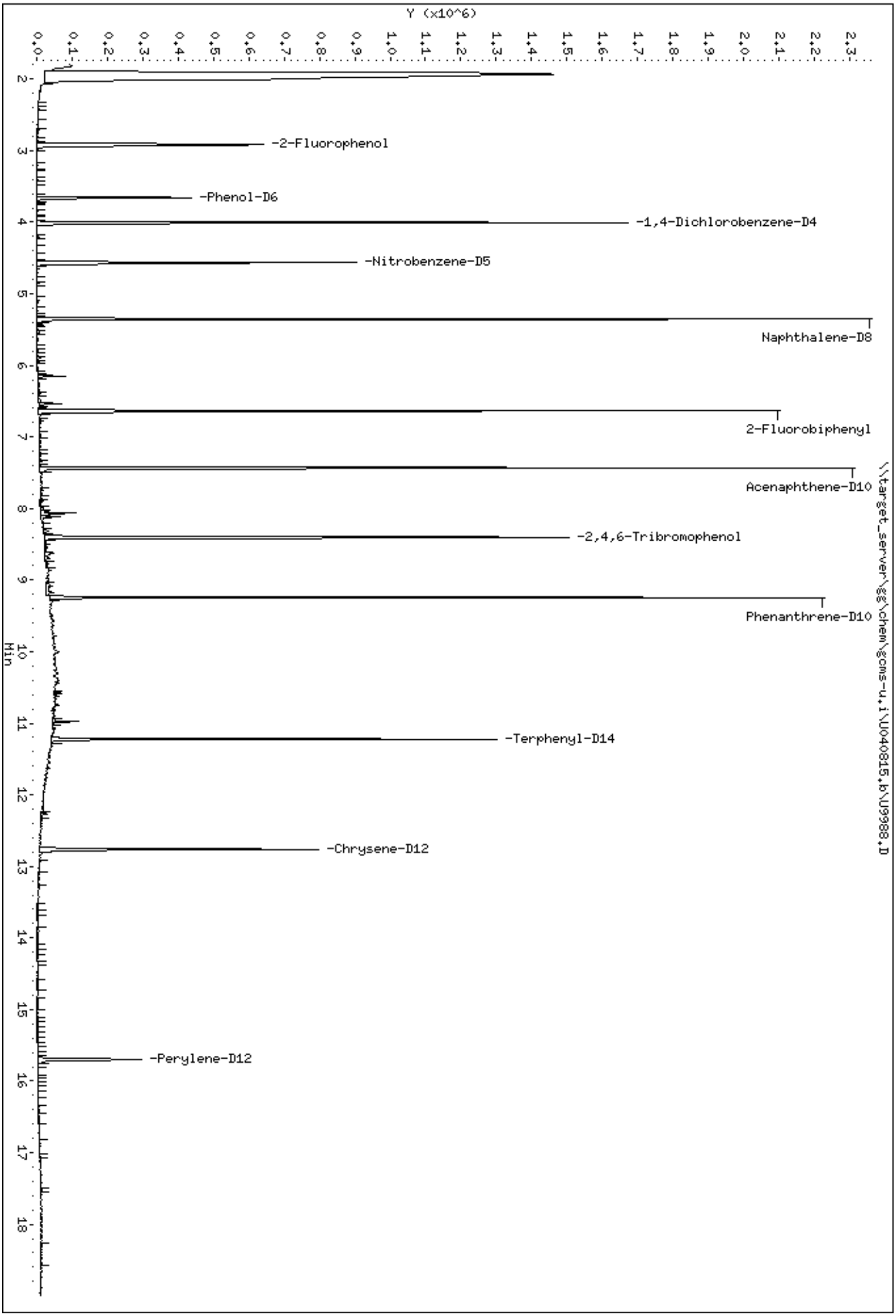
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9988.D
Lab Smp Id: SI2069-2RE Client Smp ID: MW-03-GW-040115
Inj Date : 08-APR-2015 16:12 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2069-2RE
Misc Info : WG160877,WG160882,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.030	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.911	2.911	(0.726)	362507	25.9482	25.2	
$ 12 Phenol-D6	99	3.656	3.656	(0.912)	263266	16.2488	15.8	
* 19 1,4-Dichlorobenzene-D4	152	4.008	4.008	(1.000)	369425	40.0000		
$ 33 Nitrobenzene-D5	82	4.567	4.578	(0.853)	371305	31.9725	31.0	
* 45 Naphthalene-D8	136	5.353	5.364	(1.000)	1297899	40.0000		
$ 63 2-Fluorobiphenyl	172	6.637	6.637	(0.893)	644959	33.4339	32.5	
* 78 Acenaphthene-D10	164	7.434	7.445	(1.000)	663965	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.407	8.417	(1.131)	239276	68.4276	66.4	
* 114 Phenanthrene-D10	188	9.245	9.256	(1.000)	882977	40.0000		
$ 129 Terphenyl-D14	244	11.222	11.222	(0.879)	430041	42.5861	41.3	
* 141 Chrysene-D12	240	12.764	12.775	(1.000)	424425	40.0000		
* 150 Perylene-D12	264	15.704	15.714	(1.000)	216948	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9988,D
Date : 08-APR-2015 16:12
Client ID: MW-03-GW-040115
Sample Info: SI2069-2RE
Instrument: gcms-u,i
\\target_server\gg\chem\gcms-u,i\U040815,b\U9988,D
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-3
Client ID: MW-10-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: U9949.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.4	ug/L	1	10	9.9	1.8	7.4
Bis(2-Chloroethyl)Ether	U	7.4	ug/L	1	10	9.9	2.0	7.4
2-Chlorophenol	U	7.4	ug/L	1	10	9.9	3.2	7.4
1,3-Dichlorobenzene	U	7.4	ug/L	1	10	9.9	2.1	7.4
1,4-Dichlorobenzene	U	7.4	ug/L	1	10	9.9	2.2	7.4
1,2-Dichlorobenzene	U	7.4	ug/L	1	10	9.9	2.4	7.4
2-Methylphenol	U	7.4	ug/L	1	10	9.9	3.8	7.4
2,2'-Oxybis(1-Chloropropane)	U	7.4	ug/L	1	10	9.9	2.1	7.4
3&4-Methylphenol	U	7.4	ug/L	1	10	9.9	5.5	7.4
N-Nitroso-Di-N-Propylamine	U	7.4	ug/L	1	10	9.9	1.9	7.4
Hexachloroethane	U	7.4	ug/L	1	10	9.9	2.3	7.4
Nitrobenzene	U	7.4	ug/L	1	10	9.9	3.1	7.4
Isophorone	U	7.4	ug/L	1	10	9.9	1.7	7.4
2-Nitrophenol	U	7.4	ug/L	1	10	9.9	2.7	7.4
2,4-Dimethylphenol	U	7.4	ug/L	1	10	9.9	4.4	7.4
Bis(2-Chloroethoxy)Methane	U	7.4	ug/L	1	10	9.9	2.1	7.4
2,4-Dichlorophenol	U	7.4	ug/L	1	10	9.9	3.0	7.4
1,2,4-Trichlorobenzene	U	7.4	ug/L	1	10	9.9	2.1	7.4
Naphthalene	U	7.4	ug/L	1	10	9.9	2.2	7.4
4-Chloroaniline	U	7.4	ug/L	1	10	9.9	1.9	7.4
Hexachlorobutadiene	U	7.4	ug/L	1	10	9.9	1.8	7.4
4-Chloro-3-Methylphenol	U	7.4	ug/L	1	10	9.9	3.6	7.4
2-Methylnaphthalene	U	7.4	ug/L	1	10	9.9	3.2	7.4
Hexachlorocyclopentadiene	U	7.4	ug/L	1	10	9.9	1.2	7.4
2,4,6-Trichlorophenol	U	7.4	ug/L	1	10	9.9	2.7	7.4
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.4	ug/L	1	10	9.9	2.9	7.4
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl Phthalate	U	7.4	ug/L	1	10	9.9	2.0	7.4
Acenaphthylene	U	7.4	ug/L	1	10	9.9	1.5	7.4
2,6-Dinitrotoluene	U	7.4	ug/L	1	10	9.9	2.0	7.4
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.4	ug/L	1	10	9.9	1.5	7.4
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	0.99	19.
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-3
Client ID: MW-10-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: U9949.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.4	ug/L	1	10	9.9	1.6	7.4
2,4-Dinitrotoluene	U	7.4	ug/L	1	10	9.9	2.2	7.4
Diethylphthalate	U	7.4	ug/L	1	10	9.9	2.0	7.4
4-Chlorophenyl-Phenylether	U	7.4	ug/L	1	10	9.9	2.2	7.4
Fluorene	U	7.4	ug/L	1	10	9.9	2.1	7.4
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.
4,6-Dinitro-2-Methylphenol	U	19	ug/L	1	25	25.	2.0	19.
N-Nitrosodiphenylamine	U	7.4	ug/L	1	10	9.9	3.7	7.4
4-Bromophenyl-Phenylether	U	7.4	ug/L	1	10	9.9	1.9	7.4
Hexachlorobenzene	U	7.4	ug/L	1	10	9.9	2.1	7.4
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Phenanthrene	U	7.4	ug/L	1	10	9.9	2.4	7.4
Anthracene	U	7.4	ug/L	1	10	9.9	1.7	7.4
Carbazole	U	7.4	ug/L	1	10	9.9	2.1	7.4
Di-N-Butylphthalate	U	7.4	ug/L	1	10	9.9	2.5	7.4
Fluoranthene	U	7.4	ug/L	1	10	9.9	2.4	7.4
Pyrene	U	7.4	ug/L	1	10	9.9	1.9	7.4
Butylbenzylphthalate	U	7.4	ug/L	1	10	9.9	1.9	7.4
3,3'-Dichlorobenzidine	U	7.4	ug/L	1	10	9.9	1.1	7.4
Benzo(a)anthracene	U	7.4	ug/L	1	10	9.9	1.6	7.4
Chrysene	U	7.4	ug/L	1	10	9.9	1.7	7.4
Bis(2-Ethylhexyl)Phthalate	U	7.4	ug/L	1	10	9.9	1.8	7.4
Di-N-Octylphthalate	U	7.4	ug/L	1	10	9.9	1.8	7.4
Benzo(b)fluoranthene	U	7.4	ug/L	1	10	9.9	1.2	7.4
Benzo(k)fluoranthene	U	7.4	ug/L	1	10	9.9	1.6	7.4
Benzo(a)pyrene	U	7.4	ug/L	1	10	9.9	1.2	7.4
Indeno(1,2,3-cd)pyrene	UL	7.4	ug/L	1	10	9.9	1.9	7.4
Dibenzo(a,h)anthracene	U	7.4	ug/L	1	10	9.9	1.7	7.4
Benzo(g,h,i)perylene	U	7.4	ug/L	1	10	9.9	1.5	7.4
2-Fluorophenol		23.1	%					
Phenol-d6		17.0	%					
Nitrobenzene-d5		63.0	%					
2-Fluorobiphenyl		57.8	%					
2,4,6-Tribromophenol		41.2	%					
Terphenyl-d14		87.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9949.D
Report Date: 09-Apr-2015 15:53

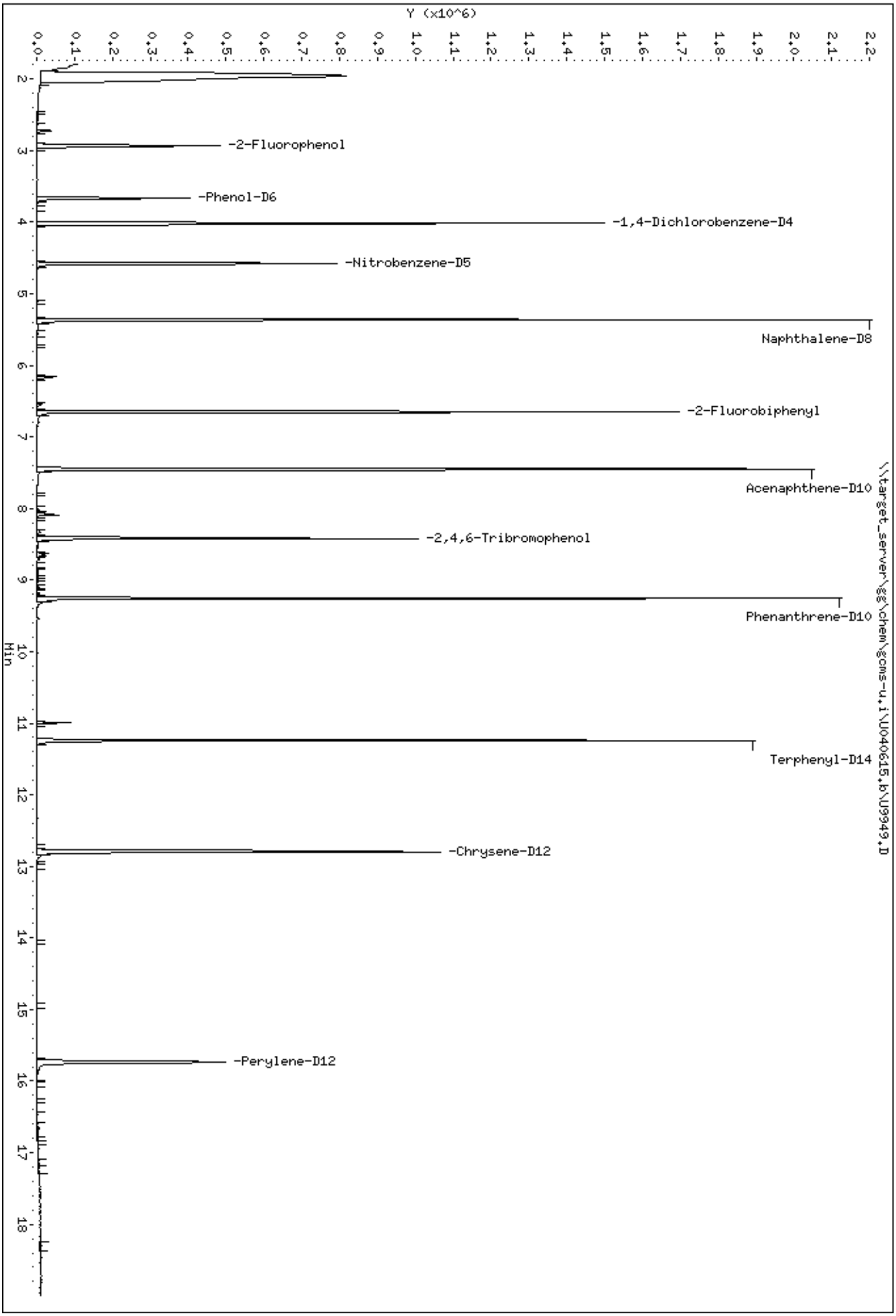
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9949.D
Lab Smp Id: SI2069-3 Client Smp ID: MW-10-GW-040115
Inj Date : 06-APR-2015 22:30 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2069-3
Misc Info : WG160781,WG160777,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.010	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.931	2.931	(0.730)	290221	23.0748	22.8	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	247810	16.9888	16.8	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	332590	40.0000		
$ 33 Nitrobenzene-D5	82	4.577	4.587	(0.853)	338692	31.5039	31.2	
* 45 Naphthalene-D8	136	5.364	5.373	(1.000)	1201511	40.0000		
$ 63 2-Fluorobiphenyl	172	6.647	6.657	(0.892)	541520	28.8969	28.6	
* 78 Acenaphthene-D10	164	7.454	7.454	(1.000)	645006	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.417	8.427	(1.129)	139839	41.1663	40.8	
* 114 Phenanthrene-D10	188	9.255	9.265	(1.000)	936215	40.0000		
$ 129 Terphenyl-D14	244	11.243	11.242	(0.879)	699575	43.4801	43.0	
* 141 Chrysene-D12	240	12.795	12.805	(1.000)	676242	40.0000		
* 150 Perylene-D12	264	15.735	15.744	(1.000)	370518	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9949,D
Date : 06-APR-2015 22:30
Client ID: MW-10-GW-040115
Sample Info: S12069-3
Instrument: gcms-u,i
\\target_server\gg\chem\gcms-u,i\U040615,b\U9949,D
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
Terphenyl-D14
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-4RE
Client ID: MW-04-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: U9989.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.4	ug/L	1	10	9.8	1.8	7.4
Bis(2-Chloroethyl)Ether	U	7.4	ug/L	1	10	9.8	2.0	7.4
2-Chlorophenol	U	7.4	ug/L	1	10	9.8	3.1	7.4
1,3-Dichlorobenzene	U	7.4	ug/L	1	10	9.8	2.0	7.4
1,4-Dichlorobenzene	U	7.4	ug/L	1	10	9.8	2.2	7.4
1,2-Dichlorobenzene	U	7.4	ug/L	1	10	9.8	2.4	7.4
2-Methylphenol	U	7.4	ug/L	1	10	9.8	3.7	7.4
2,2'-Oxybis(1-Chloropropane)	U	7.4	ug/L	1	10	9.8	2.0	7.4
3&4-Methylphenol	U	7.4	ug/L	1	10	9.8	5.5	7.4
N-Nitroso-Di-N-Propylamine	U	7.4	ug/L	1	10	9.8	1.9	7.4
Hexachloroethane	U	7.4	ug/L	1	10	9.8	2.2	7.4
Nitrobenzene	U	7.4	ug/L	1	10	9.8	3.0	7.4
Isophorone	U	7.4	ug/L	1	10	9.8	1.7	7.4
2-Nitrophenol	U	7.4	ug/L	1	10	9.8	2.6	7.4
2,4-Dimethylphenol	U	7.4	ug/L	1	10	9.8	4.3	7.4
Bis(2-Chloroethoxy)Methane	U	7.4	ug/L	1	10	9.8	2.0	7.4
2,4-Dichlorophenol	U	7.4	ug/L	1	10	9.8	2.9	7.4
1,2,4-Trichlorobenzene	U	7.4	ug/L	1	10	9.8	2.0	7.4
Naphthalene	U	7.4	ug/L	1	10	9.8	2.2	7.4
4-Chloroaniline	U	7.4	ug/L	1	10	9.8	1.9	7.4
Hexachlorobutadiene	U	7.4	ug/L	1	10	9.8	1.8	7.4
4-Chloro-3-Methylphenol	U	7.4	ug/L	1	10	9.8	3.5	7.4
2-Methylnaphthalene	U	7.4	ug/L	1	10	9.8	3.1	7.4
Hexachlorocyclopentadiene	U	7.4	ug/L	1	10	9.8	1.2	7.4
2,4,6-Trichlorophenol	U	7.4	ug/L	1	10	9.8	2.6	7.4
2,4,5-Trichlorophenol	U	18	ug/L	1	25	24.	3.5	18.
2-Chloronaphthalene	U	7.4	ug/L	1	10	9.8	2.8	7.4
2-Nitroaniline	U	18	ug/L	1	25	24.	1.8	18.
Dimethyl Phthalate	U	7.4	ug/L	1	10	9.8	2.0	7.4
Acenaphthylene	U	7.4	ug/L	1	10	9.8	1.5	7.4
2,6-Dinitrotoluene	U	7.4	ug/L	1	10	9.8	2.0	7.4
3-Nitroaniline	U	18	ug/L	1	25	24.	1.5	18.
Acenaphthene	U	7.4	ug/L	1	10	9.8	1.5	7.4
2,4-Dinitrophenol	U	18	ug/L	1	25	24.	0.98	18.
4-Nitrophenol	U	18	ug/L	1	25	24.	1.8	18.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-4RE
Client ID: MW-04-GW-040115
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: U9989.D

Sample Date: 01-APR-15
Received Date: 03-APR-15
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.4	ug/L	1	10	9.8	1.6	7.4
2,4-Dinitrotoluene	U	7.4	ug/L	1	10	9.8	2.2	7.4
Diethylphthalate	U	7.4	ug/L	1	10	9.8	2.0	7.4
4-Chlorophenyl-Phenylether	U	7.4	ug/L	1	10	9.8	2.2	7.4
Fluorene	U	7.4	ug/L	1	10	9.8	2.0	7.4
4-Nitroaniline	U	18	ug/L	1	25	24.	1.6	18.
4,6-Dinitro-2-Methylphenol	U	18	ug/L	1	25	24.	2.0	18.
N-Nitrosodiphenylamine	U	7.4	ug/L	1	10	9.8	3.6	7.4
4-Bromophenyl-Phenylether	U	7.4	ug/L	1	10	9.8	1.9	7.4
Hexachlorobenzene	U	7.4	ug/L	1	10	9.8	2.0	7.4
Pentachlorophenol	U	18	ug/L	1	25	24.	2.2	18.
Phenanthrene	U	7.4	ug/L	1	10	9.8	2.4	7.4
Anthracene	U	7.4	ug/L	1	10	9.8	1.7	7.4
Carbazole	U	7.4	ug/L	1	10	9.8	2.0	7.4
Di-N-Butylphthalate	U	7.4	ug/L	1	10	9.8	2.4	7.4
Fluoranthene	U	7.4	ug/L	1	10	9.8	2.4	7.4
Pyrene	U	7.4	ug/L	1	10	9.8	1.9	7.4
Butylbenzylphthalate	U	7.4	ug/L	1	10	9.8	1.9	7.4
3,3'-Dichlorobenzidine	U	7.4	ug/L	1	10	9.8	1.1	7.4
Benzo(a)anthracene	U	7.4	ug/L	1	10	9.8	1.6	7.4
Chrysene	U	7.4	ug/L	1	10	9.8	1.7	7.4
Bis(2-Ethylhexyl)Phthalate	U	7.4	ug/L	1	10	9.8	1.8	7.4
Di-N-Octylphthalate	U	7.4	ug/L	1	10	9.8	1.8	7.4
Benzo(b)fluoranthene	U	7.4	ug/L	1	10	9.8	1.2	7.4
Benzo(k)fluoranthene	U	7.4	ug/L	1	10	9.8	1.6	7.4
Benzo(a)pyrene	U	7.4	ug/L	1	10	9.8	1.2	7.4
Indeno(1,2,3-cd)pyrene	U	7.4	ug/L	1	10	9.8	1.9	7.4
Dibenzo(a,h)anthracene	U	7.4	ug/L	1	10	9.8	1.7	7.4
Benzo(g,h,i)perylene	U	7.4	ug/L	1	10	9.8	1.5	7.4
2-Fluorophenol		20.8	%					
Phenol-d6		17.1	%					
Nitrobenzene-d5		68.5	%					
2-Fluorobiphenyl		68.2	%					
2,4,6-Tribromophenol		48.5	%					
Terphenyl-d14		90.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9989.D
Report Date: 09-Apr-2015 15:55

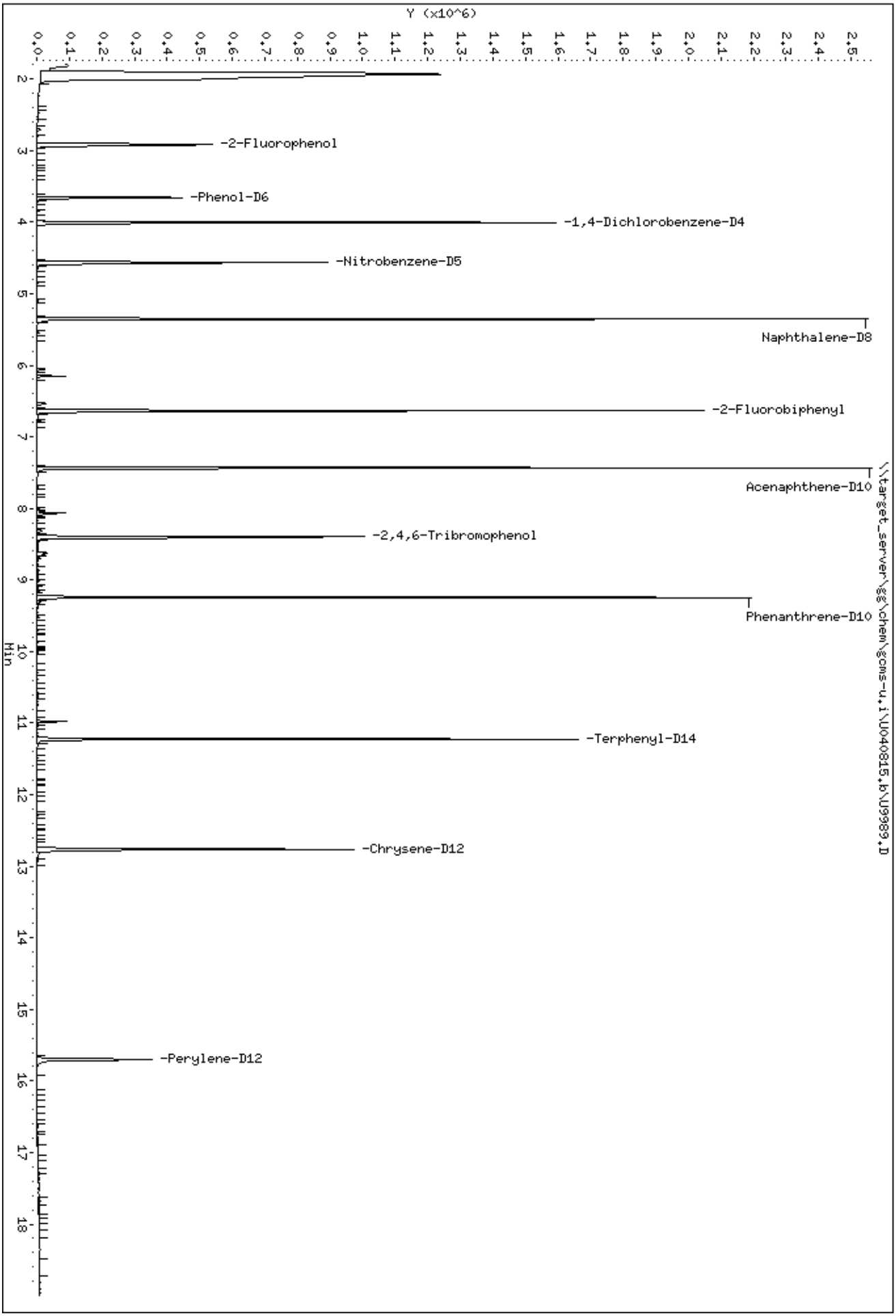
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9989.D
Lab Smp Id: SI2069-4RE Client Smp ID: MW-04-GW-040115
Inj Date : 08-APR-2015 16:39 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2069-4RE
Misc Info : WG160877,WG160882,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.020	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.912	2.911	(0.726)	288361	20.7872	20.4	
$ 12 Phenol-D6	99	3.658	3.656	(0.912)	274669	17.0727	16.7	
* 19 1,4-Dichlorobenzene-D4	152	4.009	4.008	(1.000)	366825	40.0000		
$ 33 Nitrobenzene-D5	82	4.568	4.578	(0.853)	400212	34.2631	33.6	
* 45 Naphthalene-D8	136	5.355	5.364	(1.000)	1305420	40.0000		
$ 63 2-Fluorobiphenyl	172	6.638	6.637	(0.893)	655754	34.0879	33.4	
* 78 Acenaphthene-D10	164	7.435	7.445	(1.000)	662125	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.408	8.417	(1.131)	169265	48.5406	47.6	
* 114 Phenanthrene-D10	188	9.247	9.256	(1.000)	1001422	40.0000		
$ 129 Terphenyl-D14	244	11.224	11.222	(0.879)	599882	45.2029	44.3	
* 141 Chrysene-D12	240	12.766	12.775	(1.000)	557774	40.0000		
* 150 Perylene-D12	264	15.705	15.714	(1.000)	266648	40.0000		


Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9989.D
Date : 08-APR-2015 16:39
Client ID: MW-04-GW-040115
Sample Info: S12069-4RE
Instrument: gcms-u.i
Y (x10^6)
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12
Min
\\target_server\gg\chem\gcms-u.i\U040815.b\U9989.D

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-5
Client ID: MW-01-GW-040215
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: U9951.D

Sample Date: 02-APR-15
Received Date: 03-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.1	ug/L	1	10	9.4	1.7	7.1
Bis(2-Chloroethyl)Ether	U	7.1	ug/L	1	10	9.4	1.9	7.1
2-Chlorophenol	U	7.1	ug/L	1	10	9.4	3.0	7.1
1,3-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
1,4-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.1	7.1
1,2-Dichlorobenzene	U	7.1	ug/L	1	10	9.4	2.3	7.1
2-Methylphenol	U	7.1	ug/L	1	10	9.4	3.6	7.1
2,2'-Oxybis(1-Chloropropane)	U	7.1	ug/L	1	10	9.4	2.0	7.1
3&4-Methylphenol	U	7.1	ug/L	1	10	9.4	5.3	7.1
N-Nitroso-Di-N-Propylamine	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachloroethane	U	7.1	ug/L	1	10	9.4	2.2	7.1
Nitrobenzene	U	7.1	ug/L	1	10	9.4	2.9	7.1
Isophorone	U	7.1	ug/L	1	10	9.4	1.6	7.1
2-Nitrophenol	U	7.1	ug/L	1	10	9.4	2.5	7.1
2,4-Dimethylphenol	U	7.1	ug/L	1	10	9.4	4.2	7.1
Bis(2-Chloroethoxy)Methane	U	7.1	ug/L	1	10	9.4	2.0	7.1
2,4-Dichlorophenol	U	7.1	ug/L	1	10	9.4	2.8	7.1
1,2,4-Trichlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
Naphthalene	U	7.1	ug/L	1	10	9.4	2.1	7.1
4-Chloroaniline	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachlorobutadiene	U	7.1	ug/L	1	10	9.4	1.7	7.1
4-Chloro-3-Methylphenol	U	7.1	ug/L	1	10	9.4	3.4	7.1
2-Methylnaphthalene	U	7.1	ug/L	1	10	9.4	3.0	7.1
Hexachlorocyclopentadiene	U	7.1	ug/L	1	10	9.4	1.1	7.1
2,4,6-Trichlorophenol	U	7.1	ug/L	1	10	9.4	2.5	7.1
2,4,5-Trichlorophenol	U	18	ug/L	1	25	24.	3.4	18.
2-Chloronaphthalene	U	7.1	ug/L	1	10	9.4	2.7	7.1
2-Nitroaniline	U	18	ug/L	1	25	24.	1.7	18.
Dimethyl Phthalate	U	7.1	ug/L	1	10	9.4	1.9	7.1
Acenaphthylene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2,6-Dinitrotoluene	U	7.1	ug/L	1	10	9.4	1.9	7.1
3-Nitroaniline	U	18	ug/L	1	25	24.	1.4	18.
Acenaphthene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2,4-Dinitrophenol	U	18	ug/L	1	25	24.	0.94	18.
4-Nitrophenol	U	18	ug/L	1	25	24.	1.7	18.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI2069-5
Client ID: MW-01-GW-040215
Project: Navy Clean WE15-03-06 NWIRP Bethp
SDG: SI2069
Lab File ID: U9951.D

Sample Date: 02-APR-15
Received Date: 03-APR-15
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dibenzofuran	U	7.1	ug/L	1	10	9.4	1.5	7.1
2,4-Dinitrotoluene	U	7.1	ug/L	1	10	9.4	2.1	7.1
Diethylphthalate	U	7.1	ug/L	1	10	9.4	1.9	7.1
4-Chlorophenyl-Phenylether	U	7.1	ug/L	1	10	9.4	2.1	7.1
Fluorene	U	7.1	ug/L	1	10	9.4	2.0	7.1
4-Nitroaniline	U	18	ug/L	1	25	24.	1.5	18.
4,6-Dinitro-2-Methylphenol	U	18	ug/L	1	25	24.	1.9	18.
N-Nitrosodiphenylamine	U	7.1	ug/L	1	10	9.4	3.5	7.1
4-Bromophenyl-Phenylether	U	7.1	ug/L	1	10	9.4	1.8	7.1
Hexachlorobenzene	U	7.1	ug/L	1	10	9.4	2.0	7.1
Pentachlorophenol	U	18	ug/L	1	25	24.	2.2	18.
Phenanthrene	U	7.1	ug/L	1	10	9.4	2.3	7.1
Anthracene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Carbazole	U	7.1	ug/L	1	10	9.4	2.0	7.1
Di-N-Butylphthalate	U	7.1	ug/L	1	10	9.4	2.4	7.1
Fluoranthene	U	7.1	ug/L	1	10	9.4	2.3	7.1
Pyrene	U	7.1	ug/L	1	10	9.4	1.8	7.1
Butylbenzylphthalate	U	7.1	ug/L	1	10	9.4	1.8	7.1
3,3'-Dichlorobenzidine	U	7.1	ug/L	1	10	9.4	1.0	7.1
Benzo(a)anthracene	U	7.1	ug/L	1	10	9.4	1.5	7.1
Chrysene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Bis(2-Ethylhexyl)Phthalate	J	2.5	ug/L	1	10	9.4	1.7	7.1
Di-N-Octylphthalate	U	7.1	ug/L	1	10	9.4	1.7	7.1
Benzo(b)fluoranthene	U	7.1	ug/L	1	10	9.4	1.1	7.1
Benzo(k)fluoranthene	U	7.1	ug/L	1	10	9.4	1.5	7.1
Benzo(a)pyrene	U	7.1	ug/L	1	10	9.4	1.1	7.1
Indeno(1,2,3-cd)pyrene	UL	7.1	ug/L	1	10	9.4	1.8	7.1
Dibenzo(a,h)anthracene	U	7.1	ug/L	1	10	9.4	1.6	7.1
Benzo(g,h,i)perylene	U	7.1	ug/L	1	10	9.4	1.4	7.1
2-Fluorophenol		20.5	%					
Phenol-d6		18.6	%					
Nitrobenzene-d5		73.5	%					
2-Fluorobiphenyl		72.1	%					
2,4,6-Tribromophenol		50.4	%					
Terphenyl-d14		87.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9951.D
Report Date: 09-Apr-2015 15:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9951.D
Lab Smp Id: SI2069-5 Client Smp ID: MW-01-GW-040215
Inj Date : 06-APR-2015 23:21 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : SI2069-5
Misc Info : WG160781,WG160777,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

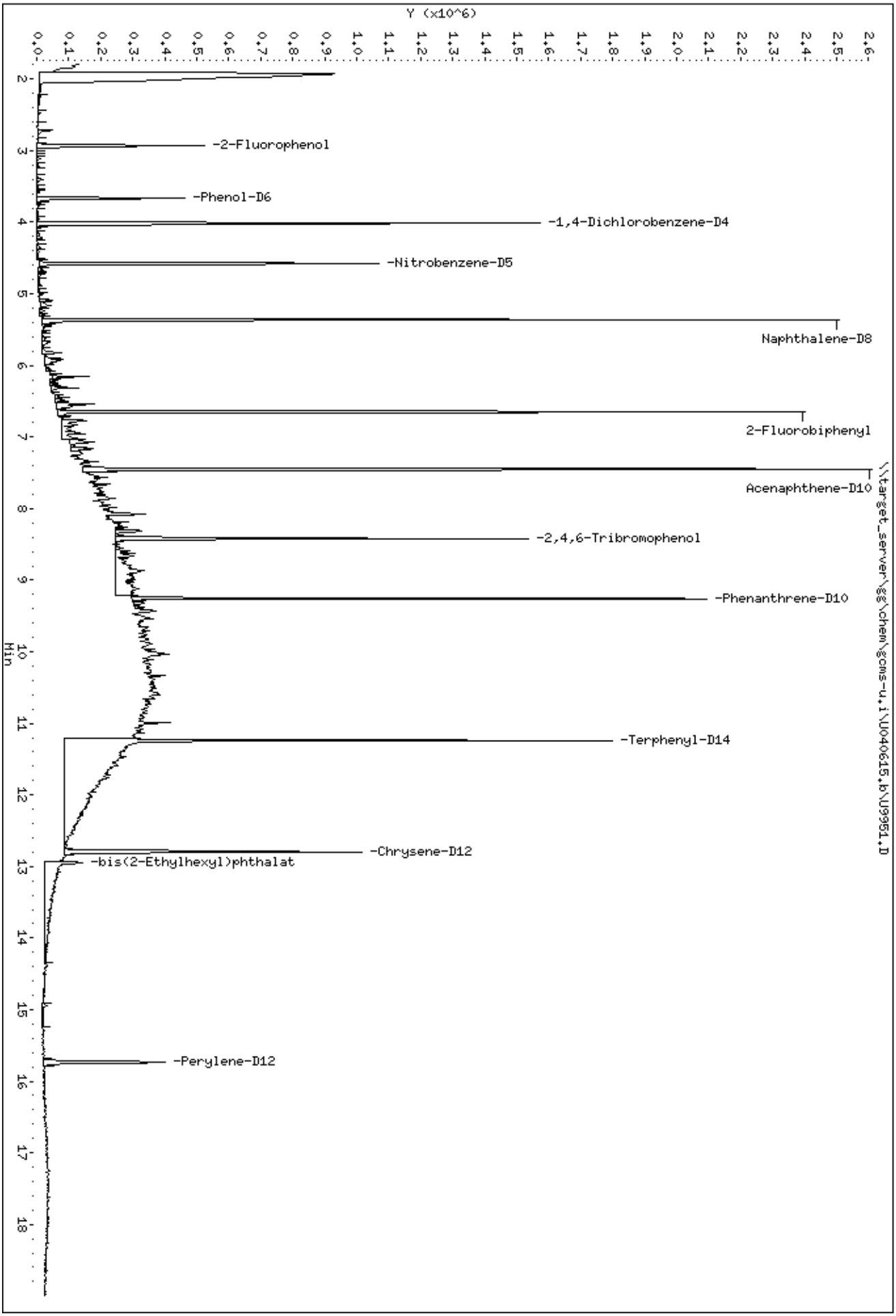
Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.920	2.931	(0.727)	279184	20.4818	19.3	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	294287	18.6159	17.6	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	360445	40.0000		
$ 33 Nitrobenzene-D5	82	4.576	4.587	(0.853)	440297	36.7584	34.7	
* 45 Naphthalene-D8	136	5.363	5.373	(1.000)	1338676	40.0000		
$ 63 2-Fluorobiphenyl	172	6.646	6.657	(0.892)	744491	36.0529	34.0	
* 78 Acenaphthene-D10	164	7.454	7.454	(1.000)	710753	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.416	8.427	(1.129)	188480	50.3529	47.5	
* 114 Phenanthrene-D10	188	9.265	9.265	(1.000)	956415	40.0000		
$ 129 Terphenyl-D14	244	11.242	11.242	(0.879)	531279	43.6106	41.1	
* 141 Chrysene-D12	240	12.794	12.805	(1.000)	512023	40.0000		
143 bis(2-Ethylhexyl)phthalate	149	12.950	12.960	(1.012)	34274	2.64445	2.49(a)	
* 150 Perylene-D12	264	15.734	15.744	(1.000)	249026	40.0000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9951,D
Date : 06-APR-2015 23:21
Client ID: MW-01-GW-040215
Sample Info: SI2069-5
Instrument: gcms-u,i
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
-Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-bis(2-Ethylhexyl)phthalat
-Perylene-D12
\\target_server\gg\chem\gcms-u,i\U040615,b\U9951,D

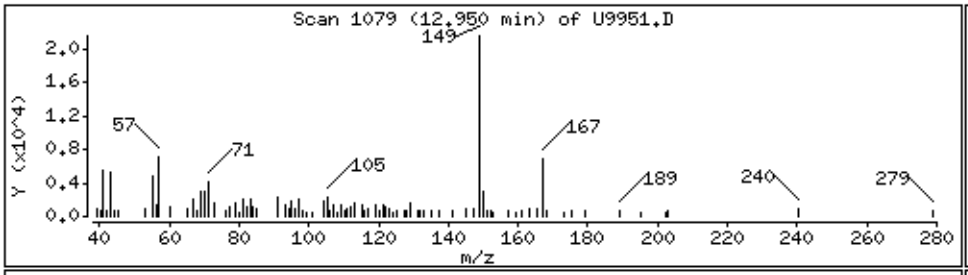
Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9951.D

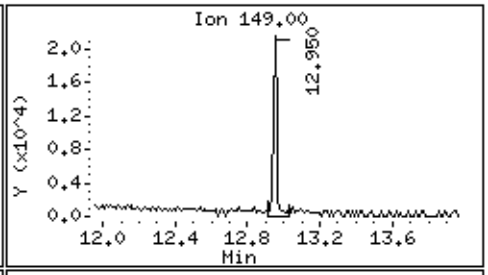
Date : 06-APR-2015 23:21

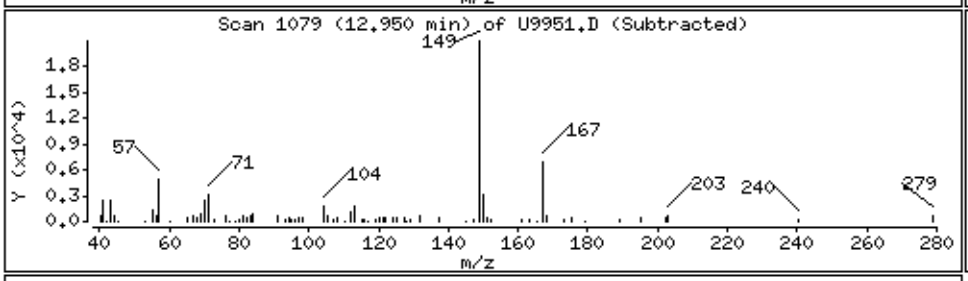
Client ID: MW-01-GW-040215 Instrument: gcms-u.i

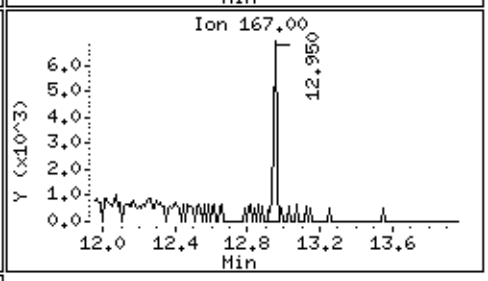
Sample Info: SI2069-5

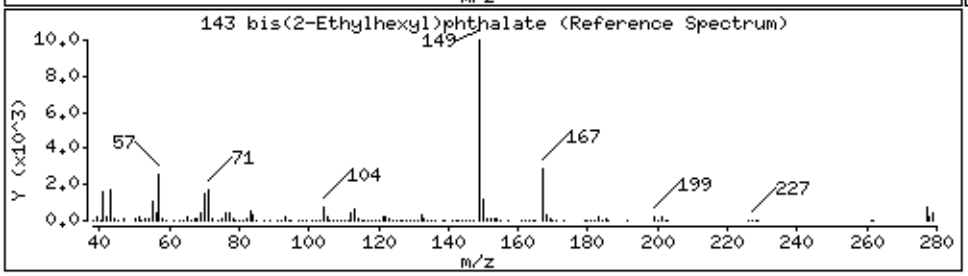
143 bis(2-Ethylhexyl)phthalate Concentration: 2.49 ug/L











Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2069
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-U
Lab File IDs : U9722.D U9723.D U9721.D U9724.D U9725.D U9726.D **Column ID:**
Calibration Date(s): 23-MAR-15 15:13 23-MAR-15 17:23

	Level 1 10.0000	Level 2 25.0000	Level 3 50.0000	Level 4 75.0000	Level 5 100.0000	Level 6 125.0000	Crv New	b	m1	m2	%RSD	Max %RSD	
Phenol	1.79315	1.79641	1.70590	2.02599	1.74890	1.92642	AVG		1.83280		6.55312	30.00000	O
Bis(2-Chloroethyl)ether	1.48150	1.37761	1.21853	1.29677	1.07681	1.15826	AVG		1.26825		11.66685	15.00000	O
2-Chlorophenol	1.53342	1.52803	1.41536	1.52639	1.38865	1.41647	AVG		1.46805		4.62154	15.00000	O
1,3-Dichlorobenzene	1.62344	1.60773	1.50123	1.58079	1.36364	1.36819	AVG		1.50750		7.79279	15.00000	O
1,4-Dichlorobenzene	1.56333	1.51643	1.40536	1.46198	1.28065	1.25271	AVG		1.41341		8.89108	30.00000	O
1,2-Dichlorobenzene	1.57728	1.48589	1.39544	1.47516	1.22836	1.18592	AVG		1.39134		11.10272	15.00000	O
2-Methylphenol	1.34125	1.39244	1.29548	1.44036	1.27655	1.35796	AVG		1.35067		4.49991	15.00000	O
2,2'-Oxybis(1-chloropropane	1.67335	1.62335	1.46365	1.50692	1.26618	1.25895	AVG		1.46540		11.90707	15.00000	O
3&4-Methylphenol	1.34166	1.28032	1.09564	1.17472	0.85178	0.93664	AVG		1.11346		17.21582	15.00000	W(
N-Nitroso-di-n-propylamine	0.93513	0.87285	0.72497	0.77761	0.59168	0.62700	AVG		0.75487		17.85253	15.00000	W(
Hexachloroethane	0.71017	0.69144	0.63199	0.65289	0.56964	0.57344	AVG		0.63826		9.17919	15.00000	O
Nitrobenzene	0.36751	0.36430	0.33421	0.34159	0.29289	0.26823	AVG		0.32812		12.11969	15.00000	O
Isophorone	0.73570	0.72549	0.64205	0.70337	0.64272	0.66136	AVG		0.68511		6.10176	15.00000	O
2-Nitrophenol	0.20148	0.21212	0.19054	0.20800	0.18599	0.18452	AVG		0.19711		5.95225	30.00000	O
2,4-Dimethylphenol	0.40069	0.39563	0.33829	0.36213	0.31208	0.31284	AVG		0.35361		11.08068	15.00000	O
Bis(2-Chloroethoxy)methane	0.47064	0.56903	0.46183	0.49766	0.44147	0.43908	AVG		0.47995		10.12810	15.00000	O
2,4-Dichlorophenol	0.30113	0.30227	0.25596	0.26488	0.22561	0.22624	AVG		0.26268		12.96388	30.00000	O
1,2,4-Trichlorobenzene	0.32924	0.30989	0.26858	0.27417	0.23681	0.23019	AVG		0.27482		14.24940	15.00000	O
Naphthalene	323717	757473	1342694	2074701	2761078	3329736	QUA	0.01948	0.77228	0.28656	0.99097	0.99000	O
4-Chloroaniline	0.47719	0.43745	0.39001	0.41283	0.34158	0.34248	AVG		0.40025		13.38277	15.00000	O
Hexachlorobutadiene	54870	123736	233802	326456	465980	551647	QUA	0.01396	4.60157	10.80533	0.99875	0.99000	O
4-Chloro-3-Methylphenol	0.31952	0.32050	0.27766	0.28671	0.24503	0.23314	AVG		0.28042		13.02447	30.00000	O
2-Methylnaphthalene	0.71657	0.67188	0.58744	0.58222	0.51908	0.49276	AVG		0.59499		14.48263	15.00000	O
Hexachlorocyclopentadiene	0.38701	0.36882	0.31751	0.32429	0.30723	0.29525	AVG		0.33335		10.90218	15.00000	O
2,4,6-Trichlorophenol	0.35635	0.37509	0.32996	0.34388	0.32091	0.31170	AVG		0.33965		6.94109	30.00000	O
2,4,5-Trichlorophenol	0.36383	0.37429	0.37283	0.39043	0.32578	0.33666	AVG		0.36064		6.81821	15.00000	O
2-Chloronaphthalene	1.34267	1.13887	1.13821	1.31311	0.98056	1.03453	AVG		1.15799		12.55297	15.00000	O
2-Nitroaniline	0.37716	0.39599	0.37050	0.40216	0.37330	0.38646	AVG		0.38426		3.33828	15.00000	O
Dimethyl Phthalate	1.39139	1.37594	1.15324	1.27210	1.22064	1.21325	AVG		1.27109		7.48388	15.00000	O
2,6-Dinitrotoluene	0.30723	0.29789	0.26879	0.28324	0.27838	0.27300	AVG		0.28475		5.24062	15.00000	O
Acenaphthylene	1.95414	1.87749	1.63916	1.61432	1.46221	1.52140	AVG		1.67812		11.69854	15.00000	O
3-Nitroaniline	0.34307	0.35811	0.33108	0.37114	0.30602	0.33306	AVG		0.34042		6.68395	15.00000	O
Acenaphthene	1.17850	1.15280	0.94650	0.93766	0.90448	0.86328	AVG		0.99720		13.43375	30.00000	O
2,4-Dinitrophenol	0.12272	0.14876	0.16255	0.18303	0.16492	0.18337	AVG		0.16089		14.22441	15.00000	O
4-Nitrophenol	0.20628	0.21479	0.14949	0.19495	0.26856	0.31349	AVG		0.22460		25.79805	15.00000	W(
Dibenzofuran	1.57583	1.46633	1.35554	1.37083	1.09838	1.13481	AVG		1.33362		13.94823	15.00000	O
2,4-Dinitrotoluene	0.36719	0.36459	0.33269	0.36824	0.33845	0.34958	AVG		0.35346		4.38772	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI2069
Project : Navy Clean WE15-03-06 NWIRP Bethpage, N **Instrument ID:** GCMS-U
Lab File IDs : U9722.D U9723.D U9721.D U9724.D U9725.D U9726.D **Column ID:**
Calibration Date(s): 23-MAR-15 15:13 23-MAR-15 17:23

Diethylphthalate	1.47456	1.36566	1.16197	1.19486	1.05486	1.03565	AVG		1.21459		14.31258	15.00000	O
Fluorene	205691	462275	767813	1142480	1471190	1679457	QUA	0.02823	0.55423	0.31250	0.99352	0.99000	O
4-Chlorophenyl-phenylether	88601	203096	340600	455799	590788	669007	QUA	0.03926	0.87107	2.53888	0.99732	0.99000	O
4-Nitroaniline	0.26548	0.27517	0.25682	0.29833	0.27880	0.26983	AVG		0.27407		5.16396	15.00000	O
4,6-Dinitro-2-Methylphenol	0.11532	0.13182	0.12100	0.14679	0.11879	0.12107	AVG		0.12580		9.27788	15.00000	O
N-Nitrosodiphenylamine	0.70366	0.68861	0.57816	0.60241	0.52052	0.52106	AVG		0.60240		13.19558	30.00000	O
4-Bromophenyl-phenylether	56943	134774	243002	348997	450014	580619	QUA	-0.00356	3.84563	4.23285	0.99114	0.99000	O
Hexachlorobenzene	0.29051	0.28556	0.23593	0.25535	0.20252	0.20028	AVG		0.24503		16.02619	15.00000	W(
Pentachlorophenol	0.16179	0.16234	0.14200	0.14957	0.12069	0.11690	AVG		0.14222		13.87298	30.00000	O
Phenanthrene	273709	587294	1032211	1390501	1766050	2147135	QUA	0.02504	0.55435	0.54216	0.99146	0.99000	O
Anthracene	1.13341	1.13629	0.92760	0.95241	0.75638	0.75336	AVG		0.94324		18.03733	15.00000	W(
Carbazole	0.98951	0.96976	0.81791	0.86018	0.71134	0.74472	AVG		0.84890		13.45585	15.00000	O
Di-n-butylphthalate	1.65190	1.50829	1.18912	1.25793	0.98363	0.98204	AVG		1.26215		21.66542	15.00000	W(
Fluoranthene	266404	561346	979174	1479963	1933344	2326366	QUA	0.01825	0.77881	0.32581	0.99069	0.99000	O
Pyrene	1.52194	1.56513	1.46283	1.48858	1.29093	1.31368	AVG		1.44051		7.81884	15.00000	O
Butylbenzylphthalate	0.79909	0.76974	0.72202	0.80454	0.69152	0.71807	AVG		0.75083		6.24471	15.00000	O
Benzo(a)anthracene	1.02105	1.03202	0.95260	1.04463	0.90627	0.90462	AVG		0.97686		6.53517	15.00000	O
3,3'-Dichlorobenzidine	0.27362	0.29509	0.27907	0.30351	0.26780	0.26305	AVG		0.28036		5.65656	15.00000	O
Chrysene	1.03035	1.01919	0.90025	0.99756	0.87333	0.86433	AVG		0.94750		8.05985	15.00000	O
bis(2-Ethylhexyl)phthalate	1.01808	1.01304	0.99457	1.08044	0.97188	0.99704	AVG		1.01251		3.65775	15.00000	O
Di-n-octylphthalate	2.33119	2.27530	2.51390	2.94011	2.69741	2.81901	AVG		2.59615		10.30897	30.00000	O
Benzo(b)fluoranthene	1.14698	1.23139	1.20971	1.34260	1.18318	1.22475	AVG		1.22310		5.41337	15.00000	O
Benzo(k)fluoranthene	1.14182	1.23282	1.18950	1.35260	1.18288	1.25903	AVG		1.22644		6.04059	15.00000	O
Benzo(a)pyrene	0.92707	0.97989	0.98502	1.11967	1.01555	1.03008	AVG		1.00954		6.39927	30.00000	O
Indeno(1,2,3-cd)pyrene	0.47609	0.53551	0.53980	0.60244	0.54117	0.56608	AVG		0.54351		7.63537	15.00000	O
Dibenzo(a,h)anthracene	0.44499	0.52064	0.53312	0.64703	0.54847	0.56356	AVG		0.54297		12.07079	15.00000	O
Benzo(g,h,i)perylene	0.58705	0.63613	0.62781	0.68029	0.54804	0.55516	AVG		0.60575		8.48406	15.00000	O
2-Fluorophenol	1.50107	1.51788	1.44725	1.60969	1.47828	1.52181	AVG		1.51266		3.63553	15.00000	
Phenol-D6	1.79797	1.79098	1.68645	1.85770	1.65603	1.73676	AVG		1.75431		4.30455	15.00000	
Nitrobenzene-D5	0.38536	0.38396	0.34508	0.36925	0.33475	0.32905	AVG		0.35791		6.95056	15.00000	
2-Fluorobiphenyl	1.31427	1.33753	1.11449	1.18219	1.02470	0.99968	AVG		1.16214		12.28169	15.00000	
2,4,6-Tribromophenol	0.22780	0.23300	0.19732	0.21339	0.19516	0.19728	AVG		0.21066		7.93542	15.00000	
Terphenyl-D14	1.03522	1.03746	0.92644	1.00899	0.80635	0.89575	AVG		0.95170		9.68827	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG160080-8
Level: LOW
Data Type: MS DATA
SpikeList File: INDcheck8270.spk
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Misc Info: WG160080,WG160080,WG160080-4

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	49.0	98.11	80-120
2 N-Nitrosodimethyla	50.0	44.9	89.85	80-120
3 Pyridine	50.0	51.9	103.73	80-120
5 2-Picoline	50.0	53.6	107.17	80-120
6 N-Nitrosomethyleth	50.0	49.3	98.60	80-120
7 Methyl Methanesulf	50.0	42.7	85.40	80-120
9 N-Nitrosodiethylam	50.0	51.1	102.17	80-120
10 Ethyl Methanesulfo	50.0	48.7	97.42	80-120
11 Benzaldehyde	50.0	0.000	*	80-120
14 Aniline	50.0	53.5	106.97	80-120
13 Phenol	50.0	52.6	105.26	80-120
16 Bis(2-Chloroethyl)	50.0	62.8	125.62*	80-120
17 2-Chlorophenol	50.0	51.2	102.37	80-120
18 1,3-Dichlorobenzen	50.0	53.5	107.09	80-120
20 1,4-Dichlorobenzen	50.0	53.2	106.32	80-120
22 1,2-Dichlorobenzen	50.0	54.1	108.25	80-120
21 Benzyl alcohol	50.0	51.6	103.21	80-120
25 2,2'-Oxybis(1-chlo	50.0	48.5	96.97	80-120
23 2-Methylphenol	50.0	50.3	100.56	80-120
27 Acetophenone	100	89.1	89.15	80-120
26 N-Nitrosopyrrolidi	50.0	53.0	105.96	80-120
31 o-Toluidine	50.0	53.6	107.18	80-120
29 N-Nitrosomorpholin	50.0	51.7	103.47	80-120
30 N-Nitroso-di-n-pro	50.0	45.5	90.98	80-120
32 Hexachloroethane	50.0	51.9	103.75	80-120
28 3&4-Methylphenol	50.0	45.4	90.90	80-120
34 Nitrobenzene	50.0	57.2	114.50	80-120
35 N-Nitrosopiperidin	50.0	52.5	104.92	80-120
36 Isophorone	50.0	52.9	105.85	80-120
37 2-Nitrophenol	50.0	52.1	104.21	80-120
38 2,4-Dimethylphenol	50.0	50.4	100.75	80-120
39 O,O,O-Triethylphos	50.0	56.2	112.41	80-120
40 Bis(2-Chloroethoxy	50.0	54.8	109.71	80-120
42 2,4-Dichlorophenol	50.0	52.8	105.63	80-120
43 1,2,4-Trichloroben	50.0	52.5	104.96	80-120
41 Benzoic acid	50.0	84.1	168.24*	80-120
46 Naphthalene	50.0	54.4	108.79	80-120
48 2,6-Dichlorophenol	50.0	50.6	101.30	80-120
47 4-Chloroaniline	50.0	51.5	102.95	80-120
49 Hexachloropropene	50.0	47.6	95.17	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
50 Hexachlorobutadien	50.0	54.6	109.26	80-120
44 A,A-Dimethylphene	50.0	0.000	*	80-120
51 N-Nitroso-Di-N-But	50.0	56.0	111.93	80-120
52 p-Phenylenediamine	50.0	5.19	10.39*	80-120
53 Caprolactam	50.0	50.1	100.25	80-120
54 4-Chloro-3-Methylp	50.0	52.7	105.45	80-120
55 Isosafrole	50.0	48.6	97.21	80-120
56 2-Methylnaphthalen	50.0	56.3	112.56	80-120
58 1-Methylnaphthalen	50.0	53.1	106.25	80-120
60 1,2,4,5-Tetrachlor	100	99.0	99.03	80-120
57 Diethyl Adipate	50.0	0.000	*	80-120
59 Hexachlorocyclopen	50.0	36.2	72.46*	80-120
61 2,4,6-Trichlorophe	50.0	50.9	101.79	80-120
62 2,4,5-Trichlorophe	50.0	52.4	104.90	80-120
64 Safrole	50.0	47.1	94.19	80-120
66 2-Chloronaphthalen	50.0	51.2	102.51	80-120
65 1,1'-Biphenyl	50.0	50.0	100.09	80-120
67 1-Chloronaphthalen	50.0	41.7	83.41	80-120
69 2-Nitroaniline	50.0	42.6	85.23	80-120
70 1,4-Naphthoquinone	50.0	54.9	109.73	80-120
73 1,3-Dinitrobenzene	50.0	48.1	96.15	80-120
72 Dimethyl Phthalate	50.0	48.7	97.42	80-120
74 2,6-Dinitrotoluene	50.0	48.6	97.17	80-120
75 Acenaphthylene	50.0	46.9	93.84	80-120
77 3-Nitroaniline	50.0	50.5	100.95	80-120
79 Acenaphthene	50.0	50.5	100.95	80-120
80 2,4-Dinitrophenol	50.0	52.0	104.03	80-120
82 Pentachlorobenzene	50.0	47.8	95.63	80-120
83 Dibenzofuran	50.0	51.4	102.70	80-120
81 4-Nitrophenol	50.0	40.8	81.53	80-120
84 2,4-Dinitrotoluene	50.0	50.0	99.99	80-120
85 1-Naphthylamine	50.0	44.8	89.67	80-120
87 2,3,4,6-Tetrachlor	50.0	47.7	95.32	80-120
88 2-Naphthylamine	50.0	46.6	93.20	80-120
89 Diethylphthalate	50.0	50.1	100.19	80-120
90 Fluorene	50.0	45.3	90.55	80-120
92 4-Chlorophenyl-phe	50.0	49.3	98.53	80-120
91 O,O-diethyl-o-2-py	50.0	53.2	106.30	80-120
93 5-Nitro-O-Toluidin	50.0	49.0	97.93	80-120
94 4-Nitroaniline	50.0	51.4	102.70	80-120
95 4,6-Dinitro-2-Meth	50.0	55.2	110.44	80-120
96 N-Nitrosodiphenyla	100	85.2	85.18	80-120
98 1,2-Diphenylhydraz	50.0	50.0	100.06	80-120
101 Sulfotepp	50.0	51.0	102.00	80-120
103 Diallate	50.0	47.8	95.61	80-120
104 Phorate	50.0	37.2	74.46*	80-120
102 1,3,5-Trinitrobenz	50.0	49.4	98.73	80-120
106 4-Bromophenyl-phen	50.0	51.9	103.74	80-120
105 Phenacetin	50.0	56.5	113.03	80-120
107 Hexachlorobenzene	50.0	50.3	100.53	80-120
108 Dimethoate	50.0	54.8	109.63	80-120
109 Atrazine	50.0	18.5	37.03*	80-120
110 Pentachlorophenol	50.0	56.9	113.87	80-120
112 Pentachloronitrobe	50.0	51.5	102.97	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
111 4-Aminobiphenyl	50.0	44.6	89.15	80-120
113 Pronamide	50.0	50.3	100.61	80-120
115 Phenanthrene	50.0	53.1	106.14	80-120
118 Anthracene	50.0	53.2	106.50	80-120
116 Disulfoton	50.0	47.7	95.40	80-120
117 Dinoseb	50.0	62.2	124.51*	80-120
119 Carbazole	50.0	54.6	109.19	80-120
120 Methyl Parathion	50.0	60.0	119.98	80-120
121 Di-n-butylphthalat	50.0	53.4	106.91	80-120
122 4-Nitroquinoline-1	50.0	62.4	124.82*	80-120
123 Ethyl Parathion	50.0	58.1	116.15	80-120
124 Methapyrilene	50.0	44.0	88.07	80-120
125 Isodrin	50.0	49.5	99.05	80-120
126 Fluoranthene	50.0	51.8	103.68	80-120
127 Benzidine	50.0	38.8	77.62*	80-120
128 Pyrene	50.0	48.7	97.35	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	48.0	95.93	80-120
132 Chlorobenzilate	50.0	48.2	96.34	80-120
135 Kepone	50.0	0.000	*	80-120
134 3,3'-Dimethylbenzi	50.0	53.5	106.97	80-120
136 Butylbenzylphthala	50.0	50.5	101.07	80-120
137 Bis(2-ethylhexyl)a	50.0	46.0	91.94	80-120
138 2-Acetylaminofluor	50.0	56.1	112.13	80-120
133 Famphur	50.0	38.2	76.44*	80-120
139 Benzo(a)anthracene	50.0	51.4	102.88	80-120
140 3,3'-Dichlorobenzi	100	49.4	49.35*	80-120
142 Chrysene	50.0	50.0	100.04	80-120
143 bis(2-Ethylhexyl)p	50.0	52.4	104.74	80-120
144 Di-n-octylphthalat	50.0	49.9	99.86	80-120
145 Benzo(b)fluoranthe	50.0	49.2	98.45	80-120
146 7,12-Dimethylbenz(	50.0	46.6	93.23	80-120
147 Benzo(k)fluoranthe	50.0	53.2	106.32	80-120
149 Benzo(a)pyrene	50.0	49.3	98.56	80-120
151 3-Methylcholanthre	50.0	51.9	103.75	80-120
148 Hexachlorophene	50.0	0.000	*	80-120
152 Dibenz(a,j)acridin	50.0	49.4	98.92	80-120
153 Indeno(1,2,3-cd)py	50.0	54.3	108.56	80-120
154 Dibenzo(a,h)anthra	50.0	52.0	104.04	80-120
155 Benzo(g,h,i)peryle	50.0	50.7	101.47	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	20-110
$ 12 Phenol-D6	100	0.000	*	10-115
$ 33 Nitrobenzene-D5	50.0	0.000	*	40-110
$ 63 2-Fluorobiphenyl	50.0	0.000	*	50-110
$ 100 2,4,6-Tribromophe	100	0.000	*	40-125
$ 129 Terphenyl-D14	50.0	0.000	*	50-135

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Lab Smp Id: WG160080-4
Inj Date : 23-MAR-2015 15:13 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-4
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 09-MAR-2015 14:36 Cal File: U9635.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	58	2.101	2.099	(0.389)	156460	50.0000	48.3	
3 Pyridine	79	2.246	2.244	(0.555)	651740	50.0000	47.6(a)	
2 N-Nitrosodimethylamine	42	2.225	2.223	(0.550)	212834	50.0000	48.6	
4 Ethyl Methacrylate	69	2.422	2.420	(0.599)	465295	50.0000	48.8	
5 2-Picoline	93	2.619	2.617	(0.647)	649999	50.0000	47.7	
6 N-Nitrosomethylethylamine	88	2.670	2.669	(0.660)	275401	50.0000	47.6	
7 Methyl Methanesulfonate	80	2.846	2.855	(0.703)	361150	50.0000	48.0	
$ 8 2-Fluorophenol	112	2.960	2.969	(0.732)	599270	50.0000	47.8	
9 N-Nitrosodiethylamine	102	3.136	3.145	(0.775)	279992	50.0000	47.2	
10 Ethyl Methanesulfonate	79	3.354	3.383	(0.829)	466518	50.0000	47.9	
11 Benzaldehyde	77	3.643	3.652	(0.900)	279010	50.0000	49.9	
15 Pentachloroethane	117	3.788	3.786	(0.936)	222138	50.0000	49.9	
14 Aniline	93	3.747	3.766	(0.926)	927427	50.0000	49.8(Q)	
16 Bis(2-Chloroethyl)ether	93	3.788	3.807	(0.936)	504563	50.0000	48.0	
$ 12 Phenol-D6	99	3.695	3.714	(0.913)	698316	50.0000	48.1	
13 Phenol	94	3.705	3.735	(0.916)	706370	50.0000	46.5(Q)	
17 2-Chlorophenol	128	3.861	3.869	(0.954)	586065	50.0000	48.2	
18 1,3-Dichlorobenzene	146	4.006	4.004	(0.990)	621622	50.0000	49.8	
* 19 1,4-Dichlorobenzene-D4	152	4.047	4.055	(1.000)	331260	40.0000		
20 1,4-Dichlorobenzene	146	4.068	4.076	(1.005)	581926	50.0000	49.7	
22 1,2-Dichlorobenzene	146	4.223	4.231	(1.043)	577816	50.0000	50.1	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.182	4.200	(1.033)	391859	50.0000	47.8	
	24 Bis(2-Chloroisopropyl)ether	45	4.326	4.335	(1.069)	606062	50.0000	49.9	
	25 2,2'-Oxybis(1-chloropropane)	45	4.326	4.335	(1.069)	606062	50.0000	49.9	
	23 2-Methylphenol	108	4.295	4.304	(1.061)	536426	50.0000	48.0	
	27 Acetophenone	105	4.451	4.469	(0.824)	670400	50.0000	45.8	
	32 Hexachloroethane	117	4.565	4.573	(1.128)	261692	50.0000	49.5	
	26 N-Nitrosopyrrolidine	100	4.440	4.521	(1.097)	295520	50.0000	52.6(Q)	
	31 o-Toluidine	106	4.492	4.521	(1.110)	780849	50.0000	50.8(Q)	
	29 N-Nitrosomorpholine	56	4.471	4.521	(1.105)	256594	50.0000	52.3	
	30 N-Nitroso-di-n-propylamine	70	4.471	4.500	(1.105)	300192	50.0000	48.0	
	28 3&4-Methylphenol	108	4.461	4.511	(1.102)	453676	50.0000	49.2(Q)	
$	33 Nitrobenzene-D5	82	4.616	4.635	(0.854)	554771	50.0000	48.2	
	34 Nitrobenzene	77	4.637	4.656	(0.858)	537289	50.0000	50.9	
	35 N-Nitrosopiperidine	114	4.792	4.821	(0.887)	285962	50.0000	46.5	
	36 Isophorone	82	4.896	4.925	(0.906)	1032200	50.0000	46.8	
	37 2-Nitrophenol	139	4.979	4.997	(0.921)	306324	50.0000	48.3	
	38 2,4-Dimethylphenol	107	5.030	5.070	(0.931)	543857	50.0000	47.8	
	40 Bis(2-Chloroethoxy)methane	93	5.134	5.163	(0.950)	742465	50.0000	48.1	
	39 O,O,O-Triethylphosphorothioat	198	5.113	5.132	(0.946)	185644	50.0000	48.9	
	42 2,4-Dichlorophenol	162	5.248	5.277	(0.971)	411493	50.0000	48.7	
	43 1,2,4-Trichlorobenzene	180	5.341	5.349	(0.989)	431792	50.0000	48.9	
*	45 Naphthalene-D8	136	5.403	5.411	(1.000)	1286125	40.0000		
	41 Benzoic acid	122	5.186	5.297	(0.960)	297547	50.0000	44.5	
	46 Naphthalene	128	5.424	5.442	(1.004)	1342694	50.0000	45.5	
	44 A,A-Dimethylphenethylamine	58	5.382	5.753	(0.996)	1295389	50.0000	53.3(TM)	M9
	49 Hexachloropropene	213	5.537	5.546	(1.025)	282080	50.0000	45.8	
	48 2,6-Dichlorophenol	162	5.506	5.525	(1.019)	382934	50.0000	45.5	
	47 4-Chloroaniline	127	5.496	5.525	(1.017)	626998	50.0000	48.7	
	50 Hexachlorobutadiene	225	5.589	5.598	(1.034)	233802	50.0000	48.3	
	51 N-Nitroso-Di-N-Butylamine	84	5.900	5.939	(1.092)	432472	50.0000	51.6	
	53 Caprolactam	113	5.931	6.022	(1.098)	169771	50.0000	46.5(Q)	
	52 p-Phenylenediamine	108	5.931	5.960	(1.098)	552290	50.0000	51.0	
	55 Isosafrole	162	6.148	6.157	(1.138)	382318	50.0000	49.8	
	56 2-Methylnaphthalene	142	6.231	6.250	(1.153)	944404	50.0000	49.4	
	54 4-Chloro-3-Methylphenol	107	6.086	6.125	(1.126)	446376	50.0000	49.5	
	58 1-Methylnaphthalene	142	6.355	6.364	(1.176)	883223	50.0000	49.6	
	60 1,2,4,5-Tetrachlorobenzene	216	6.448	6.457	(0.862)	344045	50.0000	50.8	
	59 Hexachlorocyclopentadiene	237	6.438	6.446	(0.860)	257687	50.0000	47.6	
	61 2,4,6-Trichlorophenol	196	6.583	6.612	(0.880)	267790	50.0000	48.6	
$	63 2-Fluorobiphenyl	172	6.686	6.705	(0.894)	904498	50.0000	47.9	
	62 2,4,5-Trichlorophenol	196	6.624	6.664	(0.885)	302582	50.0000	51.7	
	64 Safrole	104	6.769	6.788	(0.905)	194111	50.0000	49.2(Q)	
	66 2-Chloronaphthalene	162	6.821	6.840	(0.911)	923746	50.0000	49.1	
	65 1,1'-Biphenyl	154	6.800	6.829	(0.909)	951039	50.0000	49.8	
	67 1-Chloronaphthalene	162	6.842	6.860	(0.914)	788724	50.0000	44.6	
	68 Diphenylether	170	6.935	6.943	(0.927)	579269	50.0000	49.7	
	69 2-Nitroaniline	65	6.955	6.974	(0.929)	300688	50.0000	48.2	
	70 1,4-Naphthoquinone	158	7.028	7.047	(0.939)	310048	50.0000	49.3	
	71 1,4-Dinitrobenzene	75	7.111	7.150	(0.950)	180254	50.0000	45.7	
	75 Acenaphthylene	152	7.307	7.326	(0.976)	1330307	50.0000	48.8	
	72 Dimethyl Phthalate	163	7.204	7.243	(0.963)	935942	50.0000	45.4	
	73 1,3-Dinitrobenzene	168	7.225	7.264	(0.965)	157745	50.0000	48.7	
	74 2,6-Dinitrotoluene	165	7.256	7.285	(0.970)	218145	50.0000	47.2	
	76 1,2-Dinitrobenzene	50	7.318	7.347	(0.978)	124172	50.0000	44.9	

4:04 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
* 78 Acenaphthene-D10	164	7.483	7.502	(1.000)	649262	40.0000		
79 Acenaphthene	153	7.525	7.543	(1.006)	768156	50.0000	47.4	
77 3-Nitroaniline	138	7.463	7.502	(0.997)	268699	50.0000	48.6	
80 2,4-Dinitrophenol	184	7.597	7.647	(1.015)	131920	50.0000	50.5	
83 Dibenzofuran	168	7.742	7.761	(1.035)	1100125	50.0000	50.8	
82 Pentachlorobenzene	250	7.701	7.719	(1.029)	343753	50.0000	46.0	
85 1-Naphthylamine	143	7.835	7.864	(1.047)	941888	50.0000	48.2	
84 2,4-Dinitrotoluene	165	7.752	7.802	(1.036)	270002	50.0000	47.1	
86 2,3,5,6-Tetrachlorophenol	232	7.856	7.885	(1.050)	227347	50.0000	50.4	
88 2-Naphthylamine	143	7.939	7.978	(1.061)	868200	50.0000	46.8	
81 4-Nitrophenol	139	7.690	7.750	(1.028)	121324	50.0000	33.3(Q)	
87 2,3,4,6-Tetrachlorophenol	232	7.908	7.937	(1.057)	231639	50.0000	49.2	
90 Fluorene	166	8.156	8.175	(1.090)	767813	50.0000	44.8	
89 Diethylphthalate	149	8.063	8.092	(1.077)	943025	50.0000	47.8	
92 4-Chlorophenyl-phenylether	204	8.166	8.185	(1.091)	340600	50.0000	47.8	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.156	8.195	(1.090)	133129	50.0000	45.3	
93 5-Nitro-O-Toluidine	152	8.197	8.237	(1.095)	279461	50.0000	49.5	
94 4-Nitroaniline	138	8.208	8.268	(1.097)	208433	50.0000	46.8	
95 4,6-Dinitro-2-Methylphenol	198	8.249	8.289	(0.887)	148820	50.0000	48.1	
96 N-Nitrosodiphenylamine	169	8.322	8.351	(0.894)	711106	50.0000	48.0	
97 N-Nitrosodiphenylamine/DPA	169	8.322	8.351	(0.894)	711106	50.0000	48.0	
98 1,2-Diphenylhydrazine	77	8.363	8.382	(0.899)	1004581	50.0000	48.2	
99 Azobenzene	77	8.363	8.382	(0.899)	1004581	50.0000	48.2	
$ 100 2,4,6-Tribromophenol	330	8.456	8.485	(1.130)	160143	50.0000	46.8	
101 Sulfotepp	97	8.549	8.568	(0.919)	171007	50.0000	49.4	
103 Diallate	86	8.694	8.703	(0.934)	401346	50.0000	47.7	
106 4-Bromophenyl-phenylether	248	8.767	8.785	(0.942)	243002	50.0000	48.2	
104 Phorate	75	8.694	8.723	(0.934)	675813	50.0000	50.2	
102 1,3,5-Trinitrobenzene	213	8.684	8.744	(0.933)	55432	50.0000	43.1(Q)	
105 Phenacetin	108	8.746	8.796	(0.940)	432741	50.0000	49.7	
107 Hexachlorobenzene	284	8.850	8.868	(0.951)	290184	50.0000	48.1	
108 Dimethoate	87	8.912	8.951	(0.958)	335825	50.0000	49.2	
109 Atrazine	200	9.005	9.034	(0.968)	191730	50.0000	51.2	
111 4-Aminobiphenyl	169	9.098	9.127	(0.978)	799109	50.0000	51.3	
110 Pentachlorophenol	266	9.088	9.117	(0.977)	174659	50.0000	49.9	
112 Pentachloronitrobenzene	237	9.119	9.148	(0.980)	105908	50.0000	47.4	
* 114 Phenanthrene-D10	188	9.305	9.313	(1.000)	983961	40.0000		
113 Pronamide	173	9.201	9.220	(0.989)	394921	50.0000	49.7	
115 Phenanthrene	178	9.326	9.355	(1.002)	1032211	50.0000	48.1	
118 Anthracene	178	9.388	9.417	(1.009)	1140901	50.0000	49.2	
116 Disulfoton	88	9.336	9.355	(1.003)	484919	50.0000	46.5	
117 Dinoseb	211	9.346	9.355	(1.004)	147497	50.0000	49.2	
119 Carbazole	167	9.595	9.613	(1.031)	1005994	50.0000	48.2	
120 Methyl Parathion	109	9.791	9.800	(1.052)	304344	50.0000	50.0	
121 Di-n-butylphthalate	149	10.071	10.079	(1.082)	1462555	50.0000	47.1	
122 4-Nitroquinoline-1-Oxide	190	10.278	10.307	(1.105)	74933	50.0000	47.9	
123 Ethyl Parathion	291	10.278	10.297	(1.105)	68644	50.0000	43.7	
124 Methapyrilene	97	10.412	10.431	(1.119)	302861	50.0000	45.6	
125 Isodrin	193	10.599	10.607	(1.139)	151110	50.0000	49.2	
126 Fluoranthene	202	10.785	10.804	(1.159)	979174	50.0000	44.6	
128 Pyrene	202	11.054	11.073	(0.861)	1023960	50.0000	50.8	
127 Benzidine	184	10.971	10.990	(0.854)	287170	50.0000	50.8	
$ 129 Terphenyl-D14	244	11.282	11.301	(0.878)	648497	50.0000	48.7	
130 Aramite	185	11.385	11.394	(0.886)	71814	50.0000	50.2	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Report Date: 27-Mar-2015 15:13

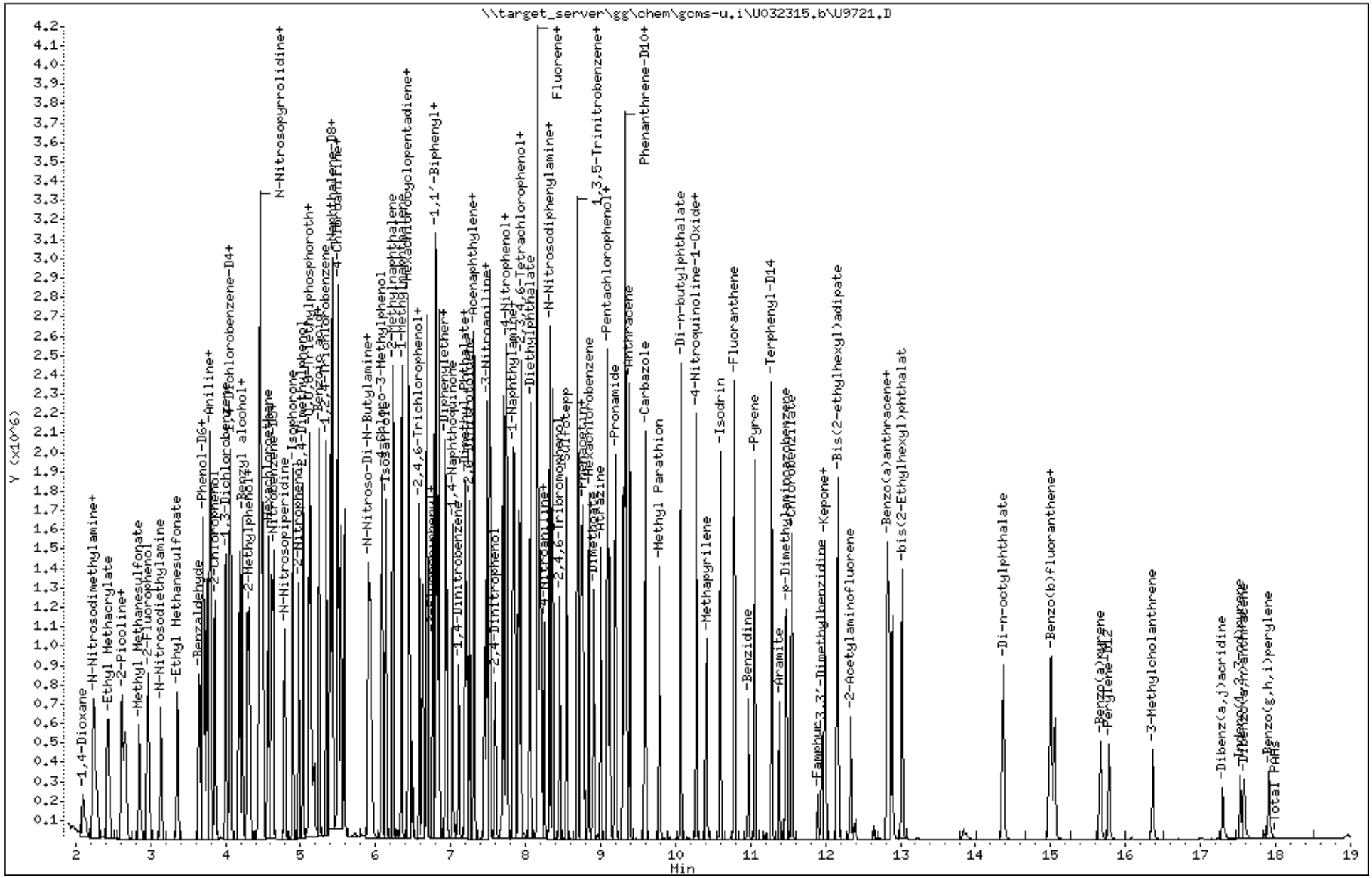
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
131 p-Dimethylaminoazobenzene	225	11.478	11.487	(0.894)	186396	50.0000	48.0	
132 Chlorobenzilate	251	11.551	11.570	(0.899)	273851	50.0000	47.9	
135 Kepone	272	11.986	11.995	(0.933)	9388	50.0000	22.3(aQ)	
133 Famphur	218	11.892	11.901	(0.926)	73930	50.0000	42.5	
134 3,3'-Dimethylbenzidine	212	11.955	11.963	(0.931)	268950	50.0000	49.7	
136 Butylbenzylphthalate	149	11.996	12.004	(0.934)	505403	50.0000	48.1	
137 Bis(2-ethylhexyl)adipate	129	12.162	12.170	(0.947)	517647	50.0000	48.6	
138 2-Acetylaminofluorene	181	12.338	12.367	(0.961)	202889	50.0000	49.7	
139 Benzo(a)anthracene	228	12.834	12.853	(0.999)	666808	50.0000	48.8	
* 141 Chrysene-D12	240	12.845	12.863	(1.000)	559989	40.0000		
142 Chrysene	228	12.896	12.915	(1.004)	630162	50.0000	47.5	
140 3,3'-Dichlorobenzidine	252	12.824	12.832	(0.998)	195346	50.0000	49.8	
143 bis(2-Ethylhexyl)phthalate	149	13.021	13.029	(1.014)	696187	50.0000	49.1	
144 Di-n-octylphthalate	149	14.366	14.385	(0.910)	988591	50.0000	48.4	
145 Benzo(b)fluoranthene	252	14.997	15.027	(0.950)	475718	50.0000	49.4	
146 7,12-Dimethylbenz(A)Anthracen	256	15.008	15.027	(0.951)	252455	50.0000	48.6	
147 Benzo(k)fluoranthene	252	15.060	15.078	(0.954)	467769	50.0000	48.5(H)	
149 Benzo(a)pyrene	252	15.670	15.679	(0.993)	387358	50.0000	48.8	
* 150 Perylene-D12	264	15.784	15.782	(1.000)	314600	40.0000		
151 3-Methylcholanthrene	268	16.364	16.372	(1.037)	182451	50.0000	49.4	
152 Dibenz(a,j)acridine	279	17.295	17.304	(1.096)	192326	50.0000	51.0	
153 Indeno(1,2,3-cd)pyrene	276	17.533	17.542	(1.111)	212275	50.0000	49.6	
154 Dibenzo(a,h)anthracene	278	17.585	17.593	(1.114)	209648	50.0000	49.1	
155 Benzo(g,h,i)perylene	276	17.916	17.925	(1.135)	246888	50.0000	51.8	

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9721.D
Date : 23-MAR-2015 15:13
Client ID:
Sample Info: WG160080-4
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



0000195

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Lab Smp Id: WG160080-2
Inj Date : 23-MAR-2015 15:39 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-2
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 15:39 Cal File: U9722.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	1 1,4-Dioxane	58	2.102	2.099	(0.390)	32594	10.0000	10.5	
	3 Pyridine	79	2.247	2.244	(0.555)	138610	10.0000	9.86(a)	
	2 N-Nitrosodimethylamine	42	2.226	2.223	(0.550)	45437	10.0000	10.1	
	4 Ethyl Methacrylate	69	2.423	2.420	(0.599)	99858	10.0000	10.2	
	5 2-Picoline	93	2.609	2.617	(0.645)	136747	10.0000	9.77(a)	
	6 N-Nitrosomethylethylamine	88	2.661	2.669	(0.657)	59168	10.0000	9.94(a)	
	7 Methyl Methanesulfonate	80	2.847	2.855	(0.703)	76584	10.0000	9.90(a)	
$	8 2-Fluorophenol	112	2.951	2.969	(0.729)	127783	10.0000	9.92(a)	
	9 N-Nitrosodiethylamine	102	3.127	3.145	(0.772)	58533	10.0000	9.59(a)	
	10 Ethyl Methanesulfonate	79	3.344	3.383	(0.826)	96160	10.0000	9.60(a)	
	11 Benzaldehyde	77	3.644	3.652	(0.900)	82944	10.0000	14.4	
	15 Pentachloroethane	117	3.789	3.786	(0.936)	51244	10.0000	11.2	
	14 Aniline	93	3.738	3.766	(0.923)	193938	10.0000	10.1(a)	
	16 Bis(2-Chloroethyl)ether	93	3.789	3.807	(0.936)	126117	10.0000	11.7	
$	12 Phenol-D6	99	3.686	3.714	(0.911)	153058	10.0000	10.2	
	13 Phenol	94	3.696	3.735	(0.913)	152647	10.0000	9.78(a)	
	17 2-Chlorophenol	128	3.851	3.869	(0.951)	130537	10.0000	10.4	
	18 1,3-Dichlorobenzene	146	3.996	4.004	(0.987)	138200	10.0000	10.8	
*	19 1,4-Dichlorobenzene-D4	152	4.048	4.055	(1.000)	340512	40.0000		
	20 1,4-Dichlorobenzene	146	4.069	4.076	(1.005)	133083	10.0000	11.1	
	22 1,2-Dichlorobenzene	146	4.214	4.231	(1.041)	134271	10.0000	11.3	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.172	4.200	(1.031)	84290	10.0000	10.0(a)	
	24 Bis(2-Chloroisopropyl)ether	45	4.317	4.335	(1.066)	142449	10.0000	11.4(Q)	
	25 2,2'-Oxybis(1-chloropropane)	45	4.317	4.335	(1.066)	142449	10.0000	11.4	
	23 2-Methylphenol	108	4.286	4.304	(1.059)	114178	10.0000	9.93(a)	
	27 Acetophenone	105	4.452	4.469	(0.825)	163534	10.0000	11.6	
	32 Hexachloroethane	117	4.566	4.573	(1.128)	60455	10.0000	11.1	
	26 N-Nitrosopyrrolidine	100	4.421	4.521	(1.092)	63129	10.0000	10.9	
	31 o-Toluidine	106	4.483	4.521	(1.107)	178144	10.0000	11.3(a)	
	29 N-Nitrosomorpholine	56	4.452	4.521	(1.100)	61679	10.0000	12.2	
	30 N-Nitroso-di-n-propylamine	70	4.452	4.500	(1.100)	79606	10.0000	12.4	
	28 3&4-Methylphenol	108	4.441	4.511	(1.097)	114213	10.0000	12.0	
$	33 Nitrobenzene-D5	82	4.607	4.635	(0.854)	118912	10.0000	10.8	
	34 Nitrobenzene	77	4.628	4.656	(0.858)	113404	10.0000	11.2	
	35 N-Nitrosopiperidine	114	4.783	4.821	(0.887)	63253	10.0000	10.7	
	36 Isophorone	82	4.886	4.925	(0.906)	227016	10.0000	10.7	
	37 2-Nitrophenol	139	4.969	4.997	(0.921)	62172	10.0000	10.2	
	38 2,4-Dimethylphenol	107	5.021	5.070	(0.931)	123643	10.0000	11.3	
	40 Bis(2-Chloroethoxy)methane	93	5.124	5.163	(0.950)	145226	10.0000	9.80(a)	
	39 O,O,O-Triethylphosphorothioat	198	5.104	5.132	(0.946)	40628	10.0000	11.2	
	42 2,4-Dichlorophenol	162	5.238	5.277	(0.971)	92921	10.0000	11.5	
	43 1,2,4-Trichlorobenzene	180	5.331	5.349	(0.988)	101595	10.0000	12.0	
*	45 Naphthalene-D8	136	5.394	5.411	(1.000)	1234294	40.0000		
	41 Benzoic acid	122	5.104	5.297	(0.946)	50045	10.0000	7.80(aMH)	M9
	46 Naphthalene	128	5.425	5.442	(1.006)	323717	10.0000	9.67(a)	
	49 Hexachloropropene	213	5.528	5.546	(1.025)	60647	10.0000	12.0	
	48 2,6-Dichlorophenol	162	5.497	5.525	(1.019)	92037	10.0000	9.48(a)	
	47 4-Chloroaniline	127	5.487	5.525	(1.017)	147247	10.0000	11.9	
	50 Hexachlorobutadiene	225	5.580	5.598	(1.035)	54870	10.0000	9.60(a)	
	51 N-Nitroso-Di-N-Butylamine	84	5.890	5.939	(1.092)	78996	10.0000	9.81(a)	
	53 Caprolactam	113	5.870	6.022	(1.088)	35839	10.0000	10.2	
	52 p-Phenylenediamine	108	5.901	5.960	(1.094)	132621	10.0000	12.8	
	55 Isosafrole	162	6.139	6.157	(1.138)	85675	10.0000	11.6	
	56 2-Methylnaphthalene	142	6.232	6.250	(1.155)	221115	10.0000	12.0	
	54 4-Chloro-3-Methylphenol	107	6.066	6.125	(1.125)	98595	10.0000	11.4	
	58 1-Methylnaphthalene	142	6.346	6.364	(1.177)	207307	10.0000	12.1	
	60 1,2,4,5-Tetrachlorobenzene	216	6.439	6.457	(0.860)	84260	10.0000	9.52(a)	
	59 Hexachlorocyclopentadiene	237	6.439	6.446	(0.860)	62108	10.0000	11.6	
	61 2,4,6-Trichlorophenol	196	6.573	6.612	(0.878)	57188	10.0000	10.5	
$	63 2-Fluorobiphenyl	172	6.677	6.705	(0.892)	210917	10.0000	11.3	
	62 2,4,5-Trichlorophenol	196	6.615	6.664	(0.884)	58389	10.0000	10.1(a)	
	64 Safrole	104	6.760	6.788	(0.903)	41023	10.0000	10.5	
	66 2-Chloronaphthalene	162	6.801	6.840	(0.909)	215475	10.0000	11.6(H)	
	65 1,1'-Biphenyl	154	6.791	6.829	(0.907)	254905	10.0000	9.73(a)	
	67 1-Chloronaphthalene	162	6.832	6.860	(0.913)	198062	10.0000	11.3	
	68 Diphenylether	170	6.925	6.943	(0.925)	130575	10.0000	11.3	
	69 2-Nitroaniline	65	6.936	6.974	(0.927)	60527	10.0000	9.82(a)	
	70 1,4-Naphthoquinone	158	7.018	7.047	(0.938)	83451	10.0000	13.4	
	71 1,4-Dinitrobenzene	75	7.101	7.150	(0.949)	36267	10.0000	9.31(a)	
	75 Acenaphthylene	152	7.298	7.326	(0.975)	313605	10.0000	11.6	
	72 Dimethyl Phthalate	163	7.184	7.243	(0.960)	223294	10.0000	10.9(M)	M6
	73 1,3-Dinitrobenzene	168	7.205	7.264	(0.963)	31931	10.0000	9.97(a)	
	74 2,6-Dinitrotoluene	165	7.236	7.285	(0.967)	49305	10.0000	10.8	
	76 1,2-Dinitrobenzene	50	7.298	7.347	(0.975)	29345	10.0000	10.7	
*	78 Acenaphthene-D10	164	7.484	7.502	(1.000)	641931	40.0000		

4:04 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
79 Acenaphthene	153	7.515	7.543	(1.004)	189129	10.0000	11.8	
77 3-Nitroaniline	138	7.443	7.502	(0.994)	55057	10.0000	10.1(a)	
80 2,4-Dinitrophenol	184	7.577	7.647	(1.012)	19694	10.0000	7.63(a)	
83 Dibenzofuran	168	7.733	7.761	(1.033)	252894	10.0000	11.8	
82 Pentachlorobenzene	250	7.691	7.719	(1.028)	87127	10.0000	11.8	
85 1-Naphthylamine	143	7.826	7.864	(1.046)	219781	10.0000	11.4	
84 2,4-Dinitrotoluene	165	7.733	7.802	(1.033)	58928	10.0000	10.4	
86 2,3,5,6-Tetrachlorophenol	232	7.847	7.885	(1.048)	51590	10.0000	11.6	
88 2-Naphthylamine	143	7.919	7.978	(1.058)	202354	10.0000	11.0	
81 4-Nitrophenol	139	7.671	7.750	(1.025)	33105	10.0000	9.18(a)	
87 2,3,4,6-Tetrachlorophenol	232	7.898	7.937	(1.055)	48312	10.0000	10.4	
90 Fluorene	166	8.147	8.175	(1.089)	205691	10.0000	9.52(a)	
89 Diethylphthalate	149	8.054	8.092	(1.076)	236641	10.0000	12.1	
92 4-Chlorophenyl-phenylether	204	8.157	8.185	(1.090)	88601	10.0000	8.31(a)	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.147	8.195	(1.089)	40671	10.0000	11.1(a)	
93 5-Nitro-O-Toluidine	152	8.167	8.237	(1.091)	57251	10.0000	10.2(Q)	
94 4-Nitroaniline	138	8.188	8.268	(1.094)	42605	10.0000	9.69(a)	
95 4,6-Dinitro-2-Methylphenol	198	8.229	8.289	(0.885)	28066	10.0000	9.17(a)	
96 N-Nitrosodiphenylamine	169	8.312	8.351	(0.894)	171248	10.0000	11.7	
97 N-Nitrosodiphenylamine/DPA	169	8.312	8.351	(0.894)	171248	10.0000	11.7	
98 1,2-Diphenylhydrazine	77	8.354	8.382	(0.899)	236016	10.0000	11.4(a)	
99 Azobenzene	77	8.354	8.382	(0.899)	236016	10.0000	11.4(a)	
$ 100 2,4,6-Tribromophenol	330	8.447	8.485	(1.129)	36558	10.0000	10.8	
101 Sulfotepp	97	8.540	8.568	(0.919)	40834	10.0000	11.9	
103 Diallate	86	8.685	8.703	(0.934)	102490	10.0000	10.0	
106 4-Bromophenyl-phenylether	248	8.757	8.785	(0.942)	56943	10.0000	9.44(a)	
104 Phorate	75	8.685	8.723	(0.934)	146249	10.0000	11.0	
102 1,3,5-Trinitrobenzene	213	8.654	8.744	(0.931)	15286	10.0000	12.0(Q)	
105 Phenacetin	108	8.716	8.796	(0.938)	104156	10.0000	12.1	
107 Hexachlorobenzene	284	8.840	8.868	(0.951)	70700	10.0000	11.8	
108 Dimethoate	87	8.882	8.951	(0.955)	91128	10.0000	13.5	
109 Atrazine	200	8.985	9.034	(0.967)	52357	10.0000	14.1	
111 4-Aminobiphenyl	169	9.078	9.127	(0.977)	202221	10.0000	13.1	
110 Pentachlorophenol	266	9.078	9.117	(0.977)	39373	10.0000	11.4(a)	
112 Pentachloronitrobenzene	237	9.109	9.148	(0.980)	26460	10.0000	12.0	
* 114 Phenanthrene-D10	188	9.296	9.313	(1.000)	973464	40.0000		
113 Pronamide	173	9.182	9.220	(0.988)	97010	10.0000	10.1	
115 Phenanthrene	178	9.316	9.355	(1.002)	273709	10.0000	8.95(a)	
118 Anthracene	178	9.378	9.417	(1.009)	275833	10.0000	12.0	
116 Disulfoton	88	9.327	9.355	(1.003)	141359	10.0000	9.12(a)	
117 Dinoseb	211	9.327	9.355	(1.003)	32880	10.0000	11.1	
119 Carbazole	167	9.585	9.613	(1.031)	240813	10.0000	11.6	
120 Methyl Parathion	109	9.782	9.800	(1.052)	78020	10.0000	13.0	
121 Di-n-butylphthalate	149	10.061	10.079	(1.082)	402017	10.0000	13.1	
122 4-Nitroquinoline-1-Oxide	190	10.268	10.307	(1.105)	14189	10.0000	9.17(a)	
123 Ethyl Parathion	291	10.279	10.297	(1.106)	18727	10.0000	11.1(a)	
124 Methapyrilene	97	10.403	10.431	(1.119)	100960	10.0000	15.4	
125 Isodrin	193	10.600	10.607	(1.140)	37637	10.0000	12.4	
126 Fluoranthene	202	10.776	10.804	(1.159)	266404	10.0000	10.2	
128 Pyrene	202	11.045	11.073	(0.860)	274808	10.0000	10.6	
$ 129 Terphenyl-D14	244	11.272	11.301	(0.878)	186924	10.0000	10.9	
130 Aramite	185	11.386	11.394	(0.886)	17710	10.0000	9.60(a)	
131 p-Dimethylaminoazobenzene	225	11.469	11.487	(0.893)	51380	10.0000	10.2	
132 Chlorobenzilate	251	11.552	11.570	(0.899)	75682	10.0000	10.3	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Report Date: 27-Mar-2015 15:13

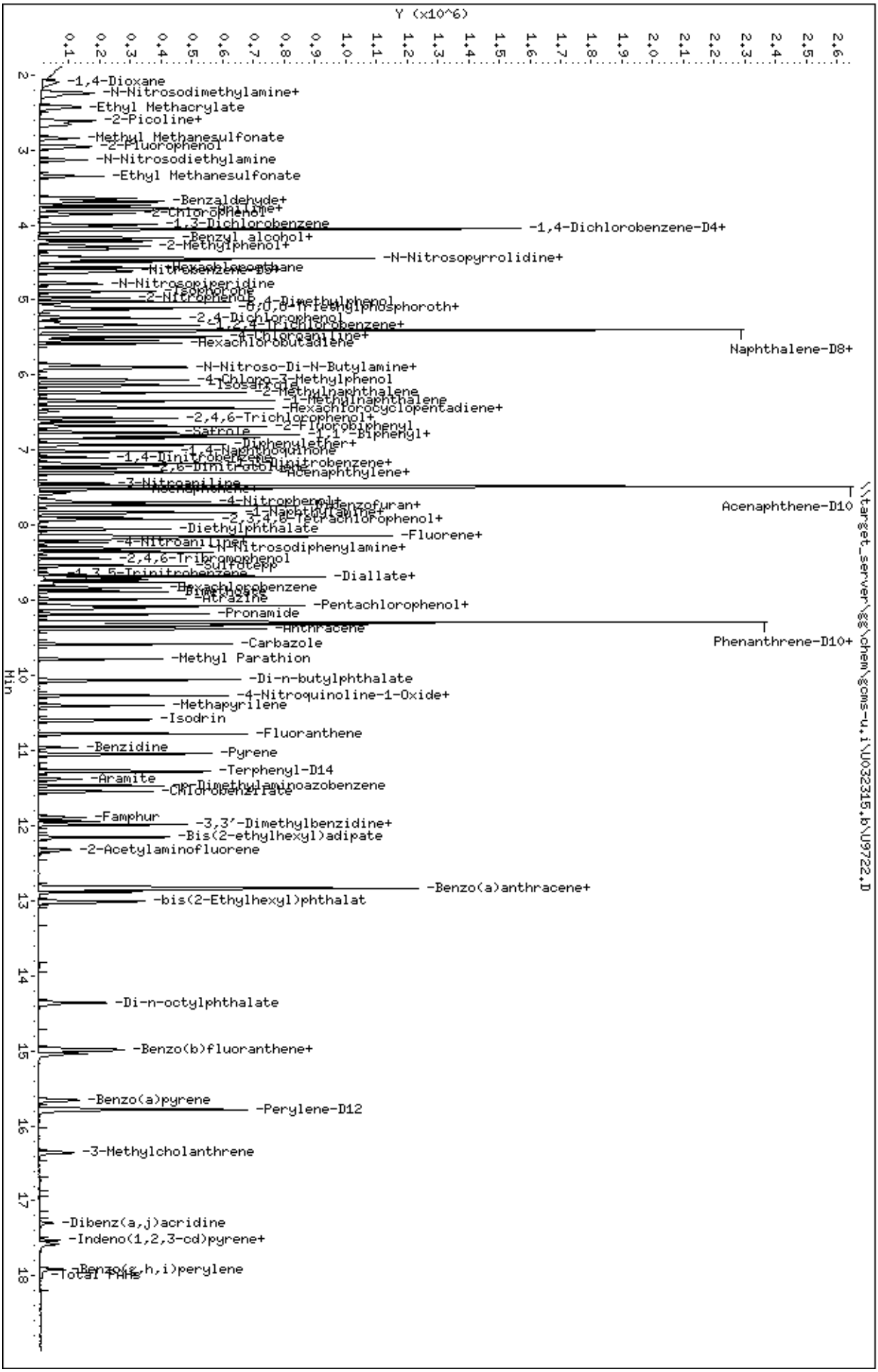
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
135 Kepone	272	11.976	11.995	(0.932)	11723	10.0000	21.6(a)	
133 Famphur	218	11.893	11.901	(0.926)	56122	10.0000	25.0	
136 Butylbenzylphthalate	149	11.987	12.004	(0.933)	144287	10.0000	10.6	
137 Bis(2-ethylhexyl)adipate	129	12.163	12.170	(0.947)	139284	10.0000	10.1	
138 2-Acetylaminofluorene	181	12.328	12.367	(0.960)	42495	10.0000	8.07(a)	
139 Benzo(a)anthracene	228	12.815	12.853	(0.998)	184365	10.0000	10.4	
* 141 Chrysene-D12	240	12.846	12.863	(1.000)	722258	40.0000		
142 Chrysene	228	12.877	12.915	(1.002)	186044	10.0000	10.9	
140 3,3'-Dichlorobenzidine	252	12.815	12.832	(0.998)	49406	10.0000	9.76(a)	
143 bis(2-Ethylhexyl)phthalate	149	13.011	13.029	(1.013)	183830	10.0000	10.0	
144 Di-n-octylphthalate	149	14.367	14.385	(0.910)	262990	10.0000	8.98(a)	
145 Benzo(b)fluoranthene	252	14.978	15.027	(0.949)	129395	10.0000	9.38(a)	
146 7,12-Dimethylbenz(A)Anthracen	256	14.998	15.027	(0.950)	73373	10.0000	9.86(a)	
147 Benzo(k)fluoranthene	252	15.040	15.078	(0.953)	128813	10.0000	9.31(aH)	
149 Benzo(a)pyrene	252	15.661	15.679	(0.992)	104586	10.0000	9.18(a)	
* 150 Perylene-D12	264	15.785	15.782	(1.000)	451255	40.0000		
151 3-Methylcholanthrene	268	16.365	16.372	(1.037)	49611	10.0000	9.36(a)	
152 Dibenz(a,j)acridine	279	17.296	17.304	(1.096)	44650	10.0000	8.25(a)	
153 Indeno(1,2,3-cd)pyrene	276	17.524	17.542	(1.110)	53709	10.0000	8.76(a)	
154 Dibenzo(a,h)anthracene	278	17.576	17.593	(1.113)	50201	10.0000	8.20(a)	
155 Benzo(g,h,i)perylene	276	17.917	17.925	(1.135)	66227	10.0000	9.69(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Date : 23-MAR-2015 15:39
Client ID:
Sample Info: WG160080-2
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Lab Smp Id: WG160080-3
Inj Date : 23-MAR-2015 16:05 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-3
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 16:05 Cal File: U9723.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	58	2.100	2.099	(0.389)	76791	25.0000	26.1	
3 Pyridine	79	2.255	2.244	(0.556)	331612	25.0000	25.3(a)	
2 N-Nitrosodimethylamine	42	2.224	2.223	(0.548)	102310	25.0000	24.4	
4 Ethyl Methacrylate	69	2.431	2.420	(0.599)	225040	25.0000	24.6	
5 2-Picoline	93	2.617	2.617	(0.645)	324882	25.0000	24.9	
6 N-Nitrosomethylethylamine	88	2.669	2.669	(0.658)	138295	25.0000	25.0	
7 Methyl Methanesulfonate	80	2.845	2.855	(0.701)	175866	25.0000	24.4	
$ 8 2-Fluorophenol	112	2.959	2.969	(0.730)	300763	25.0000	25.1	
9 N-Nitrosodiethylamine	102	3.135	3.145	(0.773)	142147	25.0000	25.0	
10 Ethyl Methanesulfonate	79	3.352	3.383	(0.826)	229407	25.0000	24.6	
11 Benzaldehyde	77	3.652	3.652	(0.900)	180262	25.0000	33.7	
15 Pentachloroethane	117	3.787	3.786	(0.934)	113903	25.0000	26.7	
14 Aniline	93	3.745	3.766	(0.923)	452191	25.0000	25.4	
16 Bis(2-Chloroethyl)ether	93	3.787	3.807	(0.934)	272969	25.0000	27.2	
$ 12 Phenol-D6	99	3.683	3.714	(0.908)	354875	25.0000	25.5	
13 Phenol	94	3.694	3.735	(0.911)	355952	25.0000	24.5	
17 2-Chlorophenol	128	3.859	3.869	(0.952)	302774	25.0000	26.0	
18 1,3-Dichlorobenzene	146	4.004	4.004	(0.987)	318566	25.0000	26.7	
* 19 1,4-Dichlorobenzene-D4	152	4.056	4.055	(1.000)	317034	40.0000		
20 1,4-Dichlorobenzene	146	4.066	4.076	(1.003)	300474	25.0000	26.8	
22 1,2-Dichlorobenzene	146	4.222	4.231	(1.041)	294424	25.0000	26.7	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.180	4.200	(1.031)	197621	25.0000	25.2	
	24 Bis(2-Chloroisopropyl)ether	45	4.315	4.335	(1.064)	321661	25.0000	27.7	
	25 2,2'-Oxybis(1-chloropropane)	45	4.315	4.335	(1.064)	321661	25.0000	27.7	
	23 2-Methylphenol	108	4.284	4.304	(1.056)	275907	25.0000	25.8	
	27 Acetophenone	105	4.449	4.469	(0.824)	357074	25.0000	26.9	
	32 Hexachloroethane	117	4.563	4.573	(1.125)	137007	25.0000	27.1	
	26 N-Nitrosopyrrolidine	100	4.429	4.521	(1.092)	158076	25.0000	29.4	
	31 o-Toluidine	106	4.491	4.521	(1.107)	417843	25.0000	28.4	
	29 N-Nitrosomorpholine	56	4.460	4.521	(1.100)	131496	25.0000	28.0	
	30 N-Nitroso-di-n-propylamine	70	4.460	4.500	(1.100)	172952	25.0000	28.9	
	28 3&4-Methylphenol	108	4.449	4.511	(1.097)	253690	25.0000	28.7	
$	33 Nitrobenzene-D5	82	4.604	4.635	(0.852)	280390	25.0000	26.8	
	34 Nitrobenzene	77	4.625	4.656	(0.856)	266032	25.0000	27.8	
	35 N-Nitrosopiperidine	114	4.780	4.821	(0.885)	141098	25.0000	25.2	
	36 Isophorone	82	4.884	4.925	(0.904)	529790	25.0000	26.5	
	37 2-Nitrophenol	139	4.977	4.997	(0.921)	154898	25.0000	26.9	
	38 2,4-Dimethylphenol	107	5.029	5.070	(0.931)	288907	25.0000	28.0	
	40 Bis(2-Chloroethoxy)methane	93	5.132	5.163	(0.950)	415535	25.0000	29.6	
	39 O,O,O-Triethylphosphorothioat	198	5.112	5.132	(0.946)	95981	25.0000	27.8	
	42 2,4-Dichlorophenol	162	5.246	5.277	(0.971)	220736	25.0000	28.8	
	43 1,2,4-Trichlorobenzene	180	5.339	5.349	(0.989)	226301	25.0000	28.2	
*	45 Naphthalene-D8	136	5.401	5.411	(1.000)	1168407	40.0000		
	41 Benzoic acid	122	5.132	5.297	(0.950)	148301	25.0000	24.4(aQ)	
	46 Naphthalene	128	5.422	5.442	(1.004)	757473	25.0000	25.6	
	44 A,A-Dimethylphenethylamine	58	5.319	5.753	(0.985)	660296	25.0000	29.9(M)	M9
	49 Hexachloropropene	213	5.536	5.546	(1.025)	144722	25.0000	23.0	
	48 2,6-Dichlorophenol	162	5.495	5.525	(1.017)	207265	25.0000	23.7	
	47 4-Chloroaniline	127	5.484	5.525	(1.015)	319447	25.0000	27.3	
	50 Hexachlorobutadiene	225	5.588	5.598	(1.034)	123736	25.0000	24.9	
	51 N-Nitroso-Di-N-Butylamine	84	5.898	5.939	(1.092)	231434	25.0000	30.4	
	53 Caprolactam	113	5.898	6.022	(1.092)	85385	25.0000	25.7	
	52 p-Phenylenediamine	108	5.909	5.960	(1.094)	307101	25.0000	31.2	
	55 Isosafrole	162	6.136	6.157	(1.136)	187154	25.0000	26.8	
	56 2-Methylnaphthalene	142	6.229	6.250	(1.153)	490640	25.0000	28.2	
	54 4-Chloro-3-Methylphenol	107	6.074	6.125	(1.125)	234044	25.0000	28.6	
	58 1-Methylnaphthalene	142	6.343	6.364	(1.174)	461060	25.0000	28.5	
	60 1,2,4,5-Tetrachlorobenzene	216	6.436	6.457	(0.860)	182397	25.0000	24.4	
	59 Hexachlorocyclopentadiene	237	6.436	6.446	(0.860)	139813	25.0000	27.6	
	61 2,4,6-Trichlorophenol	196	6.581	6.612	(0.880)	142192	25.0000	27.6	
$	63 2-Fluorobiphenyl	172	6.685	6.705	(0.893)	507039	25.0000	28.8	
	62 2,4,5-Trichlorophenol	196	6.623	6.664	(0.885)	141888	25.0000	25.9	
	64 Safrole	104	6.757	6.788	(0.903)	96523	25.0000	26.2	
	66 2-Chloronaphthalene	162	6.809	6.840	(0.910)	431730	25.0000	24.6	
	65 1,1'-Biphenyl	154	6.799	6.829	(0.909)	569997	25.0000	28.1	
	67 1-Chloronaphthalene	162	6.840	6.860	(0.914)	491001	25.0000	29.7	
	68 Diphenylether	170	6.923	6.943	(0.925)	301910	25.0000	27.7	
	69 2-Nitroaniline	65	6.944	6.974	(0.928)	150113	25.0000	25.8	
	70 1,4-Naphthoquinone	158	7.016	7.047	(0.938)	185172	25.0000	31.5	
	71 1,4-Dinitrobenzene	75	7.099	7.150	(0.949)	91588	25.0000	24.9	
	75 Acenaphthylene	152	7.306	7.326	(0.976)	711728	25.0000	28.0	
	72 Dimethyl Phthalate	163	7.192	7.243	(0.961)	521599	25.0000	27.1	
	73 1,3-Dinitrobenzene	168	7.213	7.264	(0.964)	79664	25.0000	26.3	
	74 2,6-Dinitrotoluene	165	7.244	7.285	(0.968)	112924	25.0000	26.2	
	76 1,2-Dinitrobenzene	50	7.306	7.347	(0.976)	69820	25.0000	27.0	

4:04 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
* 78 Acenaphthene-D10	164	7.482	7.502	(1.000)	606536	40.0000		
79 Acenaphthene	153	7.523	7.543	(1.006)	437011	25.0000	28.9	
77 3-Nitroaniline	138	7.451	7.502	(0.996)	135755	25.0000	26.3	
80 2,4-Dinitrophenol	184	7.585	7.647	(1.014)	56394	25.0000	23.1(a)	
83 Dibenzofuran	168	7.730	7.761	(1.033)	555864	25.0000	27.5	
82 Pentachlorobenzene	250	7.699	7.719	(1.029)	196868	25.0000	28.2	
85 1-Naphthylamine	143	7.834	7.864	(1.047)	511491	25.0000	28.0	
84 2,4-Dinitrotoluene	165	7.741	7.802	(1.035)	138210	25.0000	25.8	
86 2,3,5,6-Tetrachlorophenol	232	7.844	7.885	(1.048)	120080	25.0000	28.5	
88 2-Naphthylamine	143	7.927	7.978	(1.059)	469235	25.0000	27.1	
81 4-Nitrophenol	139	7.678	7.750	(1.026)	81425	25.0000	23.9(a)	
87 2,3,4,6-Tetrachlorophenol	232	7.896	7.937	(1.055)	120957	25.0000	27.5	
90 Fluorene	166	8.155	8.175	(1.090)	462275	25.0000	25.3	
89 Diethylphthalate	149	8.051	8.092	(1.076)	517703	25.0000	28.1	
92 4-Chlorophenyl-phenylether	204	8.165	8.185	(1.091)	203096	25.0000	24.6	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.144	8.195	(1.089)	87933	25.0000	29.8	
93 5-Nitro-O-Toluidine	152	8.175	8.237	(1.093)	139252	25.0000	26.4	
94 4-Nitroaniline	138	8.196	8.268	(1.095)	104313	25.0000	25.1	
95 4,6-Dinitro-2-Methylphenol	198	8.237	8.289	(0.886)	74022	25.0000	26.2	
96 N-Nitrosodiphenylamine	169	8.310	8.351	(0.894)	386673	25.0000	28.6	
97 N-Nitrosodiphenylamine/DPA	169	8.310	8.351	(0.894)	386673	25.0000	28.6	
98 1,2-Diphenylhydrazine	77	8.351	8.382	(0.899)	536252	25.0000	28.2	
99 Azobenzene	77	8.351	8.382	(0.899)	536252	25.0000	28.2	
$ 100 2,4,6-Tribromophenol	330	8.444	8.485	(1.129)	88327	25.0000	27.6	
101 Sulfotepp	97	8.538	8.568	(0.919)	95613	25.0000	30.2	
103 Diallate	86	8.682	8.703	(0.934)	222060	25.0000	26.2	
106 4-Bromophenyl-phenylether	248	8.765	8.785	(0.943)	134774	25.0000	26.7	
104 Phorate	75	8.693	8.723	(0.935)	339338	25.0000	27.6(M)	M3
102 1,3,5-Trinitrobenzene	213	8.662	8.744	(0.932)	34168	25.0000	29.1(Q)	
105 Phenacetin	108	8.724	8.796	(0.939)	222118	25.0000	27.9	
107 Hexachlorobenzene	284	8.838	8.868	(0.951)	160349	25.0000	29.1	
108 Dimethoate	87	8.889	8.951	(0.957)	185305	25.0000	29.8	
109 Atrazine	200	8.993	9.034	(0.968)	109880	25.0000	32.1	
111 4-Aminobiphenyl	169	9.086	9.127	(0.978)	450261	25.0000	31.6	
110 Pentachlorophenol	266	9.086	9.117	(0.978)	91160	25.0000	28.5	
112 Pentachloronitrobenzene	237	9.107	9.148	(0.980)	58337	25.0000	28.6	
* 114 Phenanthrene-D10	188	9.293	9.313	(1.000)	898442	40.0000		
113 Pronamide	173	9.190	9.220	(0.989)	212730	25.0000	27.1	
115 Phenanthrene	178	9.324	9.355	(1.003)	587294	25.0000	24.8	
118 Anthracene	178	9.386	9.417	(1.010)	638058	25.0000	30.1	
116 Disulfoton	88	9.334	9.355	(1.004)	296474	25.0000	25.9	
117 Dinoseb	211	9.334	9.355	(1.004)	75910	25.0000	27.7	
119 Carbazole	167	9.593	9.613	(1.032)	544543	25.0000	28.6	
120 Methyl Parathion	109	9.780	9.800	(1.052)	162406	25.0000	29.2	
121 Di-n-butylphthalate	149	10.069	10.079	(1.084)	846942	25.0000	29.9	
122 4-Nitroquinoline-1-Oxide	190	10.276	10.307	(1.106)	35842	25.0000	25.1	
123 Ethyl Parathion	291	10.276	10.297	(1.106)	37312	25.0000	24.4(a)	
124 Methapyrilene	97	10.401	10.431	(1.119)	178426	25.0000	29.4	
125 Isodrin	193	10.597	10.607	(1.140)	84531	25.0000	30.2	
126 Fluoranthene	202	10.784	10.804	(1.160)	561346	25.0000	25.3	
128 Pyrene	202	11.053	11.073	(0.861)	573476	25.0000	27.2	
127 Benzidine	184	10.970	10.990	(0.854)	141408	25.0000	23.9(a)	
$ 129 Terphenyl-D14	244	11.280	11.301	(0.878)	380133	25.0000	27.2	
130 Aramite	185	11.384	11.394	(0.886)	40093	25.0000	26.8	

4:04 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Report Date: 27-Mar-2015 15:13

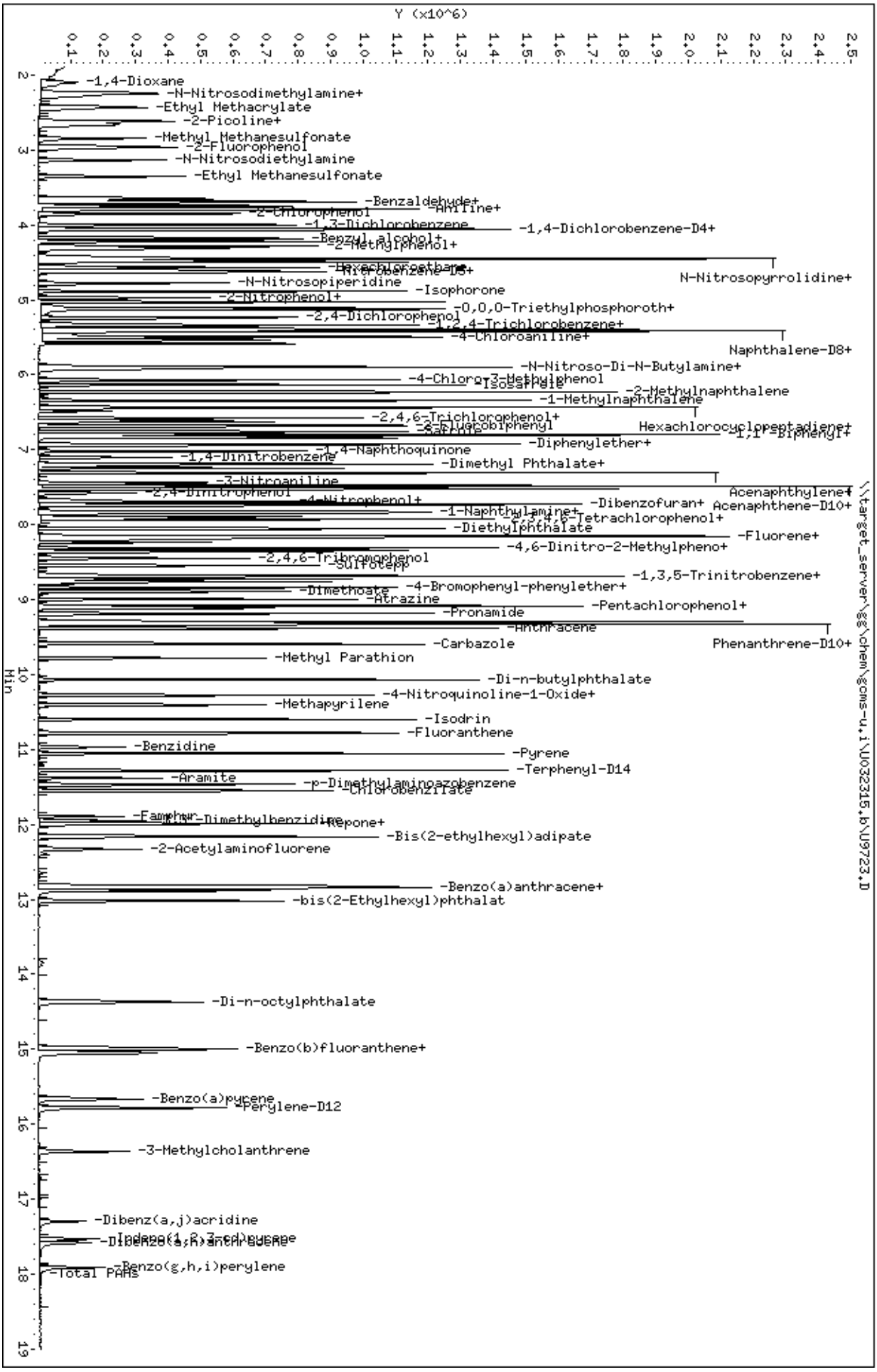
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
131 p-Dimethylaminoazobenzene	225	11.477	11.487	(0.894)	102095	25.0000	25.1	
132 Chlorobenzilate	251	11.549	11.570	(0.899)	154088	25.0000	25.7	
135 Kepone	272	11.984	11.995	(0.933)	13555	25.0000	30.7	
133 Famphur	218	11.891	11.901	(0.926)	73956	25.0000	40.6	
134 3,3'-Dimethylbenzidine	212	11.953	11.963	(0.931)	161394	25.0000	23.7	
136 Butylbenzylphthalate	149	11.994	12.004	(0.934)	282040	25.0000	25.6	
137 Bis(2-ethylhexyl)adipate	129	12.160	12.170	(0.947)	280360	25.0000	25.2	
138 2-Acetylaminofluorene	181	12.326	12.367	(0.960)	107555	25.0000	25.2	
139 Benzo(a)anthracene	228	12.822	12.853	(0.998)	378139	25.0000	26.4	
* 141 Chrysene-D12	240	12.843	12.863	(1.000)	586253	40.0000		
142 Chrysene	228	12.885	12.915	(1.003)	373440	25.0000	26.9	
140 3,3'-Dichlorobenzidine	252	12.822	12.832	(0.998)	108123	25.0000	26.3	
143 bis(2-Ethylhexyl)phthalate	149	13.019	13.029	(1.014)	371187	25.0000	25.0	
144 Di-n-octylphthalate	149	14.365	14.385	(0.910)	535380	25.0000	21.9	
145 Benzo(b)fluoranthene	252	14.986	15.027	(0.950)	289748	25.0000	25.2	
146 7,12-Dimethylbenz(A)Anthracen	256	14.996	15.027	(0.950)	155300	25.0000	25.0	
147 Benzo(k)fluoranthene	252	15.048	15.078	(0.953)	290083	25.0000	25.1(H)	
149 Benzo(a)pyrene	252	15.658	15.679	(0.992)	230569	25.0000	24.3	
* 150 Perylene-D12	264	15.783	15.782	(1.000)	376482	40.0000		
151 3-Methylcholanthrene	268	16.362	16.372	(1.037)	113692	25.0000	25.7	
152 Dibenz(a,j)acridine	279	17.294	17.304	(1.096)	112593	25.0000	24.9	
153 Indeno(1,2,3-cd)pyrene	276	17.532	17.542	(1.111)	126007	25.0000	24.6	
154 Dibenzo(a,h)anthracene	278	17.584	17.593	(1.114)	122507	25.0000	24.0	
155 Benzo(g,h,i)perylene	276	17.915	17.925	(1.135)	149683	25.0000	26.2	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9723.D
Date : 23-MAR-2015 16:05
Client ID:
Sample Info: WG160080-3
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Lab Smp Id: WG160080-5
Inj Date : 23-MAR-2015 16:31 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-5
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 16:31 Cal File: U9724.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
1 1,4-Dioxane	58	2.100	2.099	(0.389)	245992	75.0000	78.3	
3 Pyridine	79	2.245	2.244	(0.553)	1046300	75.0000	79.6	
2 N-Nitrosodimethylamine	42	2.224	2.223	(0.548)	338510	75.0000	80.4	
4 Ethyl Methacrylate	69	2.421	2.420	(0.597)	727694	75.0000	79.3	
5 2-Picoline	93	2.617	2.617	(0.645)	1035290	75.0000	79.1	
6 N-Nitrosomethylethylamine	88	2.669	2.669	(0.658)	443760	75.0000	79.7	
7 Methyl Methanesulfonate	80	2.855	2.855	(0.704)	558063	75.0000	77.2	
$ 8 2-Fluorophenol	112	2.959	2.969	(0.730)	961228	75.0000	79.8	
9 N-Nitrosodiethylamine	102	3.135	3.145	(0.773)	456923	75.0000	80.1	
10 Ethyl Methanesulfonate	79	3.363	3.383	(0.829)	751501	75.0000	80.2	
11 Benzaldehyde	77	3.652	3.652	(0.900)	370285	75.0000	68.9	
15 Pentachloroethane	117	3.787	3.786	(0.934)	333177	75.0000	77.8	
14 Aniline	93	3.756	3.766	(0.926)	1414717	75.0000	79.0	
16 Bis(2-Chloroethyl)ether	93	3.797	3.807	(0.936)	774367	75.0000	76.7	
$ 12 Phenol-D6	99	3.704	3.714	(0.913)	1109327	75.0000	79.4	
13 Phenol	94	3.714	3.735	(0.916)	1209820	75.0000	82.9	
17 2-Chlorophenol	128	3.859	3.869	(0.952)	911484	75.0000	78.0	
18 1,3-Dichlorobenzene	146	4.004	4.004	(0.987)	943971	75.0000	78.6	
* 19 1,4-Dichlorobenzene-D4	152	4.056	4.055	(1.000)	318480	40.0000		
20 1,4-Dichlorobenzene	146	4.066	4.076	(1.003)	873021	75.0000	77.6	
22 1,2-Dichlorobenzene	146	4.222	4.231	(1.041)	880889	75.0000	79.5	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.191	4.200	(1.033)	637716	75.0000	80.9	
	24 Bis(2-Chloroisopropyl)ether	45	4.325	4.335	(1.066)	899860	75.0000	77.1(Q)	
	25 2,2'-Oxybis(1-chloropropane)	45	4.325	4.335	(1.066)	899860	75.0000	77.1	
	23 2-Methylphenol	108	4.294	4.304	(1.059)	860109	75.0000	80.0	
	27 Acetophenone	105	4.460	4.469	(0.826)	1078602	75.0000	76.0	
	32 Hexachloroethane	117	4.563	4.573	(1.125)	389872	75.0000	76.7	
	26 N-Nitrosopyrrolidine	100	4.460	4.521	(1.100)	437786	75.0000	81.0(Q)	
	31 o-Toluidine	106	4.501	4.521	(1.110)	1160451	75.0000	78.6	
	29 N-Nitrosomorpholine	56	4.491	4.521	(1.107)	330268	75.0000	70.1	
	30 N-Nitroso-di-n-propylamine	70	4.491	4.500	(1.107)	464348	75.0000	77.2(Q)	
	28 3&4-Methylphenol	108	4.480	4.511	(1.105)	701487	75.0000	79.1	
$	33 Nitrobenzene-D5	82	4.625	4.635	(0.856)	863595	75.0000	77.4	
	34 Nitrobenzene	77	4.636	4.656	(0.858)	798907	75.0000	78.1	
	35 N-Nitrosopiperidine	114	4.801	4.821	(0.889)	458409	75.0000	76.9	
	36 Isophorone	82	4.905	4.925	(0.908)	1645043	75.0000	77.0	
	37 2-Nitrophenol	139	4.988	4.997	(0.923)	486469	75.0000	79.1	
	38 2,4-Dimethylphenol	107	5.050	5.070	(0.935)	846942	75.0000	76.8	
	40 Bis(2-Chloroethoxy)methane	93	5.143	5.163	(0.952)	1163918	75.0000	77.8	
	39 O,O,O-Triethylphosphorothioat	198	5.122	5.132	(0.948)	275543	75.0000	74.8	
	42 2,4-Dichlorophenol	162	5.257	5.277	(0.973)	619495	75.0000	75.6	
	43 1,2,4-Trichlorobenzene	180	5.339	5.349	(0.989)	641237	75.0000	74.8	
*	45 Naphthalene-D8	136	5.402	5.411	(1.000)	1247358	40.0000		
	41 Benzoic acid	122	5.226	5.297	(0.967)	546830	75.0000	84.3(H)	
	46 Naphthalene	128	5.433	5.442	(1.006)	2074701	75.0000	83.9	
	44 A,A-Dimethylphenethylamine	58	5.650	5.753	(1.046)	2054452	75.0000	87.1(TM)	M9
	49 Hexachloropropene	213	5.536	5.546	(1.025)	402143	75.0000	81.3	
	48 2,6-Dichlorophenol	162	5.515	5.525	(1.021)	573201	75.0000	83.5	
	47 4-Chloroaniline	127	5.505	5.525	(1.019)	965516	75.0000	77.4	
	50 Hexachlorobutadiene	225	5.588	5.598	(1.034)	326456	75.0000	78.3	
	51 N-Nitroso-Di-N-Butylamine	84	5.909	5.939	(1.094)	617899	75.0000	76.0	
	53 Caprolactam	113	5.971	6.022	(1.105)	277652	75.0000	78.4	
	52 p-Phenylenediamine	108	5.940	5.960	(1.100)	881179	75.0000	84.0	
	55 Isosafrole	162	6.147	6.157	(1.138)	547031	75.0000	73.5	
	56 2-Methylnaphthalene	142	6.240	6.250	(1.155)	1361694	75.0000	73.4	
	54 4-Chloro-3-Methylphenol	107	6.095	6.125	(1.128)	670548	75.0000	76.7	
	58 1-Methylnaphthalene	142	6.354	6.364	(1.176)	1250892	75.0000	72.5	
	60 1,2,4,5-Tetrachlorobenzene	216	6.447	6.457	(0.860)	434687	75.0000	72.7	
	59 Hexachlorocyclopentadiene	237	6.447	6.446	(0.860)	385431	75.0000	73.0	
	61 2,4,6-Trichlorophenol	196	6.592	6.612	(0.880)	408716	75.0000	75.9	
$	63 2-Fluorobiphenyl	172	6.685	6.705	(0.892)	1405091	75.0000	76.3	
	62 2,4,5-Trichlorophenol	196	6.644	6.664	(0.887)	464048	75.0000	81.2	
	64 Safrole	104	6.778	6.788	(0.905)	296624	75.0000	77.1	
	66 2-Chloronaphthalene	162	6.820	6.840	(0.910)	1560691	75.0000	85.0	
	65 1,1'-Biphenyl	154	6.809	6.829	(0.909)	1269926	75.0000	76.1	
	67 1-Chloronaphthalene	162	6.851	6.860	(0.914)	1149711	75.0000	66.5	
	68 Diphenylether	170	6.933	6.943	(0.925)	827838	75.0000	72.7	
	69 2-Nitroaniline	65	6.964	6.974	(0.930)	477988	75.0000	78.5	
	70 1,4-Naphthoquinone	158	7.037	7.047	(0.939)	429114	75.0000	69.9	
	71 1,4-Dinitrobenzene	75	7.120	7.150	(0.950)	303504	75.0000	78.9	
	75 Acenaphthylene	152	7.316	7.326	(0.977)	1918691	75.0000	72.1	
	72 Dimethyl Phthalate	163	7.213	7.243	(0.963)	1511944	75.0000	75.0	
	73 1,3-Dinitrobenzene	168	7.234	7.264	(0.965)	242530	75.0000	76.7	
	74 2,6-Dinitrotoluene	165	7.265	7.285	(0.970)	336639	75.0000	74.6	
	76 1,2-Dinitrobenzene	50	7.327	7.347	(0.978)	207558	75.0000	76.8	

4:04 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
* 78 Acenaphthene-D10	164	7.492	7.502	(1.000)	633891	40.0000		
79 Acenaphthene	153	7.534	7.543	(1.006)	1114455	75.0000	70.5	
77 3-Nitroaniline	138	7.472	7.502	(0.997)	441121	75.0000	81.8	
80 2,4-Dinitrophenol	184	7.616	7.647	(1.017)	217537	75.0000	85.3	
83 Dibenzofuran	168	7.741	7.761	(1.033)	1629292	75.0000	77.1	
82 Pentachlorobenzene	250	7.710	7.719	(1.029)	524510	75.0000	71.9	
85 1-Naphthylamine	143	7.844	7.864	(1.047)	1440210	75.0000	75.5	
84 2,4-Dinitrotoluene	165	7.772	7.802	(1.037)	437671	75.0000	78.1	
86 2,3,5,6-Tetrachlorophenol	232	7.865	7.885	(1.050)	329046	75.0000	74.8	
88 2-Naphthylamine	143	7.948	7.978	(1.061)	1404942	75.0000	77.6	
81 4-Nitrophenol	139	7.730	7.750	(1.032)	231711	75.0000	65.1(MH)	M9
87 2,3,4,6-Tetrachlorophenol	232	7.917	7.937	(1.057)	349227	75.0000	76.0	
90 Fluorene	166	8.165	8.175	(1.090)	1142480	75.0000	81.7	
89 Diethylphthalate	149	8.072	8.092	(1.077)	1420142	75.0000	73.8	
92 4-Chlorophenyl-phenylether	204	8.175	8.185	(1.091)	455799	75.0000	79.1	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.175	8.195	(1.091)	195757	75.0000	75.5	
93 5-Nitro-O-Toluidine	152	8.206	8.237	(1.095)	434541	75.0000	78.8(Q)	
94 4-Nitroaniline	138	8.227	8.268	(1.098)	354583	75.0000	81.6	
95 4,6-Dinitro-2-Methylphenol	198	8.269	8.289	(0.889)	254340	75.0000	87.5	
96 N-Nitrosodiphenylamine	169	8.331	8.351	(0.895)	1043796	75.0000	75.0	
97 N-Nitrosodiphenylamine/DPA	169	8.331	8.351	(0.895)	1043796	75.0000	75.0	
98 1,2-Diphenylhydrazine	77	8.372	8.382	(0.900)	1542352	75.0000	78.8(H)	
99 Azobenzene	77	8.372	8.382	(0.900)	1542352	75.0000	78.8(H)	
$ 100 2,4,6-Tribromophenol	330	8.465	8.485	(1.130)	253623	75.0000	76.0	
101 Sulfotepp	97	8.558	8.568	(0.920)	247474	75.0000	76.1	
103 Diallate	86	8.693	8.703	(0.934)	578740	75.0000	82.3	
106 4-Bromophenyl-phenylether	248	8.776	8.785	(0.943)	348997	75.0000	82.1	
104 Phorate	75	8.703	8.723	(0.935)	911324	75.0000	72.1	
102 1,3,5-Trinitrobenzene	213	8.703	8.744	(0.935)	83304	75.0000	69.0(Q)	
105 Phenacetin	108	8.765	8.796	(0.942)	612417	75.0000	74.9	
107 Hexachlorobenzene	284	8.858	8.868	(0.952)	442450	75.0000	78.2	
108 Dimethoate	87	8.921	8.951	(0.959)	499972	75.0000	78.1	
109 Atrazine	200	9.014	9.034	(0.969)	265744	75.0000	75.5	
111 4-Aminobiphenyl	169	9.107	9.127	(0.979)	1070462	75.0000	73.1	
110 Pentachlorophenol	266	9.097	9.117	(0.978)	259155	75.0000	78.9	
112 Pentachloronitrobenzene	237	9.128	9.148	(0.981)	163855	75.0000	78.2	
* 114 Phenanthrene-D10	188	9.304	9.313	(1.000)	924108	40.0000		
113 Pronamide	173	9.210	9.220	(0.990)	554912	75.0000	80.2	
115 Phenanthrene	178	9.335	9.355	(1.003)	1390501	75.0000	83.5	
118 Anthracene	178	9.397	9.417	(1.010)	1650247	75.0000	75.7	
116 Disulfoton	88	9.345	9.355	(1.004)	639216	75.0000	78.9	
117 Dinoseb	211	9.355	9.355	(1.006)	211163	75.0000	75.0	
119 Carbazole	167	9.604	9.613	(1.032)	1490438	75.0000	76.0	
120 Methyl Parathion	109	9.790	9.800	(1.052)	437433	75.0000	76.6	
121 Di-n-butylphthalate	149	10.080	10.079	(1.083)	2179626	75.0000	74.7	
122 4-Nitroquinoline-1-Oxide	190	10.287	10.307	(1.106)	120685	75.0000	82.2	
123 Ethyl Parathion	291	10.287	10.297	(1.106)	107892	75.0000	81.6	
124 Methapyrilene	97	10.411	10.431	(1.119)	435362	75.0000	69.9	
125 Isodrin	193	10.608	10.607	(1.140)	217829	75.0000	75.6	
126 Fluoranthene	202	10.794	10.804	(1.160)	1479963	75.0000	84.0	
128 Pyrene	202	11.063	11.073	(0.861)	1431223	75.0000	77.5	
127 Benzidine	184	10.980	10.990	(0.854)	463262	75.0000	89.4	
$ 129 Terphenyl-D14	244	11.291	11.301	(0.878)	970115	75.0000	79.5	
130 Aramite	185	11.394	11.394	(0.886)	108418	75.0000	82.8	

4:04 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Report Date: 27-Mar-2015 15:13

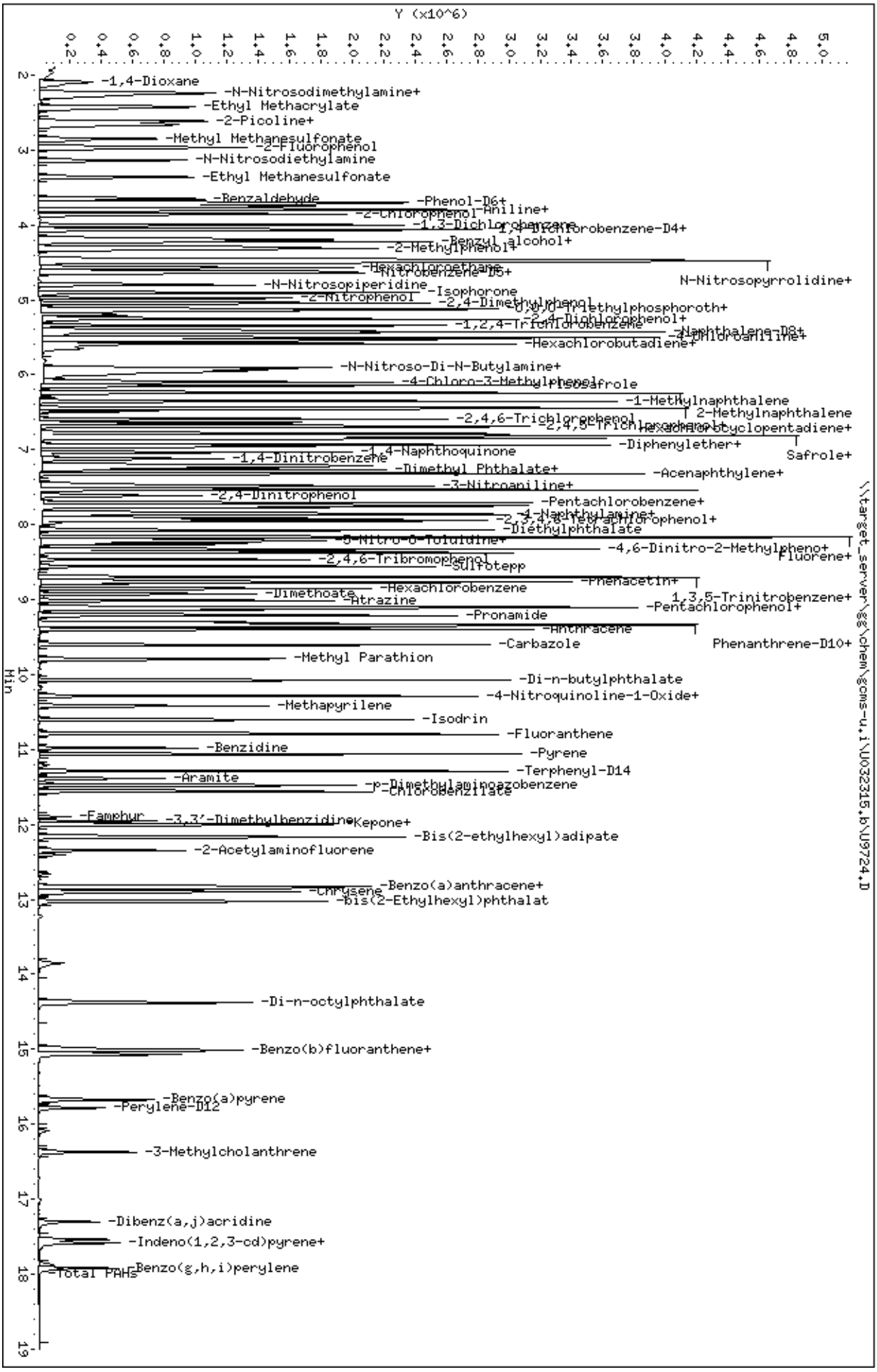
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
131 p-Dimethylaminoazobenzene	225	11.477	11.487	(0.893)	294296	75.0000	82.7	
132 Chlorobenzilate	251	11.560	11.570	(0.899)	426827	75.0000	81.5	
133 Famphur	218	11.901	11.901	(0.926)	64860	75.0000	40.7	
134 3,3'-Dimethylbenzidine	212	11.953	11.963	(0.930)	348148	75.0000	82.3	
136 Butylbenzylphthalate	149	12.005	12.004	(0.934)	773539	75.0000	80.4	
137 Bis(2-ethylhexyl)adipate	129	12.171	12.170	(0.947)	794144	75.0000	81.4	
138 2-Acetylaminofluorene	181	12.346	12.367	(0.961)	313950	75.0000	83.9	
139 Benzo(a)anthracene	228	12.843	12.853	(0.999)	1004381	75.0000	80.2	
* 141 Chrysene-D12	240	12.854	12.863	(1.000)	512783	40.0000		
142 Chrysene	228	12.905	12.915	(1.004)	959125	75.0000	79.0	
140 3,3'-Dichlorobenzidine	252	12.833	12.832	(0.998)	291814	75.0000	81.2	
143 bis(2-Ethylhexyl)phthalate	149	13.030	13.029	(1.014)	1038813	75.0000	80.0	
144 Di-n-octylphthalate	149	14.375	14.385	(0.911)	1489539	75.0000	84.9	
145 Benzo(b)fluoranthene	252	15.006	15.027	(0.951)	680198	75.0000	82.3	
146 7,12-Dimethylbenz(A)Anthracen	256	15.017	15.027	(0.951)	364196	75.0000	81.7	
147 Benzo(k)fluoranthene	252	15.069	15.078	(0.955)	685264	75.0000	82.7(H)	
149 Benzo(a)pyrene	252	15.669	15.679	(0.993)	567253	75.0000	83.2	
* 150 Perylene-D12	264	15.783	15.782	(1.000)	270201	40.0000		
151 3-Methylcholanthrene	268	16.373	16.372	(1.037)	260067	75.0000	82.0	
152 Dibenz(a,j)acridine	279	17.304	17.304	(1.096)	283282	75.0000	87.4	
153 Indeno(1,2,3-cd)pyrene	276	17.542	17.542	(1.111)	305210	75.0000	83.1	
154 Dibenzo(a,h)anthracene	278	17.584	17.593	(1.114)	327801	75.0000	89.4	
155 Benzo(g,h,i)perylene	276	17.925	17.925	(1.136)	344651	75.0000	84.2	

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Date : 23-MAR-2015 16:31
Client ID:
Sample Info: WG160080-5
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Lab Smp Id: WG160080-6
Inj Date : 23-MAR-2015 16:57 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-6
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 16:57 Cal File: U9725.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	1 1,4-Dioxane	58	2.100	2.099	(0.388)	368724	100.000	97.0	
	3 Pyridine	79	2.255	2.244	(0.556)	1552660	100.000	97.4	
	2 N-Nitrosodimethylamine	42	2.224	2.223	(0.548)	490732	100.000	96.2	
	4 Ethyl Methacrylate	69	2.431	2.420	(0.599)	1081759	100.000	97.3	
	5 2-Picoline	93	2.607	2.617	(0.643)	1564256	100.000	98.6	
	6 N-Nitrosomethylethylamine	88	2.669	2.669	(0.658)	659281	100.000	97.7	
	7 Methyl Methanesulfonate	80	2.855	2.855	(0.704)	864826	100.000	98.7	
$	8 2-Fluorophenol	112	2.969	2.969	(0.732)	1425884	100.000	97.7	
	9 N-Nitrosodiethylamine	102	3.145	3.145	(0.775)	673144	100.000	97.4	
	10 Ethyl Methanesulfonate	79	3.373	3.383	(0.832)	1101588	100.000	97.1	
	11 Benzaldehyde	77	3.652	3.652	(0.900)	375997	100.000	57.8	
	15 Pentachloroethane	117	3.787	3.786	(0.934)	463921	100.000	89.4	
	14 Aniline	93	3.766	3.766	(0.929)	2161461	100.000	99.6	
	16 Bis(2-Chloroethyl)ether	93	3.797	3.807	(0.936)	1038644	100.000	84.9	
$	12 Phenol-D6	99	3.714	3.714	(0.916)	1597338	100.000	94.4	
	13 Phenol	94	3.724	3.735	(0.918)	1686919	100.000	95.4(Q)	
	17 2-Chlorophenol	128	3.869	3.869	(0.954)	1339435	100.000	94.6	
	18 1,3-Dichlorobenzene	146	4.004	4.004	(0.987)	1315308	100.000	90.4	
*	19 1,4-Dichlorobenzene-D4	152	4.056	4.055	(1.000)	385823	40.0000		
	20 1,4-Dichlorobenzene	146	4.076	4.076	(1.005)	1235256	100.000	90.6	
	22 1,2-Dichlorobenzene	146	4.221	4.231	(1.041)	1184828	100.000	88.3	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.201	4.200	(1.036)	924834	100.000	96.9	
	24 Bis(2-Chloroisopropyl)ether	45	4.325	4.335	(1.066)	1221305	100.000	86.4	
	25 2,2'-Oxybis(1-chloropropane)	45	4.325	4.335	(1.066)	1221305	100.000	86.4(Q)	
	23 2-Methylphenol	108	4.304	4.304	(1.061)	1231303	100.000	94.5	
	27 Acetophenone	105	4.470	4.469	(0.826)	1573530	100.000	91.6	
	32 Hexachloroethane	117	4.573	4.573	(1.128)	549450	100.000	89.2	
	26 N-Nitrosopyrrolidine	100	4.490	4.521	(1.107)	514181	100.000	78.5	
	31 o-Toluidine	106	4.521	4.521	(1.115)	1455779	100.000	81.4(Q)	
	29 N-Nitrosomorpholine	56	4.511	4.521	(1.112)	460741	100.000	80.7	
	30 N-Nitroso-di-n-propylamine	70	4.490	4.500	(1.107)	570707	100.000	78.4	
	28 3&4-Methylphenol	108	4.501	4.511	(1.110)	821592	100.000	76.5(Q)	
$	33 Nitrobenzene-D5	82	4.625	4.635	(0.855)	1263291	100.000	93.5	
	34 Nitrobenzene	77	4.646	4.656	(0.858)	1105325	100.000	89.3	
	35 N-Nitrosopiperidine	114	4.822	4.821	(0.891)	710869	100.000	98.5	
	36 Isophorone	82	4.915	4.925	(0.908)	2425482	100.000	93.8	
	37 2-Nitrophenol	139	4.987	4.997	(0.922)	701888	100.000	94.4	
	38 2,4-Dimethylphenol	107	5.060	5.070	(0.935)	1177722	100.000	88.2	
	40 Bis(2-Chloroethoxy)methane	93	5.153	5.163	(0.952)	1666002	100.000	92.0	
	39 O,O,O-Triethylphosphorothioat	198	5.132	5.132	(0.948)	396124	100.000	88.9	
	42 2,4-Dichlorophenol	162	5.267	5.277	(0.973)	851409	100.000	85.9	
	43 1,2,4-Trichlorobenzene	180	5.349	5.349	(0.989)	893692	100.000	86.2	
*	45 Naphthalene-D8	136	5.412	5.411	(1.000)	1509520	40.0000		
	41 Benzoic acid	122	5.236	5.297	(0.967)	885177	100.000	113(M)	M9
	46 Naphthalene	128	5.432	5.442	(1.004)	2761078	100.000	95.6	
	44 A,A-Dimethylphenethylamine	58	5.701	5.753	(1.054)	1858421	100.000	65.1(M)	M9
	49 Hexachloropropene	213	5.536	5.546	(1.023)	561105	100.000	102	
	48 2,6-Dichlorophenol	162	5.525	5.525	(1.021)	783011	100.000	100	
	47 4-Chloroaniline	127	5.515	5.525	(1.019)	1289037	100.000	85.3	
	50 Hexachlorobutadiene	225	5.588	5.598	(1.033)	465980	100.000	98.6	
	51 N-Nitroso-Di-N-Butylamine	84	5.929	5.939	(1.096)	853861	100.000	86.7	
	53 Caprolactam	113	5.991	6.022	(1.107)	397288	100.000	92.7(M)	M9
	52 p-Phenylenediamine	108	5.950	5.960	(1.099)	842381	100.000	66.3	
	55 Isosafrole	162	6.157	6.157	(1.138)	802950	100.000	89.2	
	56 2-Methylnaphthalene	142	6.250	6.250	(1.155)	1958892	100.000	87.2	
	54 4-Chloro-3-Methylphenol	107	6.115	6.125	(1.130)	924680	100.000	87.4	
	58 1-Methylnaphthalene	142	6.364	6.364	(1.176)	1768367	100.000	84.7	
	60 1,2,4,5-Tetrachlorobenzene	216	6.457	6.457	(0.862)	638633	100.000	108	
	59 Hexachlorocyclopentadiene	237	6.447	6.446	(0.860)	544361	100.000	92.2	
	61 2,4,6-Trichlorophenol	196	6.602	6.612	(0.881)	568593	100.000	94.5	
$	63 2-Fluorobiphenyl	172	6.695	6.705	(0.894)	1815594	100.000	88.2	
	62 2,4,5-Trichlorophenol	196	6.654	6.664	(0.888)	577225	100.000	90.3	
	64 Safrole	104	6.788	6.788	(0.906)	414734	100.000	96.4	
	66 2-Chloronaphthalene	162	6.830	6.840	(0.912)	1737372	100.000	84.7	
	65 1,1'-Biphenyl	154	6.819	6.829	(0.910)	1658318	100.000	94.6	
	67 1-Chloronaphthalene	162	6.861	6.860	(0.916)	2031926	100.000	105	
	68 Diphenylether	170	6.943	6.943	(0.927)	1206771	100.000	94.8	
	69 2-Nitroaniline	65	6.974	6.974	(0.931)	661430	100.000	97.1	
	70 1,4-Naphthoquinone	158	7.047	7.047	(0.941)	544714	100.000	79.4	
	71 1,4-Dinitrobenzene	75	7.140	7.150	(0.953)	443879	100.000	103	
	75 Acenaphthylene	152	7.326	7.326	(0.978)	2590779	100.000	87.1	
	72 Dimethyl Phthalate	163	7.233	7.243	(0.965)	2162762	100.000	96.0(M)	M6
	73 1,3-Dinitrobenzene	168	7.254	7.264	(0.968)	349957	100.000	99.0	
	74 2,6-Dinitrotoluene	165	7.275	7.285	(0.971)	493247	100.000	97.8	
	76 1,2-Dinitrobenzene	50	7.337	7.347	(0.979)	282975	100.000	93.7	

4:04 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
* 78 Acenaphthene-D10	164	7.492	7.502	(1.000)	708729	40.0000		
79 Acenaphthene	153	7.544	7.543	(1.007)	1602584	100.000	90.7	
77 3-Nitroaniline	138	7.492	7.502	(1.000)	542216	100.000	89.9	
80 2,4-Dinitrophenol	184	7.626	7.647	(1.018)	292214	100.000	102	
83 Dibenzofuran	168	7.751	7.761	(1.035)	1946128	100.000	82.4	
82 Pentachlorobenzene	250	7.720	7.719	(1.030)	750721	100.000	92.0	
85 1-Naphthylamine	143	7.854	7.864	(1.048)	1909787	100.000	89.6	
84 2,4-Dinitrotoluene	165	7.782	7.802	(1.039)	599681	100.000	95.8	
86 2,3,5,6-Tetrachlorophenol	232	7.875	7.885	(1.051)	403112	100.000	81.9	
88 2-Naphthylamine	143	7.968	7.978	(1.064)	1890868	100.000	93.5	
81 4-Nitrophenol	139	7.740	7.750	(1.033)	475841	100.000	120(QM)	M3
87 2,3,4,6-Tetrachlorophenol	232	7.927	7.937	(1.058)	471294	100.000	91.7	
90 Fluorene	166	8.165	8.175	(1.090)	1471190	100.000	101	
89 Diethylphthalate	149	8.082	8.092	(1.079)	1869019	100.000	86.8	
92 4-Chlorophenyl-phenylether	204	8.175	8.185	(1.091)	590788	100.000	101	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.185	8.195	(1.093)	269941	100.000	99.0	
93 5-Nitro-O-Toluidine	152	8.227	8.237	(1.098)	594449	100.000	96.4	
94 4-Nitroaniline	138	8.247	8.268	(1.101)	493989	100.000	102	
95 4,6-Dinitro-2-Methylphenol	198	8.279	8.289	(0.889)	323409	100.000	94.4	
96 N-Nitrosodiphenylamine	169	8.341	8.351	(0.896)	1417184	100.000	86.4	
97 N-Nitrosodiphenylamine/DPA	169	8.341	8.351	(0.896)	1417184	100.000	86.4	
98 1,2-Diphenylhydrazine	77	8.372	8.382	(0.899)	1905109	100.000	82.6(H)	
99 Azobenzene	77	8.372	8.382	(0.899)	1905109	100.000	82.6(H)	
$ 100 2,4,6-Tribromophenol	330	8.475	8.485	(1.131)	345796	100.000	92.6	
101 Sulfotepp	97	8.558	8.568	(0.919)	319654	100.000	83.4	
103 Diallate	86	8.703	8.703	(0.934)	747310	100.000	92.9	
106 4-Bromophenyl-phenylether	248	8.775	8.785	(0.942)	450014	100.000	92.3	
104 Phorate	75	8.713	8.723	(0.936)	1368272	100.000	91.8	
102 1,3,5-Trinitrobenzene	213	8.724	8.744	(0.937)	129837	100.000	91.2(Q)	
105 Phenacetin	108	8.786	8.796	(0.943)	832574	100.000	86.4	
107 Hexachlorobenzene	284	8.858	8.868	(0.951)	551374	100.000	82.6	
108 Dimethoate	87	8.941	8.951	(0.960)	569981	100.000	75.5	
109 Atrazine	200	9.024	9.034	(0.969)	285487	100.000	68.8	
111 4-Aminobiphenyl	169	9.117	9.127	(0.979)	1291069	100.000	74.9	
110 Pentachlorophenol	266	9.107	9.117	(0.978)	328594	100.000	84.9	
112 Pentachloronitrobenzene	237	9.138	9.148	(0.981)	209651	100.000	84.9	
* 114 Phenanthrene-D10	188	9.314	9.313	(1.000)	1089048	40.0000		
113 Pronamide	173	9.220	9.220	(0.990)	729964	100.000	91.8	
115 Phenanthrene	178	9.345	9.355	(1.003)	1766050	100.000	94.0	
118 Anthracene	178	9.407	9.417	(1.010)	2059345	100.000	80.2	
116 Disulfoton	88	9.355	9.355	(1.004)	875145	100.000	101	
117 Dinoseb	211	9.355	9.355	(1.004)	265825	100.000	80.1	
119 Carbazole	167	9.614	9.613	(1.032)	1936721	100.000	83.8	
120 Methyl Parathion	109	9.800	9.800	(1.052)	540882	100.000	80.4	
121 Di-n-butylphthalate	149	10.079	10.079	(1.082)	2678048	100.000	77.9	
122 4-Nitroquinoline-1-Oxide	190	10.297	10.307	(1.106)	181687	100.000	105	
123 Ethyl Parathion	291	10.286	10.297	(1.104)	151900	100.000	103(Q)	
124 Methapyrilene	97	10.421	10.431	(1.119)	569416	100.000	77.6	
125 Isodrin	193	10.607	10.607	(1.139)	268056	100.000	78.9	
126 Fluoranthene	202	10.794	10.804	(1.159)	1933344	100.000	97.1	
128 Pyrene	202	11.073	11.073	(0.861)	2055909	100.000	89.6	
127 Benzidine	184	10.980	10.990	(0.854)	621647	100.000	96.6	
$ 129 Terphenyl-D14	244	11.290	11.301	(0.878)	1284172	100.000	84.7	
130 Aramite	185	11.394	11.394	(0.886)	148356	100.000	91.2	

4:04 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
131 p-Dimethylaminoazobenzene	225	11.487	11.487	(0.893)	409634	100.000	92.7	
132 Chlorobenzilate	251	11.560	11.570	(0.899)	587734	100.000	90.4	
133 Famphur	218	11.901	11.901	(0.925)	57103	100.000	28.8	
134 3,3'-Dimethylbenzidine	212	11.963	11.963	(0.930)	471945	100.000	94.0	
136 Butylbenzylphthalate	149	12.005	12.004	(0.933)	1101297	100.000	92.1	
137 Bis(2-ethylhexyl)adipate	129	12.170	12.170	(0.946)	1111658	100.000	91.8	
138 2-Acetylaminofluorene	181	12.356	12.367	(0.961)	495010	100.000	106	
139 Benzo(a)anthracene	228	12.843	12.853	(0.998)	1443300	100.000	92.8	
* 141 Chrysene-D12	240	12.864	12.863	(1.000)	637030	40.0000		
142 Chrysene	228	12.915	12.915	(1.004)	1390846	100.000	92.2	
140 3,3'-Dichlorobenzidine	252	12.833	12.832	(0.998)	426487	100.000	95.5	
143 bis(2-Ethylhexyl)phthalate	149	13.029	13.029	(1.013)	1547796	100.000	96.0	
144 Di-n-octylphthalate	149	14.385	14.385	(0.911)	2243613	100.000	104	
145 Benzo(b)fluoranthene	252	15.027	15.027	(0.952)	984127	100.000	96.7	
146 7,12-Dimethylbenz(A)Anthracen	256	15.027	15.027	(0.952)	525266	100.000	95.7	
147 Benzo(k)fluoranthene	252	15.079	15.078	(0.955)	983879	100.000	96.4(MH)	M6
149 Benzo(a)pyrene	252	15.679	15.679	(0.993)	844697	100.000	100	
* 150 Perylene-D12	264	15.793	15.782	(1.000)	332706	40.0000		
151 3-Methylcholanthrene	268	16.372	16.372	(1.037)	377407	100.000	96.6	
152 Dibenz(a,j)acridine	279	17.304	17.304	(1.096)	392247	100.000	98.3	
153 Indeno(1,2,3-cd)pyrene	276	17.542	17.542	(1.111)	450130	100.000	99.6	
154 Dibenzo(a,h)anthracene	278	17.594	17.593	(1.114)	456194	100.000	101	
155 Benzo(g,h,i)perylene	276	17.925	17.925	(1.135)	455837	100.000	90.5	

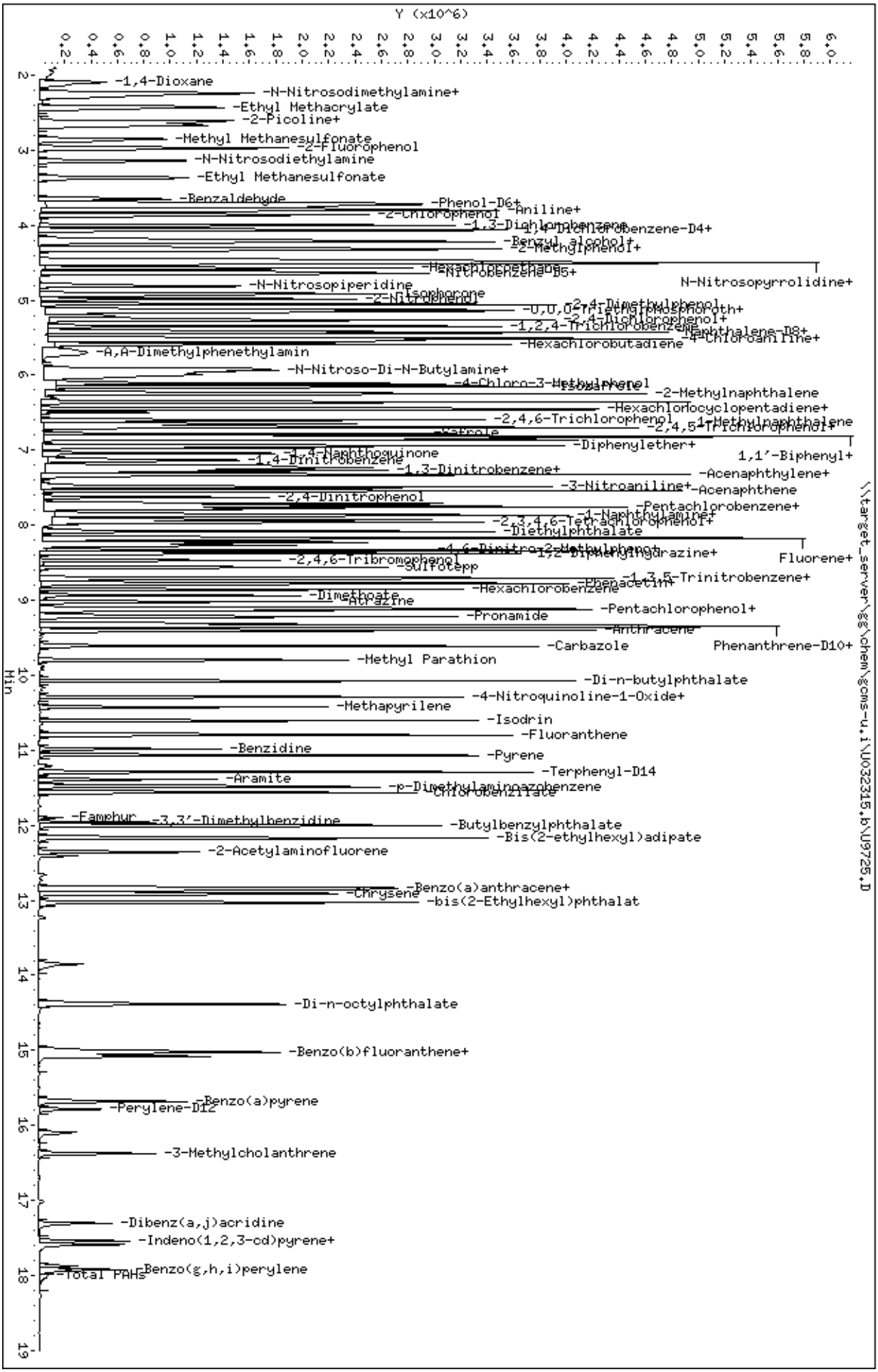
QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

4:04 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Date : 23-MAR-2015 16:57
Client ID:
Sample Info: WG160080-6
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Report Date: 27-Mar-2015 15:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Lab Smp Id: WG160080-7
Inj Date : 23-MAR-2015 17:23 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-7
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	1 1,4-Dioxane	58	2.099	2.099	(0.388)	441905	125.000	116	
	3 Pyridine	79	2.244	2.244	(0.553)	1897532	125.000	126(A)	
	2 N-Nitrosodimethylamine	42	2.223	2.223	(0.548)	603827	125.000	126(A)	
	4 Ethyl Methacrylate	69	2.420	2.420	(0.597)	1293367	125.000	124	
	5 2-Picoline	93	2.617	2.617	(0.645)	1923333	125.000	129(A)	
	6 N-Nitrosomethylethylamine	88	2.669	2.669	(0.658)	806965	125.000	127(A)	
	7 Methyl Methanesulfonate	80	2.855	2.855	(0.704)	1088077	125.000	132(A)	
$	8 2-Fluorophenol	112	2.969	2.969	(0.732)	1726550	125.000	126(A)	
	9 N-Nitrosodiethylamine	102	3.145	3.145	(0.775)	857626	125.000	132(A)	
	10 Ethyl Methanesulfonate	79	3.383	3.383	(0.834)	1410791	125.000	132(A)	
	11 Benzaldehyde	77	3.652	3.652	(0.900)	545038	125.000	89.0	
	15 Pentachloroethane	117	3.786	3.786	(0.934)	537558	125.000	110	
	14 Aniline	93	3.766	3.766	(0.929)	2369081	125.000	116	
	16 Bis(2-Chloroethyl)ether	93	3.807	3.807	(0.939)	1314090	125.000	114	
$	12 Phenol-D6	99	3.714	3.714	(0.916)	1970410	125.000	124	
	13 Phenol	94	3.735	3.735	(0.921)	2185592	125.000	131(A)	
	17 2-Chlorophenol	128	3.869	3.869	(0.954)	1607031	125.000	121	
	18 1,3-Dichlorobenzene	146	4.004	4.004	(0.987)	1552254	125.000	113	
*	19 1,4-Dichlorobenzene-D4	152	4.055	4.055	(1.000)	363051	40.0000		
	20 1,4-Dichlorobenzene	146	4.076	4.076	(1.005)	1421246	125.000	111	
	22 1,2-Dichlorobenzene	146	4.231	4.231	(1.043)	1345467	125.000	106	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Report Date: 27-Mar-2015 15:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 Benzyl alcohol	108	4.200	4.200	(1.036)	1110454	125.000	124	
	24 Bis(2-Chloroisopropyl)ether	45	4.335	4.335	(1.069)	1428326	125.000	107	
	25 2,2'-Oxybis(1-chloropropane)	45	4.335	4.335	(1.069)	1428326	125.000	107	
	23 2-Methylphenol	108	4.304	4.304	(1.061)	1540649	125.000	126(A)	
	27 Acetophenone	105	4.469	4.469	(0.826)	1973751	125.000	114	
	32 Hexachloroethane	117	4.573	4.573	(1.128)	650590	125.000	112	
	26 N-Nitrosopyrrolidine	100	4.521	4.521	(1.115)	628522	125.000	102(MH)	M9
	31 o-Toluidine	106	4.521	4.521	(1.115)	1798862	125.000	107	
	29 N-Nitrosomorpholine	56	4.521	4.521	(1.115)	582258	125.000	108	
	30 N-Nitroso-di-n-propylamine	70	4.500	4.500	(1.110)	711357	125.000	104	
	28 3&4-Methylphenol	108	4.511	4.511	(1.112)	1062655	125.000	105	
$	33 Nitrobenzene-D5	82	4.635	4.635	(0.857)	1559064	125.000	115	
	34 Nitrobenzene	77	4.656	4.656	(0.860)	1270860	125.000	102	
	35 N-Nitrosopiperidine	114	4.821	4.821	(0.891)	886244	125.000	122	
	36 Isophorone	82	4.925	4.925	(0.910)	3133532	125.000	121	
	37 2-Nitrophenol	139	4.997	4.997	(0.924)	874247	125.000	117	
	38 2,4-Dimethylphenol	107	5.070	5.070	(0.937)	1482239	125.000	110	
	40 Bis(2-Chloroethoxy)methane	93	5.163	5.163	(0.954)	2080382	125.000	114	
	39 O,O,O-Triethylphosphorothioat	198	5.132	5.132	(0.948)	506486	125.000	113	
	42 2,4-Dichlorophenol	162	5.277	5.277	(0.975)	1071916	125.000	108	
	43 1,2,4-Trichlorobenzene	180	5.349	5.349	(0.989)	1090638	125.000	105	
*	45 Naphthalene-D8	136	5.411	5.411	(1.000)	1516164	40.0000		
	41 Benzoic acid	122	5.297	5.297	(0.979)	1084113	125.000	138(AM)	M9
	46 Naphthalene	128	5.442	5.442	(1.006)	3329736	125.000	124	
	44 A,A-Dimethylphenethylamine	58	5.753	5.753	(1.063)	2812447	125.000	98.1(M)	M9
	49 Hexachloropropene	213	5.546	5.546	(1.025)	622509	125.000	121	
	48 2,6-Dichlorophenol	162	5.525	5.525	(1.021)	892244	125.000	121	
	47 4-Chloroaniline	127	5.525	5.525	(1.021)	1622668	125.000	107	
	50 Hexachlorobutadiene	225	5.598	5.598	(1.034)	551647	125.000	125	
	51 N-Nitroso-Di-N-Butylamine	84	5.939	5.939	(1.098)	1102884	125.000	112	
	53 Caprolactam	113	6.022	6.022	(1.113)	562905	125.000	131(AM)	M9
	52 p-Phenylenediamine	108	5.960	5.960	(1.101)	1064711	125.000	83.5	
	55 Isosafrole	162	6.157	6.157	(1.138)	1011717	125.000	112	
	56 2-Methylnaphthalene	142	6.250	6.250	(1.155)	2334717	125.000	104	
	54 4-Chloro-3-Methylphenol	107	6.125	6.125	(1.132)	1104629	125.000	104	
	58 1-Methylnaphthalene	142	6.364	6.364	(1.176)	2195605	125.000	105	
	60 1,2,4,5-Tetrachlorobenzene	216	6.457	6.457	(0.861)	685677	125.000	118	
	59 Hexachlorocyclopentadiene	237	6.446	6.446	(0.859)	661897	125.000	111	
	61 2,4,6-Trichlorophenol	196	6.612	6.612	(0.881)	698792	125.000	115	
$	63 2-Fluorobiphenyl	172	6.705	6.705	(0.894)	2241115	125.000	108	
	62 2,4,5-Trichlorophenol	196	6.664	6.664	(0.888)	754736	125.000	117	
	64 Safrole	104	6.788	6.788	(0.905)	501972	125.000	115(Q)	
	66 2-Chloronaphthalene	162	6.840	6.840	(0.912)	2319241	125.000	112(M)	M3
	65 1,1'-Biphenyl	154	6.829	6.829	(0.910)	2067118	125.000	128(A)	
	67 1-Chloronaphthalene	162	6.860	6.860	(0.914)	2081604	125.000	106(M)	M6
	68 Diphenylether	170	6.943	6.943	(0.925)	1362808	125.000	106	
	69 2-Nitroaniline	65	6.974	6.974	(0.930)	866391	125.000	126(A)	
	70 1,4-Naphthoquinone	158	7.047	7.047	(0.939)	591335	125.000	85.2	
	71 1,4-Dinitrobenzene	75	7.150	7.150	(0.953)	585356	125.000	134(A)	
	75 Acenaphthylene	152	7.326	7.326	(0.977)	3410735	125.000	113	
	72 Dimethyl Phthalate	163	7.243	7.243	(0.966)	2719924	125.000	119(M)	M9
	73 1,3-Dinitrobenzene	168	7.264	7.264	(0.968)	431569	125.000	120	
	74 2,6-Dinitrotoluene	165	7.285	7.285	(0.971)	612019	125.000	120	
	76 1,2-Dinitrobenzene	50	7.347	7.347	(0.979)	377343	125.000	123	

4:04 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
* 78 Acenaphthene-D10	164	7.502	7.502	(1.000)	717389	40.0000		
79 Acenaphthene	153	7.543	7.543	(1.006)	1935336	125.000	108	
77 3-Nitroaniline	138	7.502	7.502	(1.000)	746674	125.000	122	
80 2,4-Dinitrophenol	184	7.647	7.647	(1.019)	411095	125.000	142(A)	
83 Dibenzofuran	168	7.761	7.761	(1.034)	2544057	125.000	106	
82 Pentachlorobenzene	250	7.719	7.719	(1.029)	925047	125.000	112	
85 1-Naphthylamine	143	7.864	7.864	(1.048)	2356606	125.000	109	
84 2,4-Dinitrotoluene	165	7.802	7.802	(1.040)	783700	125.000	124	
86 2,3,5,6-Tetrachlorophenol	232	7.885	7.885	(1.051)	546011	125.000	110	
88 2-Naphthylamine	143	7.978	7.978	(1.063)	2314756	125.000	113	
81 4-Nitrophenol	139	7.750	7.750	(1.033)	702797	125.000	174(AM)	M3
87 2,3,4,6-Tetrachlorophenol	232	7.937	7.937	(1.058)	617615	125.000	119	
90 Fluorene	166	8.175	8.175	(1.090)	1679457	125.000	122	
89 Diethylphthalate	149	8.092	8.092	(1.079)	2321755	125.000	106	
92 4-Chlorophenyl-phenylether	204	8.185	8.185	(1.091)	669007	125.000	122	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.195	8.195	(1.092)	327221	125.000	126(A)	
93 5-Nitro-O-Toluidine	152	8.237	8.237	(1.098)	712453	125.000	114	
94 4-Nitroaniline	138	8.268	8.268	(1.102)	604905	125.000	123	
95 4,6-Dinitro-2-Methylphenol	198	8.289	8.289	(0.890)	420674	125.000	120	
96 N-Nitrosodiphenylamine	169	8.351	8.351	(0.897)	1810441	125.000	108	
97 N-Nitrosodiphenylamine/DPA	169	8.351	8.351	(0.897)	1810441	125.000	108	
98 1,2-Diphenylhydrazine	77	8.382	8.382	(0.900)	2616660	125.000	111	
99 Azobenzene	77	8.382	8.382	(0.900)	2616660	125.000	111	
$ 100 2,4,6-Tribromophenol	330	8.485	8.485	(1.131)	442279	125.000	117	
101 Sulfotepp	97	8.568	8.568	(0.920)	371709	125.000	95.0	
103 Diallate	86	8.703	8.703	(0.934)	954459	125.000	126(A)	
106 4-Bromophenyl-phenylether	248	8.785	8.785	(0.943)	580619	125.000	126(A)	
104 Phorate	75	8.723	8.723	(0.937)	1741366	125.000	114	
102 1,3,5-Trinitrobenzene	213	8.744	8.744	(0.939)	170779	125.000	118(Q)	
105 Phenacetin	108	8.796	8.796	(0.944)	1003846	125.000	102	
107 Hexachlorobenzene	284	8.868	8.868	(0.952)	695887	125.000	102	
108 Dimethoate	87	8.951	8.951	(0.961)	652061	125.000	84.6	
109 Atrazine	200	9.034	9.034	(0.970)	308782	125.000	72.9	
111 4-Aminobiphenyl	169	9.127	9.127	(0.980)	1480386	125.000	84.1	
110 Pentachlorophenol	266	9.117	9.117	(0.979)	406178	125.000	103	
112 Pentachloronitrobenzene	237	9.148	9.148	(0.982)	257130	125.000	102	
* 114 Phenanthrene-D10	188	9.313	9.313	(1.000)	1111842	40.0000		
113 Pronamide	173	9.220	9.220	(0.990)	967899	125.000	127(A)	
115 Phenanthrene	178	9.355	9.355	(1.004)	2147135	125.000	125	
118 Anthracene	178	9.417	9.417	(1.011)	2617560	125.000	99.8	
116 Disulfoton	88	9.355	9.355	(1.004)	1009538	125.000	123	
119 Carbazole	167	9.613	9.613	(1.032)	2587536	125.000	110	
120 Methyl Parathion	109	9.800	9.800	(1.052)	607373	125.000	88.4	
121 Di-n-butylphthalate	149	10.079	10.079	(1.082)	3412114	125.000	97.2	
122 4-Nitroquinoline-1-Oxide	190	10.307	10.307	(1.107)	215441	125.000	122	
123 Ethyl Parathion	291	10.297	10.297	(1.106)	175172	125.000	120(Q)	
124 Methapyrilene	97	10.431	10.431	(1.120)	621470	125.000	82.9	
125 Isodrin	193	10.607	10.607	(1.139)	334365	125.000	96.4	
126 Fluoranthene	202	10.804	10.804	(1.160)	2326366	125.000	123	
128 Pyrene	202	11.073	11.073	(0.861)	2249773	125.000	114	
127 Benzidine	184	10.990	10.990	(0.854)	735781	125.000	133(A)	
$ 129 Terphenyl-D14	244	11.301	11.301	(0.879)	1534045	125.000	118	
130 Aramite	185	11.394	11.394	(0.886)	165705	125.000	118	
131 p-Dimethylaminoazobenzene	225	11.487	11.487	(0.893)	465453	125.000	122	

4:05 pm, Apr 09, 2015

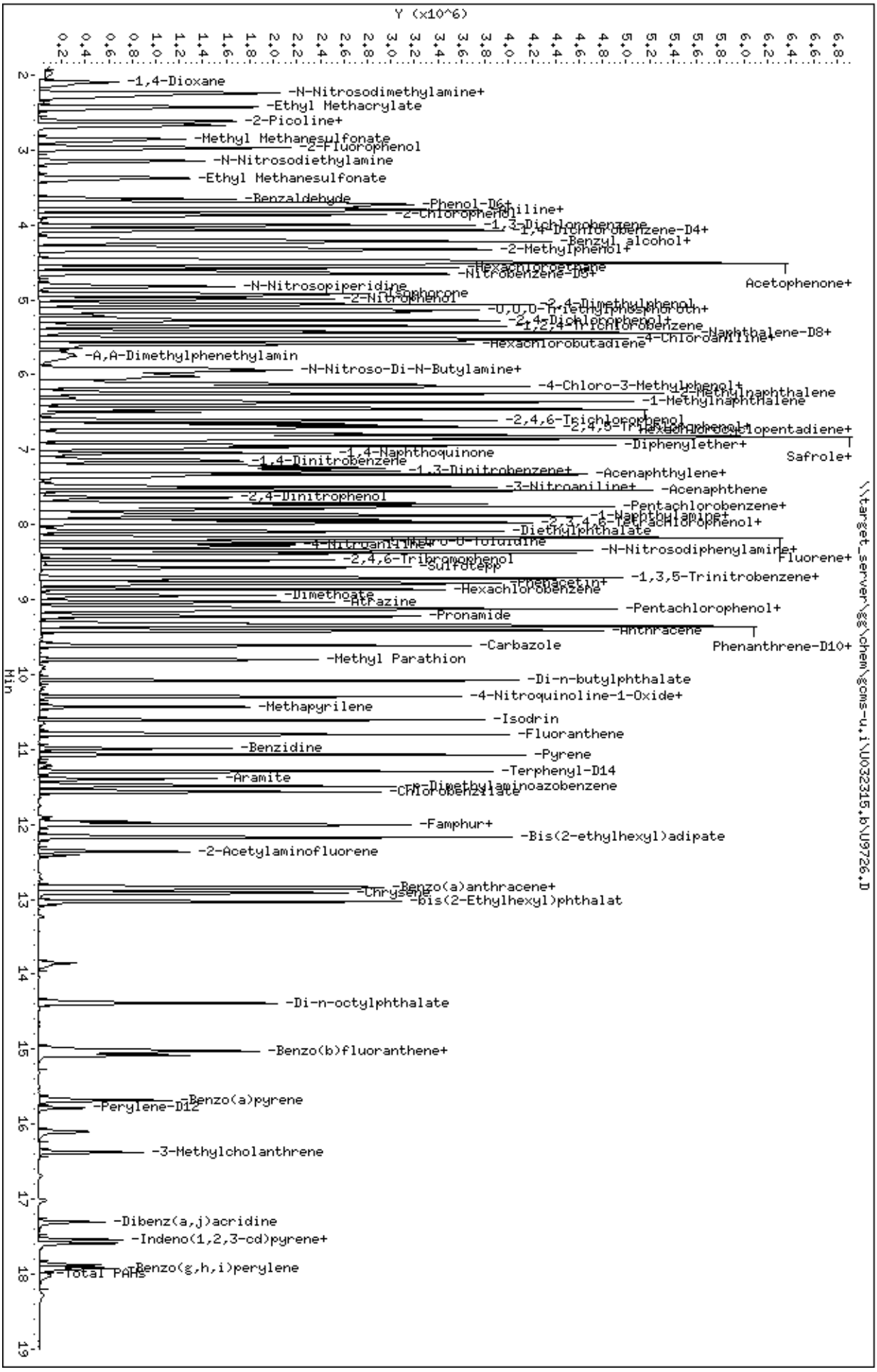
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Report Date: 27-Mar-2015 15:13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
132 Chlorobenzilate	251	11.570	11.570	(0.899)	696084	125.000	124	
133 Famphur	218	11.901	11.901	(0.925)	42024	125.000	24.7(a)	
134 3,3'-Dimethylbenzidine	212	11.963	11.963	(0.930)	488201	125.000	125(A)	
136 Butylbenzylphthalate	149	12.004	12.004	(0.933)	1229758	125.000	120	
137 Bis(2-ethylhexyl)adipate	129	12.170	12.170	(0.946)	1306595	125.000	125(A)	
138 2-Acetylaminofluorene	181	12.367	12.367	(0.961)	504217	125.000	126(A)	
139 Benzo(a)anthracene	228	12.853	12.853	(0.999)	1549239	125.000	116	
* 141 Chrysene-D12	240	12.863	12.863	(1.000)	548025	40.0000		
142 Chrysene	228	12.915	12.915	(1.004)	1480238	125.000	114	
140 3,3'-Dichlorobenzidine	252	12.832	12.832	(0.998)	450489	125.000	117	
143 bis(2-Ethylhexyl)phthalate	149	13.029	13.029	(1.013)	1707516	125.000	123	
144 Di-n-octylphthalate	149	14.385	14.385	(0.911)	2328476	125.000	136(A)	
145 Benzo(b)fluoranthene	252	15.027	15.027	(0.952)	1011636	125.000	125(A)	
146 7,12-Dimethylbenz(A)Anthracen	256	15.027	15.027	(0.952)	542632	125.000	124	
147 Benzo(k)fluoranthene	252	15.078	15.078	(0.955)	1039949	125.000	128(AMH)	M6
149 Benzo(a)pyrene	252	15.679	15.679	(0.993)	850838	125.000	128(A)	
* 150 Perylene-D12	264	15.782	15.782	(1.000)	264317	40.0000		
151 3-Methylcholanthrene	268	16.372	16.372	(1.037)	383261	125.000	123	
152 Dibenz(a,j)acridine	279	17.304	17.304	(1.096)	400869	125.000	126(A)	
153 Indeno(1,2,3-cd)pyrene	276	17.542	17.542	(1.111)	467579	125.000	130(A)	
154 Dibenzo(a,h)anthracene	278	17.593	17.593	(1.115)	465493	125.000	130(A)	
155 Benzo(g,h,i)perylene	276	17.925	17.925	(1.136)	458557	125.000	114	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

4:05 pm, Apr 09, 2015


Data File: \\target_server\gg\chem\gcms-u,i\U032315,b\U9726,D
Date : 23-MAR-2015 17:23
Client ID:
Sample Info: WG160080-7
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25
Y (x10^6)
Min
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Ethyl Methacrylate
-2-Picoline+
-Methyl Methanesulfonate
-2-Fluorophenol
-N-Nitrosodiethylamine
-Ethyl Methanesulfonate
-Benzaldehyde
-Phenol-D6+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-Benzyl alcohol+
-2-Methylphenol+
-Hexachloroethane
-Nitrobenzene-D5+
Acetophenone+
-N-Nitrosopiperidine
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-2,4-Dichlorophenol+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-Hexachlorobutadiene
-4-Chloroaniline+
-A,A-Dimethylphenethylamin
-N-Nitroso-Di-N-Butylamine+
-4-Chloro-3-Methylphenol+
-2-Methylnaphthalene
-1-Methylnaphthalene
-2,4,6-Trichlorophenol
-Hexachlorocyclopentadiene+
-Diphenylether+
-1,4-Naphthoquinone
-1,4-Dinitrobenzene
-1,3-Dinitrobenzene+
-Acenaphthylene+
Safrole+
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Pentachlorobenzene+
-1-Naphthylamine+
-2,3,4,6-Tetrachlorophenol+
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine+
-2,4,6-Tribromophenol
-Sulfotepp
-Fluorene+
-Phenacetin+
-1,3,5-Trinitrobenzene+
-Hexachlorobenzene
-Dimethoate
-Atrazine
-Pentachlorophenol+
-Pronamide
-Anthracene
-Carbazole
Phenanthrene-D10+
-Methyl Parathion
-Di-n-butylphthalate
-4-Nitroquinoline-1-Oxide+
-Methapyrilene
-Isodrin
-Fluoranthene
-Benzidine
-Pyrene
-Terphenyl-D14
-Aramite
-p-Dimethylaminoazobenzene
-Chlorobenzilate
-Famphur+
-Bis(2-ethylhexyl)adipate
-2-Acetylaminofluorene
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-3-Methylcholanthrene
-Dibenz(a,j)acridine
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
-Total PAHs
\\target_server\gg\chem\gcms-u,i\U032315,b\U9726,D

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Lab Smp Id: WG160080-8
Inj Date : 23-MAR-2015 17:49 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160080-8
Misc Info : WG160080,WG160080,WG160080-4
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U032315.b\U8270C72.m
Meth Date : 24-Mar-2015 08:20 gcms-u.i Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 8 QC Sample: INDCHECK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all_DOD.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
1	1,4-Dioxane	58	2.100	2.099	(0.389)	164678	49.0525	49.0	
3	Pyridine	79	2.255	2.244	(0.557)	758630	51.8653	51.9	
2	N-Nitrosodimethylamine	42	2.224	2.223	(0.550)	210317	44.9238	44.9	
5	2-Picoline	93	2.618	2.617	(0.647)	780347	53.5865	53.6	
6	N-Nitrosomethylethylamine	88	2.659	2.669	(0.657)	305329	49.3016	49.3	
7	Methyl Methanesulfonate	80	2.845	2.855	(0.703)	343462	42.7016	42.7	
9	N-Nitrosodiethylamine	102	3.135	3.145	(0.775)	324240	51.0873	51.1	
10	Ethyl Methanesulfonate	79	3.352	3.383	(0.829)	507425	48.7097	48.7	
14	Aniline	93	3.746	3.766	(0.926)	1065542	53.4839	53.5	
16	Bis(2-Chloroethyl)ether	93	3.787	3.807	(0.936)	705419	62.8088	62.8(R)	
13	Phenol	94	3.704	3.735	(0.916)	854243	52.6314	52.6(Q)	
17	2-Chlorophenol	128	3.860	3.869	(0.954)	665418	51.1835	51.2	
18	1,3-Dichlorobenzene	146	4.005	4.004	(0.990)	714842	53.5462	53.5	
* 19	1,4-Dichlorobenzene-D4	152	4.046	4.055	(1.000)	354228	40.0000		
20	1,4-Dichlorobenzene	146	4.067	4.076	(1.005)	665399	53.1608	53.2	
22	1,2-Dichlorobenzene	146	4.222	4.231	(1.043)	666921	54.1274	54.1	
21	Benzyl alcohol	108	4.180	4.200	(1.033)	452397	51.6068	51.6	
24	Bis(2-Chloroisopropyl)ether	45	4.315	4.335	(1.067)	629223	48.4869	48.5	
25	2,2'-Oxybis(1-chloropropane)	45	4.315	4.335	(1.067)	629223	48.4869	48.5	
23	2-Methylphenol	108	4.305	4.304	(1.064)	601393	50.2789	50.3	
27	Acetophenone	105	4.460	4.469	(0.826)	1352479	89.1481	89.1	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	32 Hexachloroethane	117	4.563	4.573	(1.128)	293218	51.8763	51.9	
	26 N-Nitrosopyrrolidine	100	4.450	4.521	(1.100)	318500	52.9784	53.0(Q)	
	31 o-Toluidine	106	4.501	4.521	(1.113)	879981	53.5906	53.6(Q)	
	29 N-Nitrosomorpholine	56	4.481	4.521	(1.107)	271223	51.7374	51.7	
	30 N-Nitroso-di-n-propylamine	70	4.470	4.500	(1.105)	304088	45.4886	45.5(Q)	
	28 3&4-Methylphenol	108	4.470	4.511	(1.105)	448178	45.4520	45.4(QH)	
	34 Nitrobenzene	77	4.636	4.656	(0.858)	626176	57.2480	57.2	
	35 N-Nitrosopiperidine	114	4.791	4.821	(0.887)	334455	52.4608	52.5	
	36 Isophorone	82	4.895	4.925	(0.906)	1208711	52.9247	52.9	
	37 2-Nitrophenol	139	4.977	4.997	(0.921)	342349	52.1032	52.1	
	38 2,4-Dimethylphenol	107	5.040	5.070	(0.933)	593807	50.3756	50.4	
	40 Bis(2-Chloroethoxy)methane	93	5.133	5.163	(0.950)	877674	54.8574	54.8	
	39 O,O,O-Triethylphosphorothioat	198	5.122	5.132	(0.948)	221157	56.2033	56.2	
	42 2,4-Dichlorophenol	162	5.247	5.277	(0.971)	462462	52.8135	52.8	
	43 1,2,4-Trichlorobenzene	180	5.340	5.349	(0.989)	480768	52.4797	52.5	
*	45 Naphthalene-D8	136	5.402	5.411	(1.000)	1333404	40.0000		
	41 Benzoic acid	122	5.226	5.297	(0.967)	583034	84.1191	84.1(R)	
	46 Naphthalene	128	5.422	5.442	(1.004)	1601065	54.3973	54.4	
	49 Hexachloropropene	213	5.536	5.546	(1.025)	300662	47.5841	47.6	
	48 2,6-Dichlorophenol	162	5.505	5.525	(1.019)	429981	50.6509	50.6	
	47 4-Chloroaniline	127	5.495	5.525	(1.017)	686791	51.4740	51.5	
	50 Hexachlorobutadiene	225	5.588	5.598	(1.034)	266568	54.6294	54.6	
	51 N-Nitroso-Di-N-Butylamine	84	5.909	5.939	(1.094)	486665	55.9654	56.0(H)	
	53 Caprolactam	113	5.940	6.022	(1.100)	189780	50.1250	50.1(QH)	
	52 p-Phenylenediamine	108	5.940	5.960	(1.100)	58239	5.19303	5.19(aR)	
	55 Isosafrole	162	6.147	6.157	(1.138)	386686	48.6052	48.6	
	56 2-Methylnaphthalene	142	6.240	6.250	(1.155)	1116223	56.2780	56.3	
	54 4-Chloro-3-Methylphenol	107	6.085	6.125	(1.126)	492879	52.7258	52.7	
	58 1-Methylnaphthalene	142	6.354	6.364	(1.176)	979731	53.1245	53.1	
	60 1,2,4,5-Tetrachlorobenzene	216	6.447	6.457	(0.862)	603530	99.0290	99.0	
	59 Hexachlorocyclopentadiene	237	6.437	6.446	(0.860)	214919	36.2303	36.2(R)	
	61 2,4,6-Trichlorophenol	196	6.592	6.612	(0.881)	307626	50.8968	50.9	
	62 2,4,5-Trichlorophenol	196	6.633	6.664	(0.887)	336599	52.4493	52.4	
	64 Safrole	104	6.768	6.788	(0.905)	203511	47.0962	47.1(Q)	
	66 2-Chloronaphthalene	162	6.820	6.840	(0.911)	1056234	51.2570	51.2(H)	
	65 1,1'-Biphenyl	154	6.799	6.829	(0.909)	1046732	50.0441	50.0	
	67 1-Chloronaphthalene	162	6.840	6.860	(0.914)	809385	41.7032	41.7	
	69 2-Nitroaniline	65	6.954	6.974	(0.929)	291414	42.6168	42.6	
	70 1,4-Naphthoquinone	158	7.027	7.047	(0.939)	377962	54.8651	54.9	
	75 Acenaphthylene	152	7.306	7.326	(0.976)	1401174	46.9210	46.9	
	72 Dimethyl Phthalate	163	7.203	7.243	(0.963)	1101735	48.7077	48.7	
	73 1,3-Dinitrobenzene	168	7.223	7.264	(0.965)	170760	48.0771	48.1	
	74 2,6-Dinitrotoluene	165	7.254	7.285	(0.970)	246202	48.5870	48.6	
*	78 Acenaphthene-D10	164	7.482	7.502	(1.000)	711806	40.0000		
	79 Acenaphthene	153	7.524	7.543	(1.006)	895714	50.4758	50.5	
	77 3-Nitroaniline	138	7.461	7.502	(0.997)	305771	50.4760	50.5	
	80 2,4-Dinitrophenol	184	7.596	7.647	(1.015)	148926	52.0156	52.0	
	83 Dibenzofuran	168	7.741	7.761	(1.035)	1218652	51.3507	51.4	
	82 Pentachlorobenzene	250	7.699	7.719	(1.029)	391898	47.8162	47.8	
	85 1-Naphthylamine	143	7.834	7.864	(1.047)	960144	44.8374	44.8	
	84 2,4-Dinitrotoluene	165	7.751	7.802	(1.036)	314463	49.9955	50.0	
	88 2-Naphthylamine	143	7.938	7.978	(1.061)	946793	46.6012	46.6	
	81 4-Nitrophenol	139	7.689	7.750	(1.028)	162920	40.7635	40.8	
	87 2,3,4,6-Tetrachlorophenol	232	7.907	7.937	(1.057)	246085	47.6621	47.7	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
90 Fluorene	166	8.155	8.175	(1.090)	847934	45.2766	45.3	
89 Diethylphthalate	149	8.062	8.092	(1.077)	1082766	50.0960	50.1	
92 4-Chlorophenyl-phenylether	204	8.165	8.185	(1.091)	380758	49.2670	49.3	
91 O,O-diethyl-o-2-pyrazinylphos	107	8.165	8.195	(1.091)	166150	53.1524	53.2(H)	
93 5-Nitro-O-Toluidine	152	8.196	8.237	(1.095)	303129	48.9650	49.0	
94 4-Nitroaniline	138	8.217	8.268	(1.098)	250447	51.3509	51.4	
95 4,6-Dinitro-2-Methylphenol	198	8.248	8.289	(0.887)	180930	55.2188	55.2	
96 N-Nitrosodiphenylamine	169	8.331	8.351	(0.895)	1336572	85.1837	85.2	
97 N-Nitrosodiphenylamine/DPA	169	8.331	8.351	(0.895)	1336572	85.1837	85.2	
98 1,2-Diphenylhydrazine	77	8.362	8.382	(0.899)	1104233	50.0281	50.0	
99 Azobenzene	77	8.362	8.382	(0.899)	1104233	50.0281	50.0	
101 Sulfotepp	97	8.548	8.568	(0.919)	186927	51.0004	51.0	
103 Diallate	86	8.693	8.703	(0.934)	425634	47.8075	47.8	
106 4-Bromophenyl-phenylether	248	8.766	8.785	(0.942)	273344	51.8703	51.9	
104 Phorate	75	8.693	8.723	(0.934)	530815	37.2297	37.2(R)	
102 1,3,5-Trinitrobenzene	213	8.693	8.744	(0.934)	67213	49.3649	49.4(Q)	
105 Phenacetin	108	8.745	8.796	(0.940)	520979	56.5150	56.5	
107 Hexachlorobenzene	284	8.848	8.868	(0.951)	320780	50.2631	50.3	
108 Dimethoate	87	8.910	8.951	(0.958)	395741	54.8159	54.8	
109 Atrazine	200	9.004	9.034	(0.968)	73439	18.5131	18.5(QRH)	
111 4-Aminobiphenyl	169	9.097	9.127	(0.978)	735452	44.5769	44.6	
110 Pentachlorophenol	266	9.097	9.117	(0.978)	210906	56.9370	56.9	
112 Pentachloronitrobenzene	237	9.117	9.148	(0.980)	121645	51.4828	51.5	
* 114 Phenanthrene-D10	188	9.304	9.313	(1.000)	1041855	40.0000		
113 Pronamide	173	9.200	9.220	(0.989)	422771	50.3070	50.3	
115 Phenanthrene	178	9.335	9.355	(1.003)	1167324	53.0703	53.1	
118 Anthracene	178	9.397	9.417	(1.010)	1308292	53.2518	53.2	
116 Disulfoton	88	9.335	9.355	(1.003)	522144	47.6985	47.7	
117 Dinoseb	211	9.345	9.355	(1.004)	197737	62.2562	62.2(R)	
119 Carbazole	167	9.604	9.613	(1.032)	1207170	54.5962	54.6	
120 Methyl Parathion	109	9.790	9.800	(1.052)	386252	59.9902	60.0	
121 Di-n-butylphthalate	149	10.070	10.079	(1.082)	1757297	53.4547	53.4	
122 4-Nitroquinoline-1-Oxide	190	10.287	10.307	(1.106)	103343	62.4096	62.4(R)	
123 Ethyl Parathion	291	10.287	10.297	(1.106)	92360	58.0729	58.1	
124 Methapyrilene	97	10.411	10.431	(1.119)	309311	44.0344	44.0	
125 Isodrin	193	10.598	10.607	(1.139)	160908	49.5241	49.5	
126 Fluoranthene	202	10.784	10.804	(1.159)	1164645	51.8394	51.8	
128 Pyrene	202	11.063	11.073	(0.861)	1262973	48.6735	48.7	
127 Benzidine	184	10.970	10.990	(0.853)	282428	38.8076	38.8(aR)	
131 p-Dimethylaminoazobenzene	225	11.477	11.487	(0.893)	239703	47.9668	48.0	
132 Chlorobenzilate	251	11.550	11.570	(0.899)	354337	48.1680	48.2	
133 Famphur	218	11.891	11.901	(0.925)	85612	38.2200	38.2(R)	
134 3,3'-Dimethylbenzidine	212	11.953	11.963	(0.930)	364626	53.4850	53.5	
136 Butylbenzylphthalate	149	11.995	12.004	(0.933)	683496	50.5371	50.5	
137 Bis(2-ethylhexyl)adipate	129	12.160	12.170	(0.946)	629708	45.9682	46.0	
138 2-Acetylaminofluorene	181	12.336	12.367	(0.960)	294645	56.0664	56.1	
139 Benzo(a)anthracene	228	12.833	12.853	(0.998)	905174	51.4415	51.4	
* 141 Chrysene-D12	240	12.854	12.863	(1.000)	720516	40.0000		
142 Chrysene	228	12.895	12.915	(1.003)	853745	50.0224	50.0	
140 3,3'-Dichlorobenzidine	252	12.823	12.832	(0.998)	249236	49.3535	49.4(R)	
143 bis(2-Ethylhexyl)phthalate	149	13.019	13.029	(1.013)	955105	52.3682	52.4	
144 Di-n-octylphthalate	149	14.365	14.385	(0.910)	1425437	49.9304	49.9	
145 Benzo(b)fluoranthene	252	15.007	15.027	(0.951)	662056	49.2243	49.2	
146 7,12-Dimethylbenz(A)Anthracen	256	15.007	15.027	(0.951)	338296	46.6160	46.6	

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Report Date: 24-Mar-2015 08:33

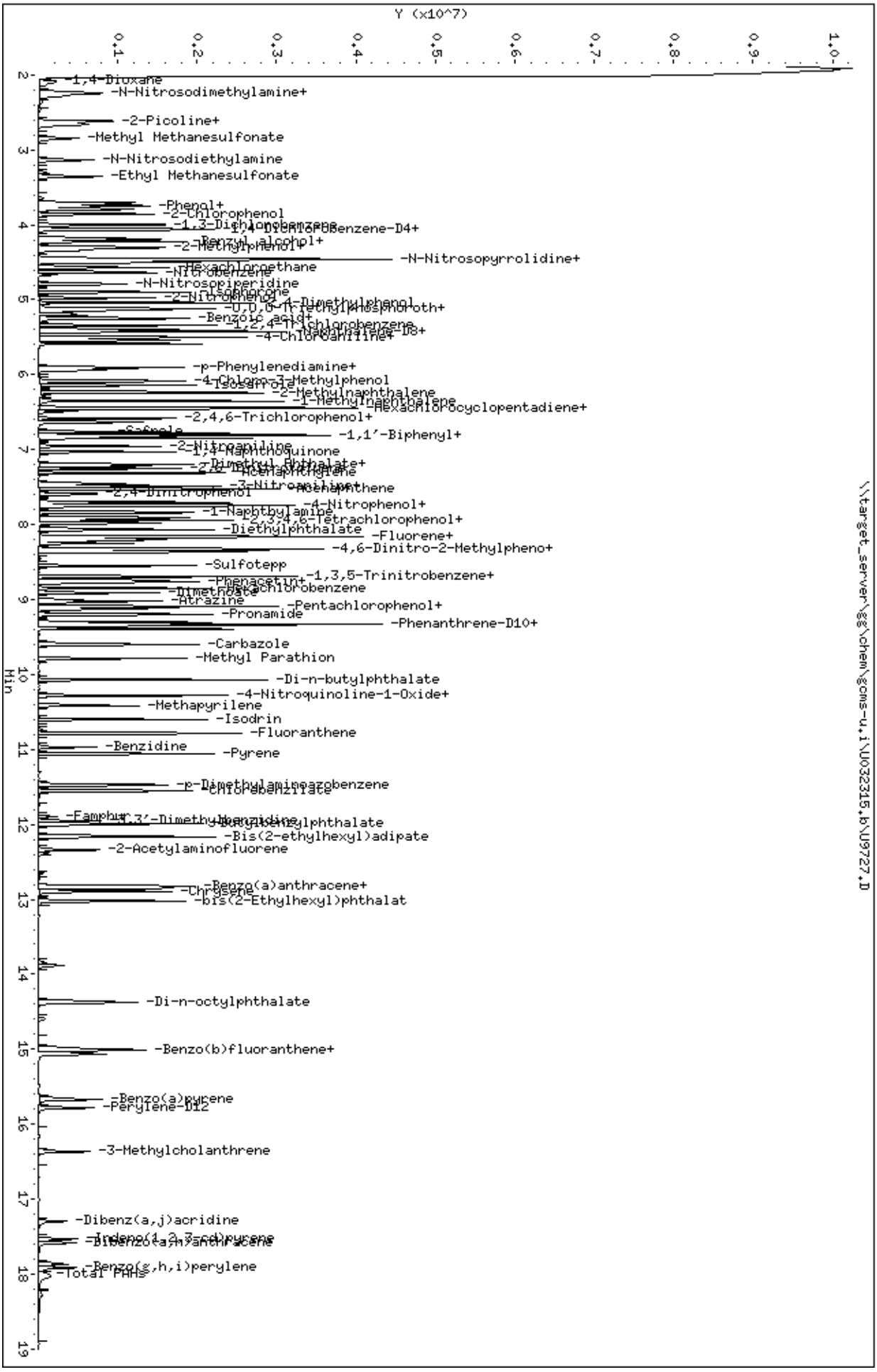
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
147 Benzo(k)fluoranthene	252	15.058	15.078	(0.954)	716934	53.1594	53.2(H)	
149 Benzo(a)pyrene	252	15.669	15.679	(0.993)	547056	49.2781	49.3	
* 150 Perylene-D12	264	15.783	15.782	(1.000)	439858	40.0000		
151 3-Methylcholanthrene	268	16.363	16.372	(1.037)	267904	51.8731	51.9	
152 Dibenz(a,j)acridine	279	17.294	17.304	(1.096)	261000	49.4578	49.4	
153 Indeno(1,2,3-cd)pyrene	276	17.532	17.542	(1.111)	324429	54.2820	54.3	
154 Dibenzo(a,h)anthracene	278	17.584	17.593	(1.114)	310608	52.0221	52.0	
155 Benzo(g,h,i)perylene	276	17.925	17.925	(1.136)	337948	50.7349	50.7	
M 156 Total PAHs	100				16403025	923.473	923	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9727.D
Date : 23-MAR-2015 17:49
Client ID:
Sample Info: WG160080-8
Volume Injected (uL): 1.0
Column phase: ZB5-MS

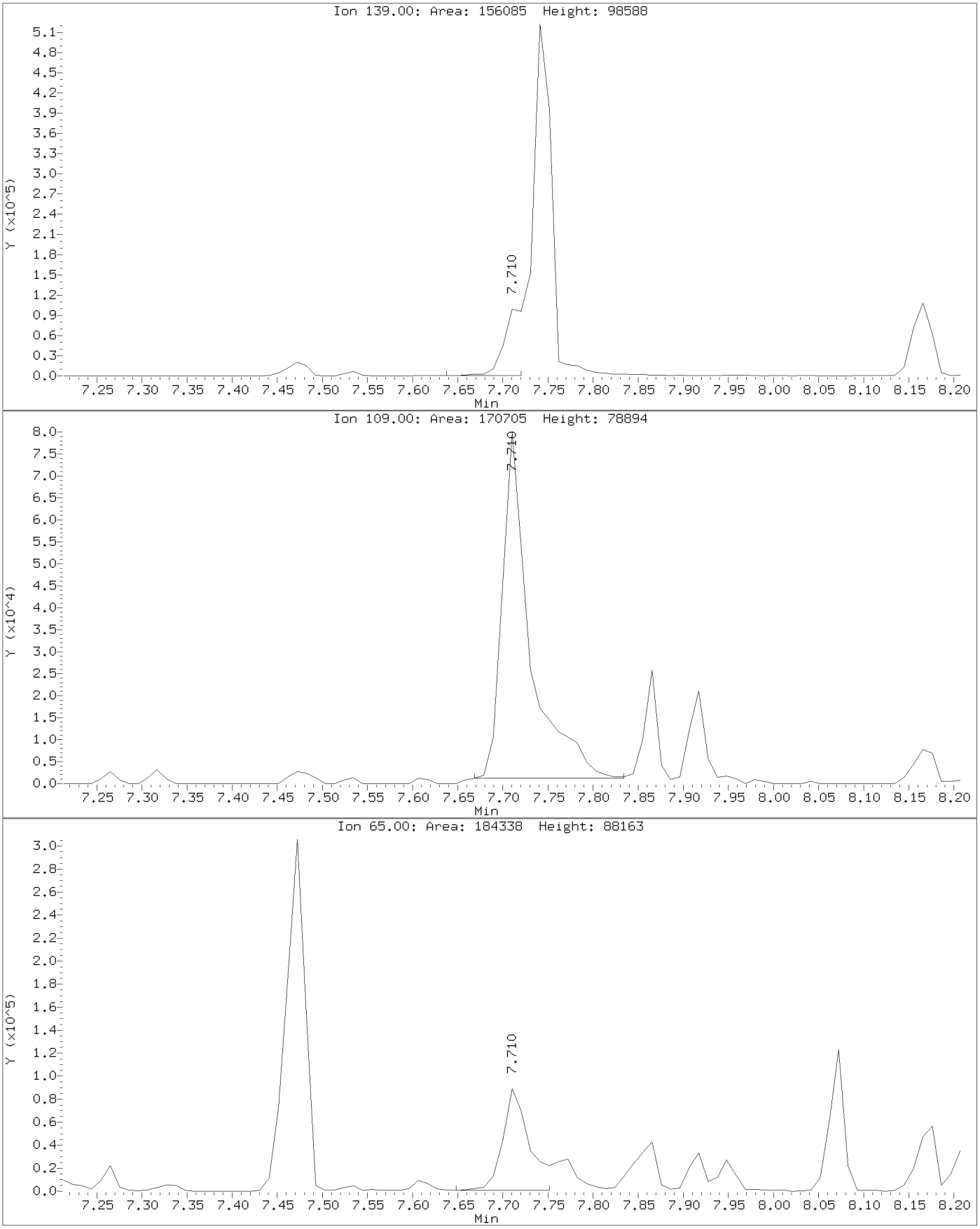
Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Injection Date: 23-MAR-2015 16:31
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

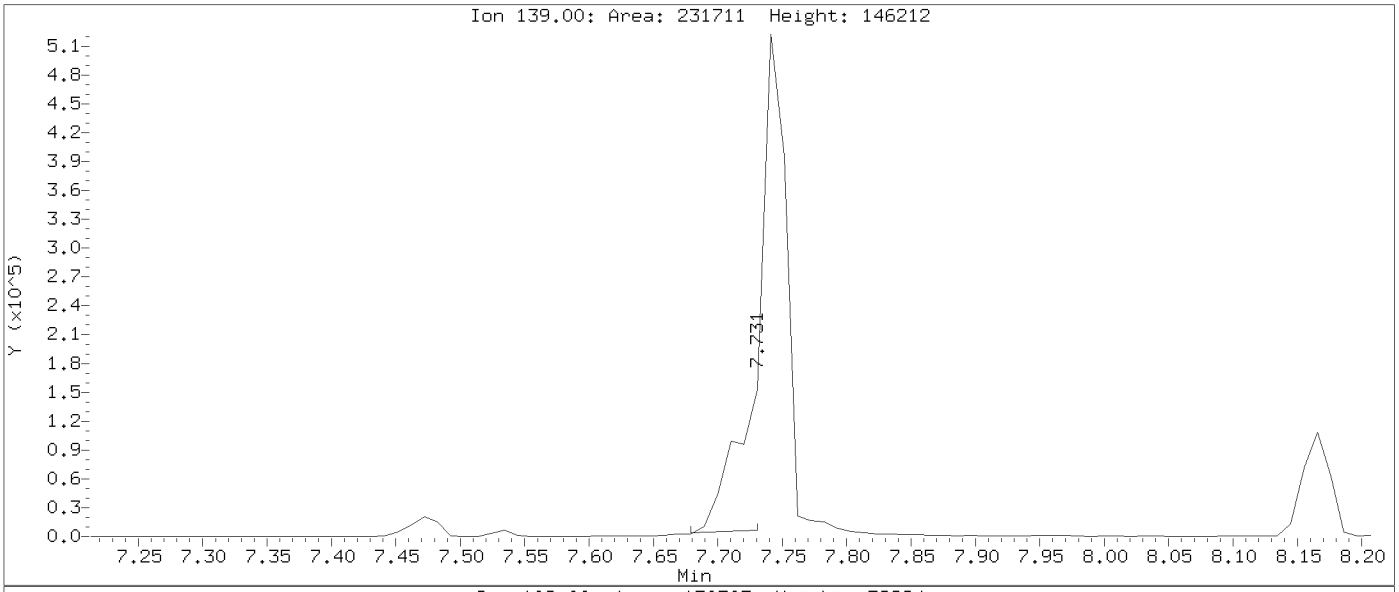
BEFORE MANUAL INTEGRATION

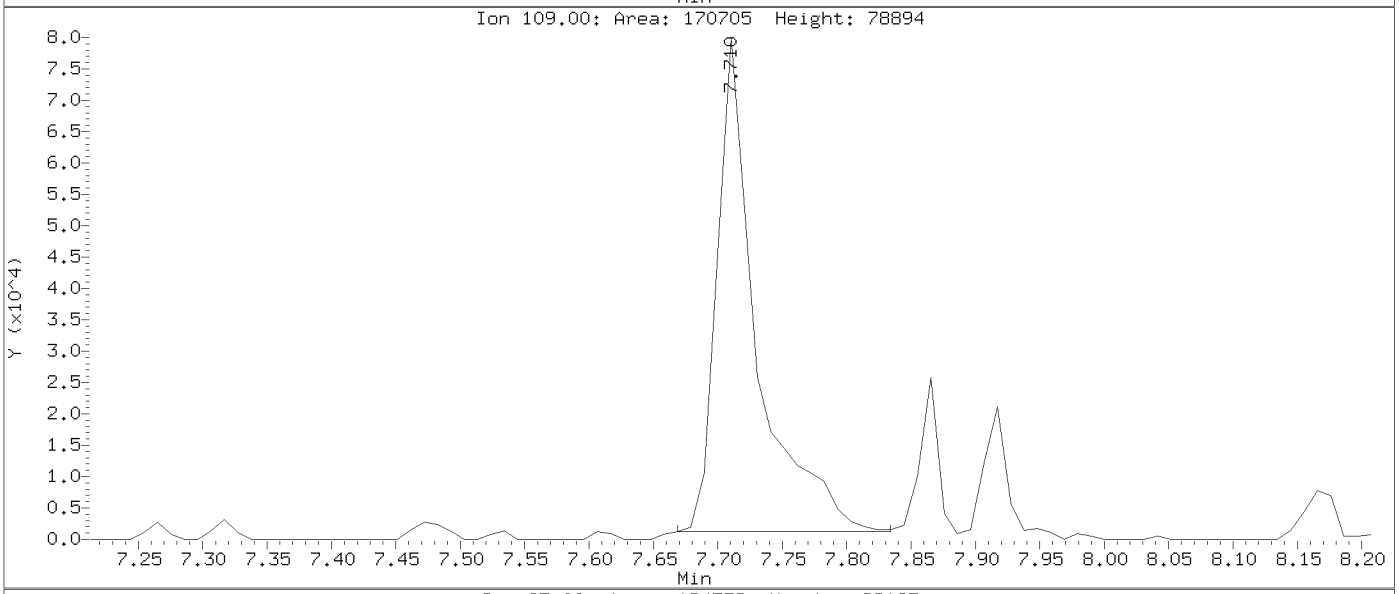


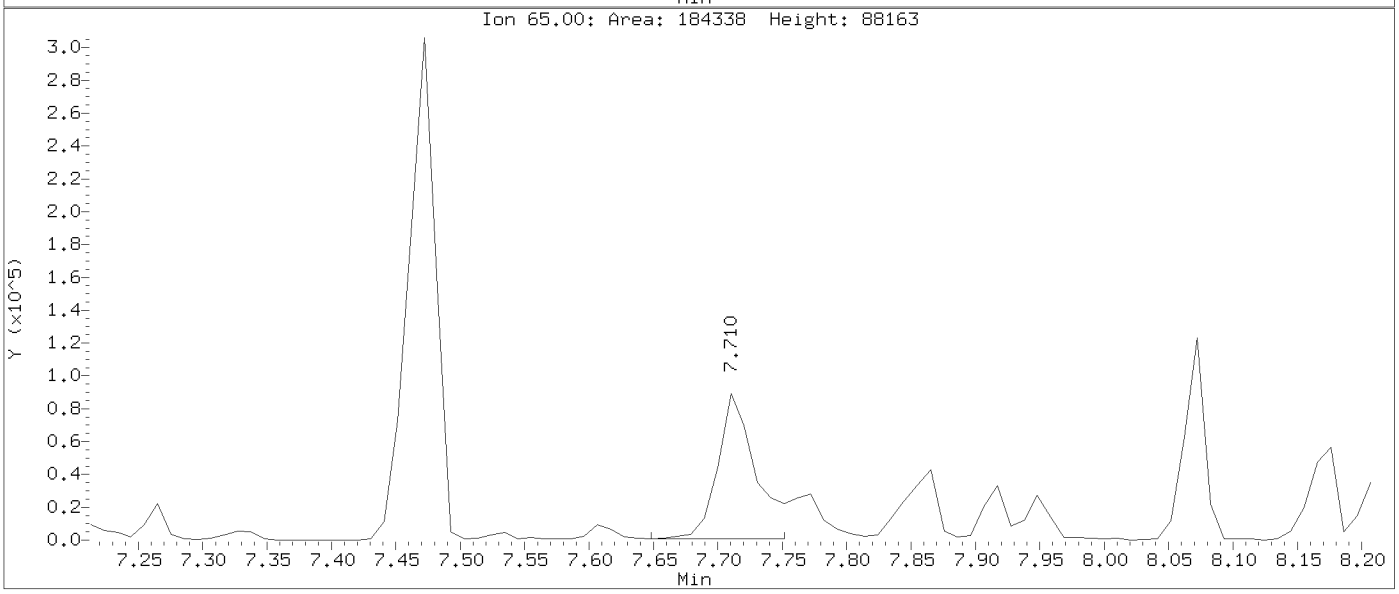
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9724.D
Injection Date: 23-MAR-2015 16:31
Instrument: gcms-u.i
Client Sample ID:

AFTER MANUAL INTEGRATION

Compound: 4-Nitrophenol
CAS Number: 100-02-7



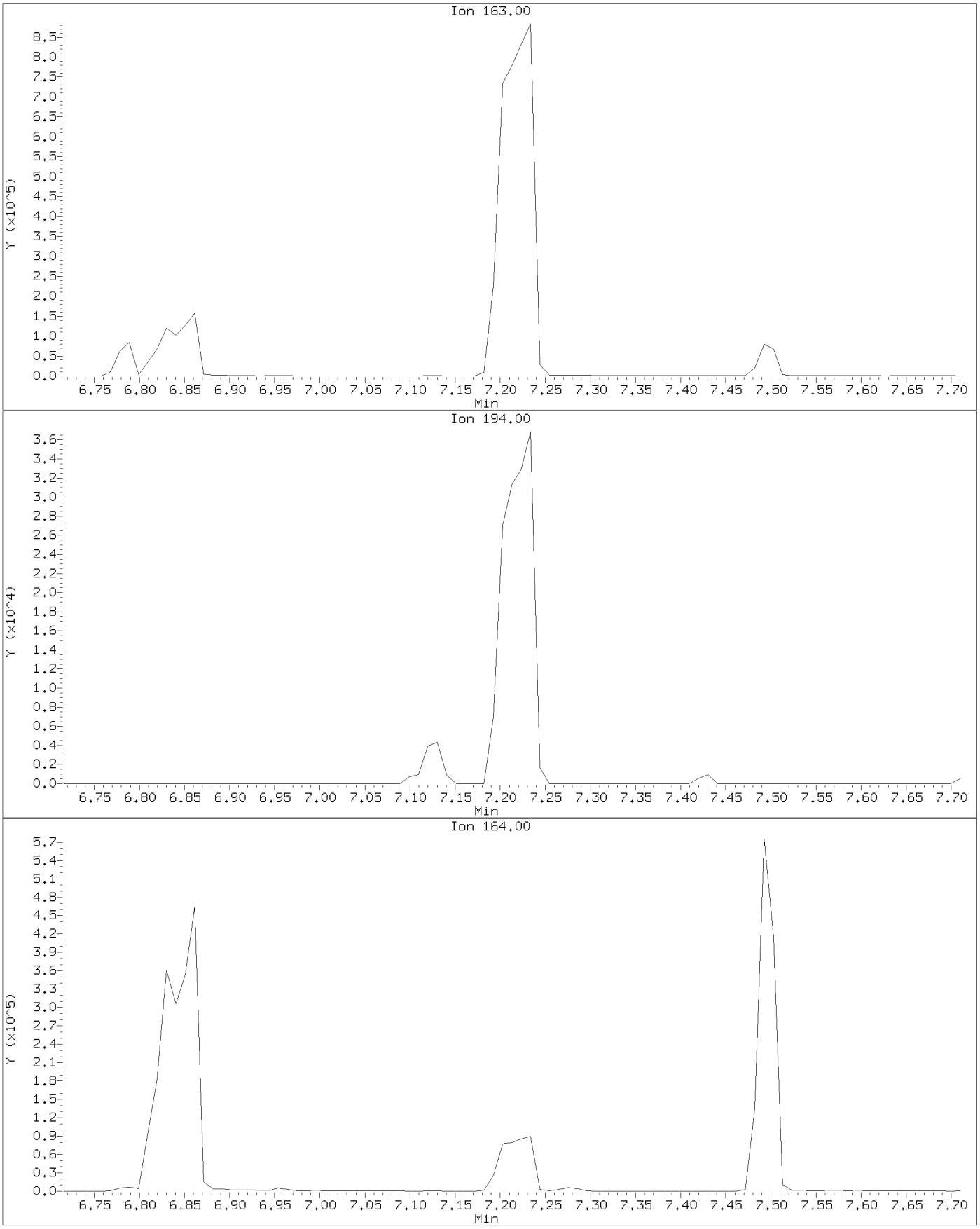




Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

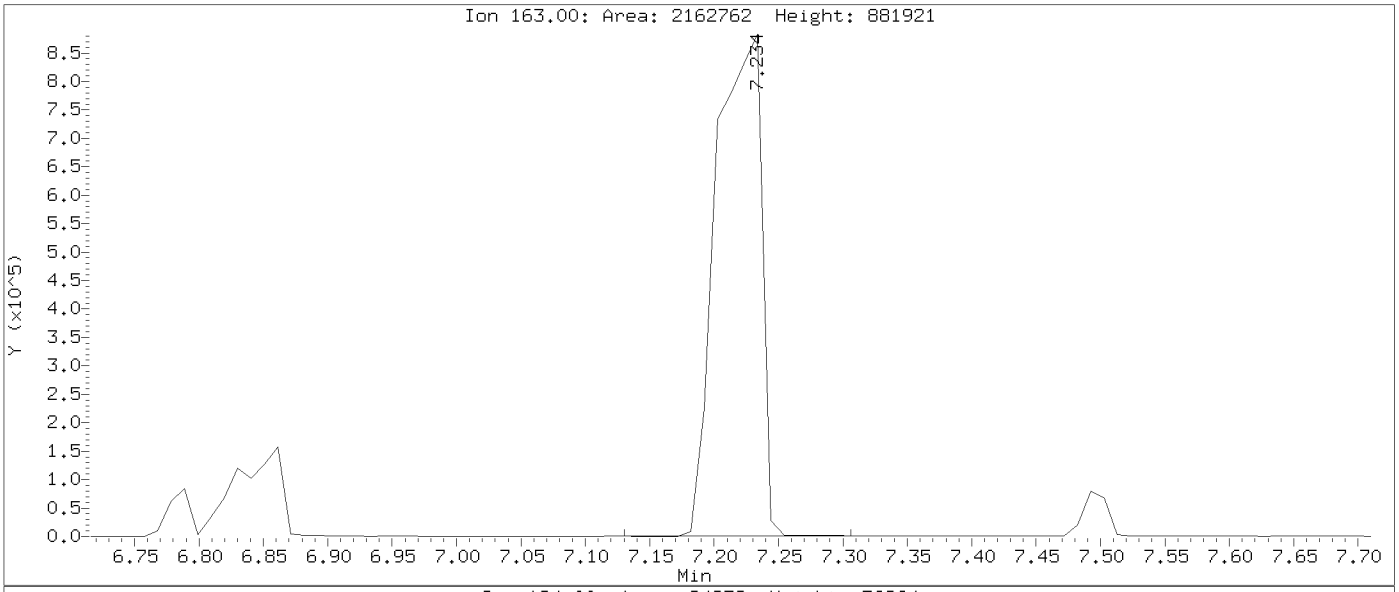
BEFORE MANUAL INTEGRATION

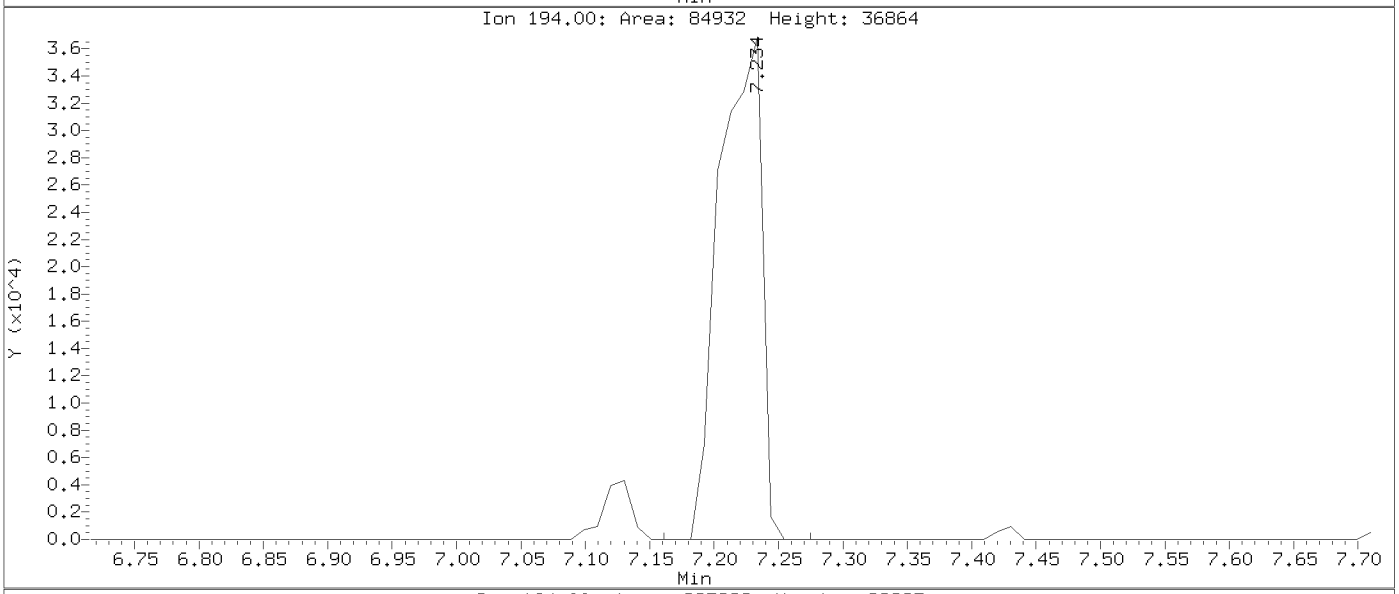


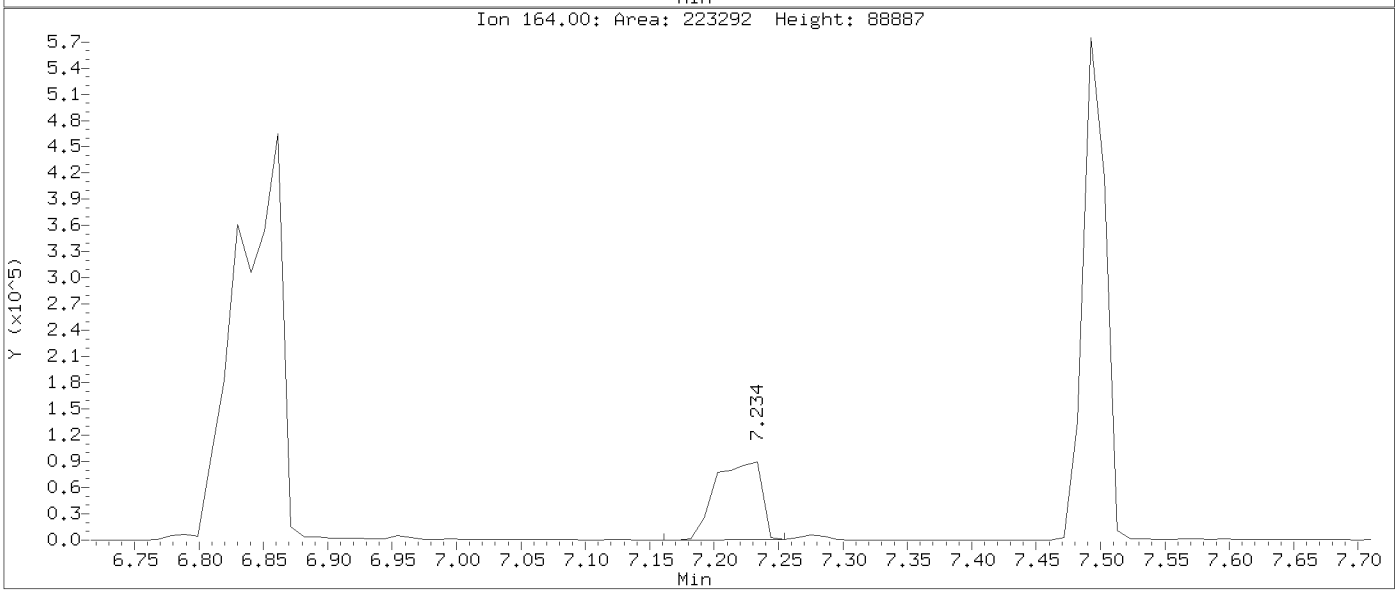
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

AFTER MANUAL INTEGRATION



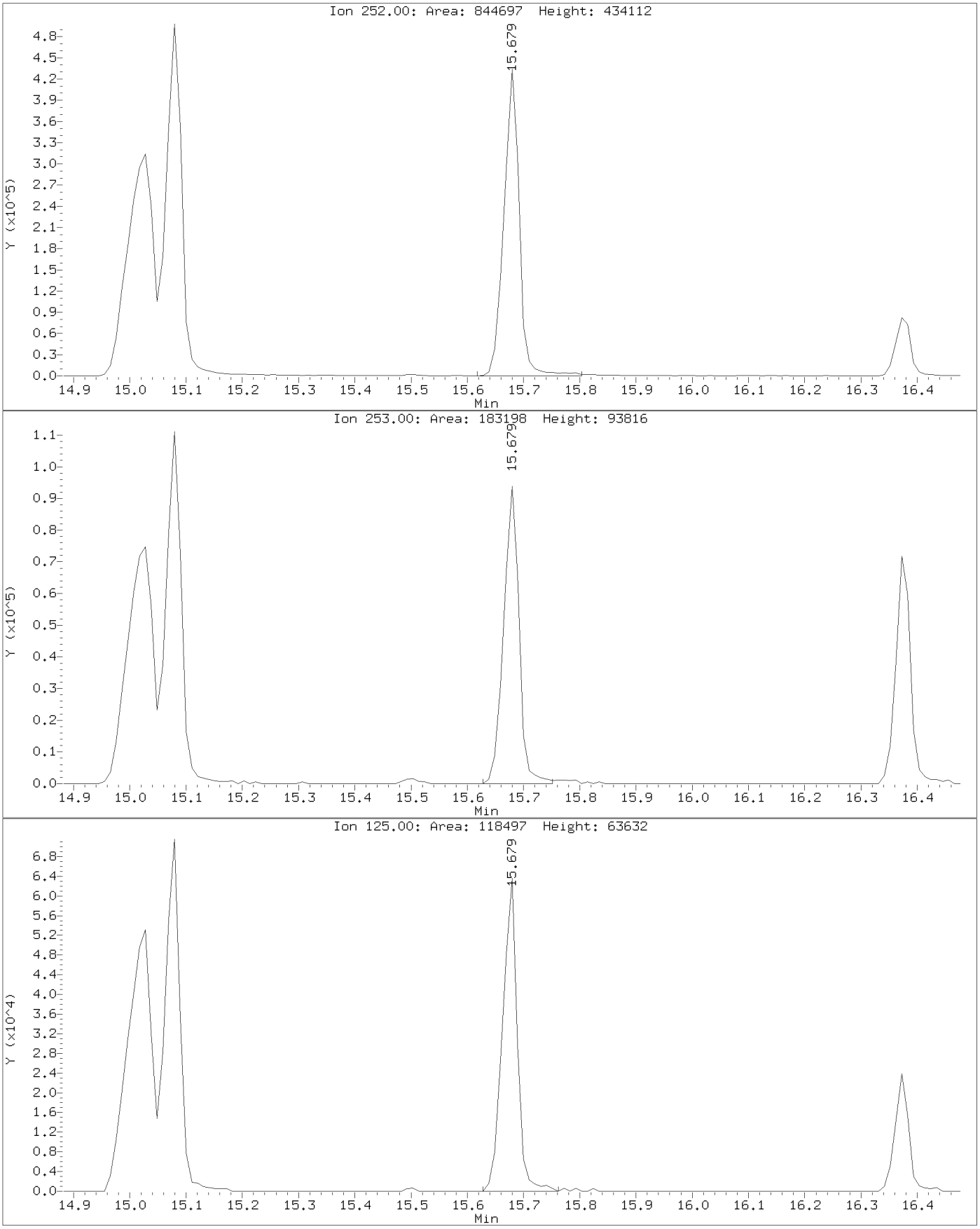




Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

BEFORE MANUAL INTEGRATION

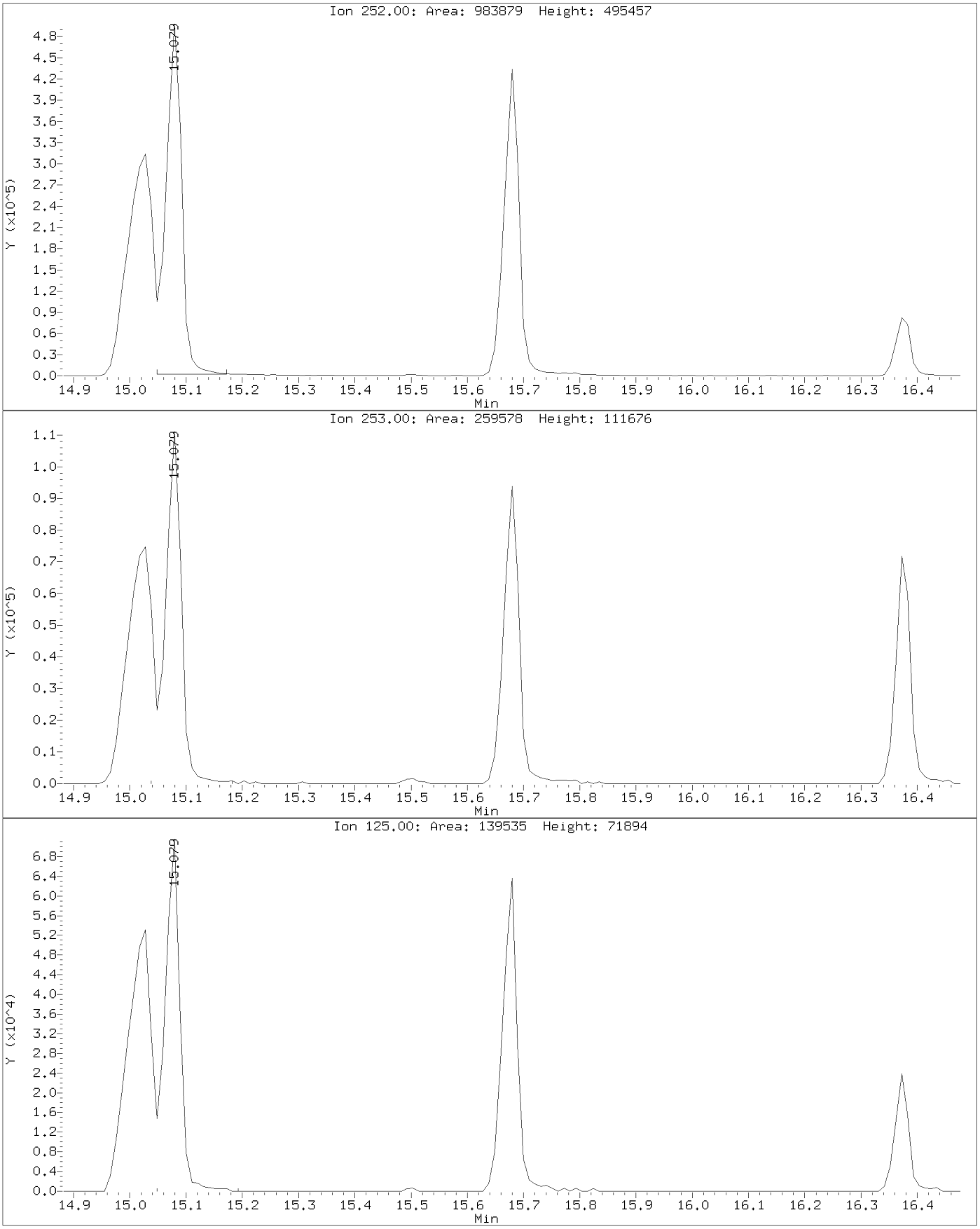
Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

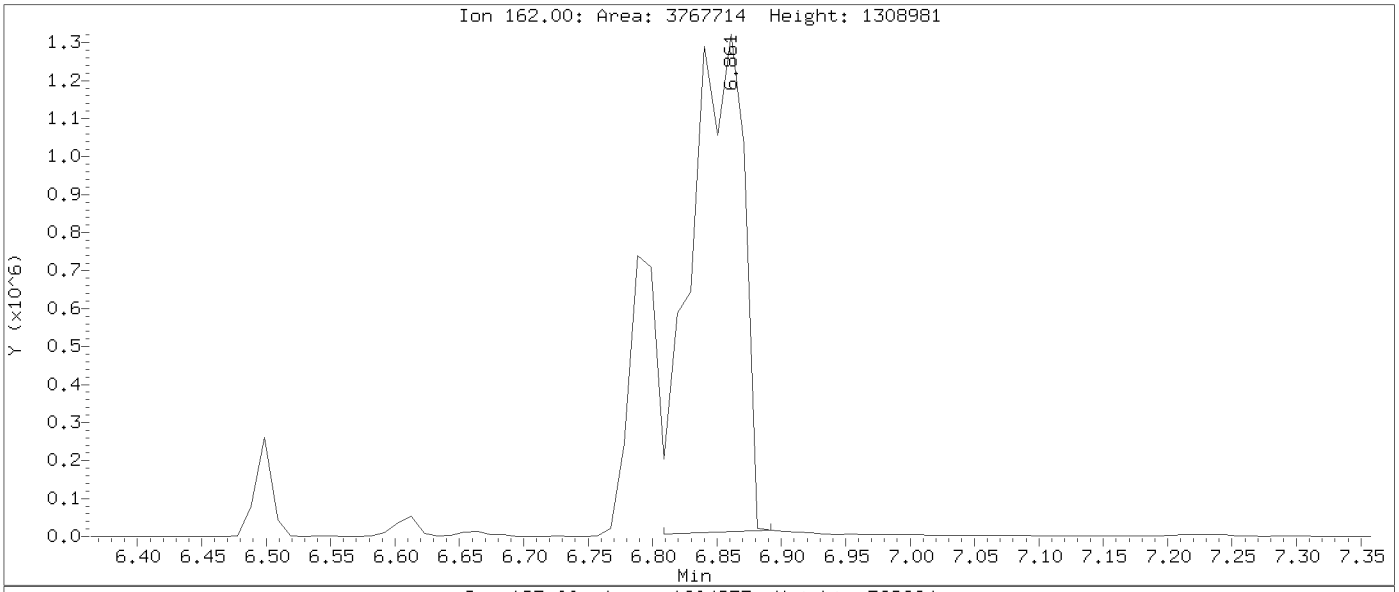
AFTER MANUAL INTEGRATION

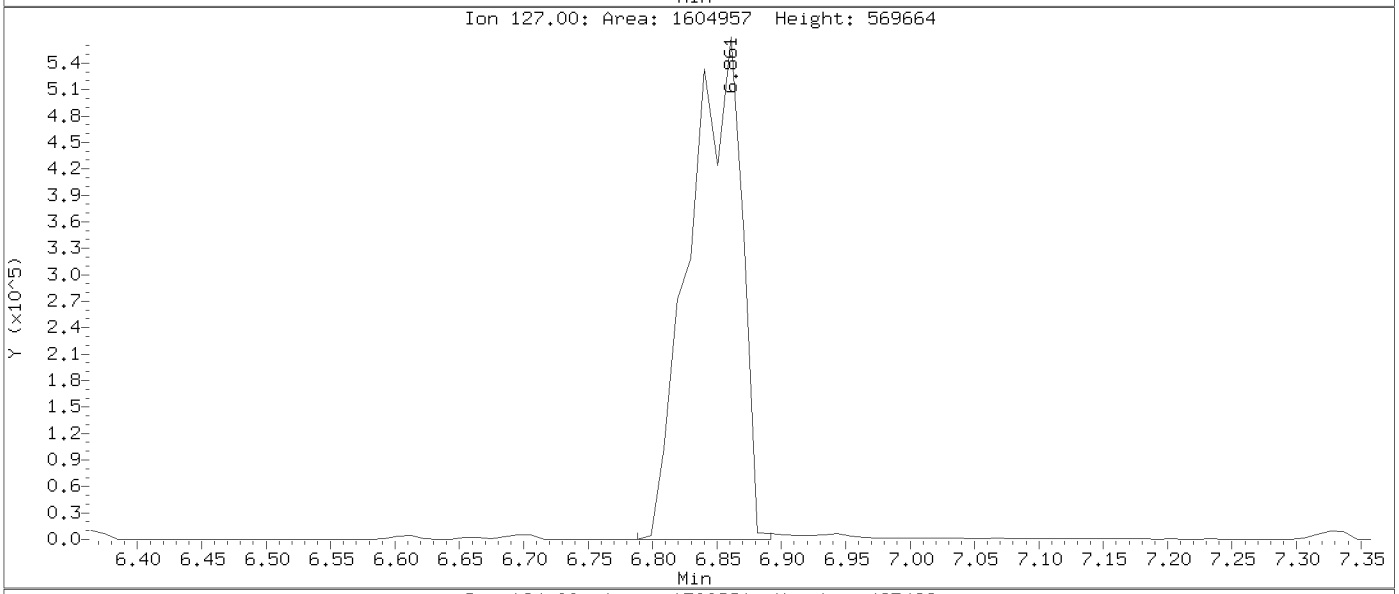


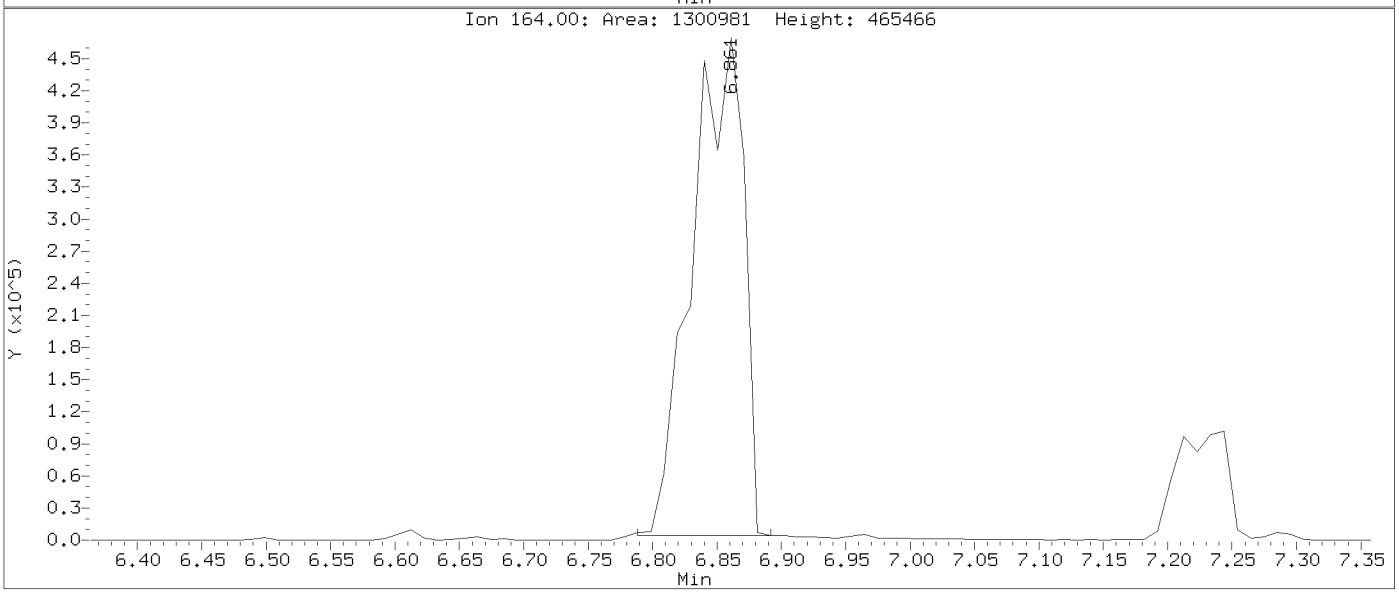
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: 2-Chloronaphthalene
CAS Number: 91-58-7

BEFORE MANUAL INTEGRATION



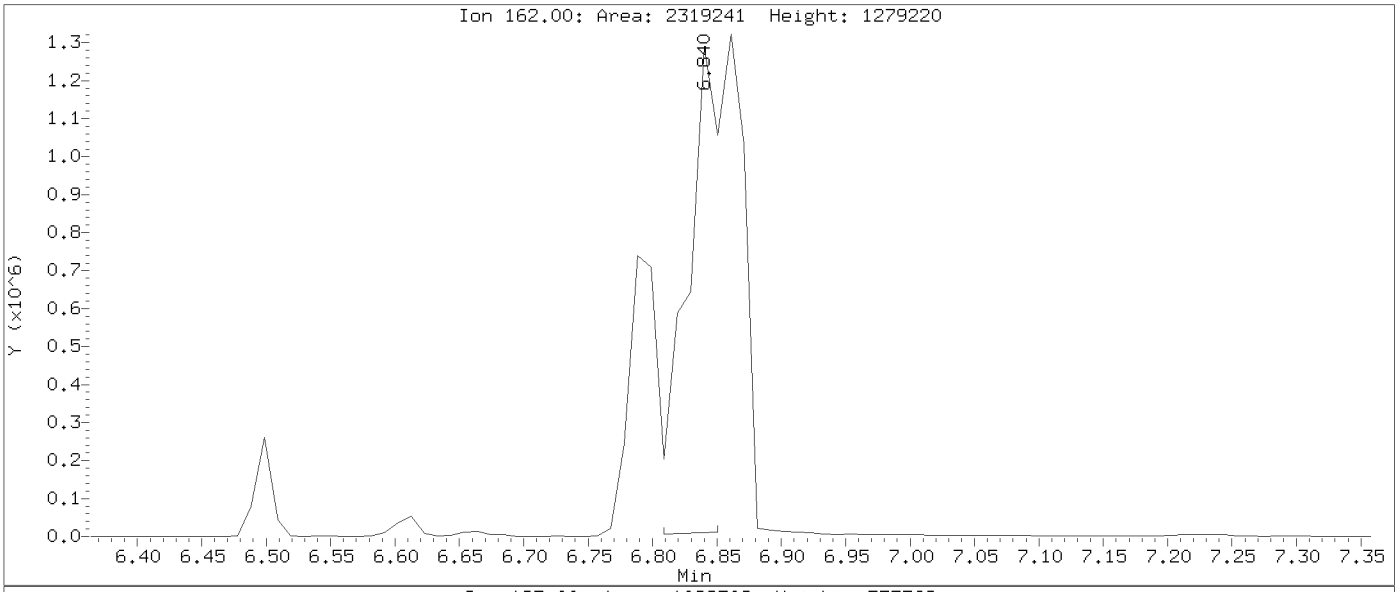


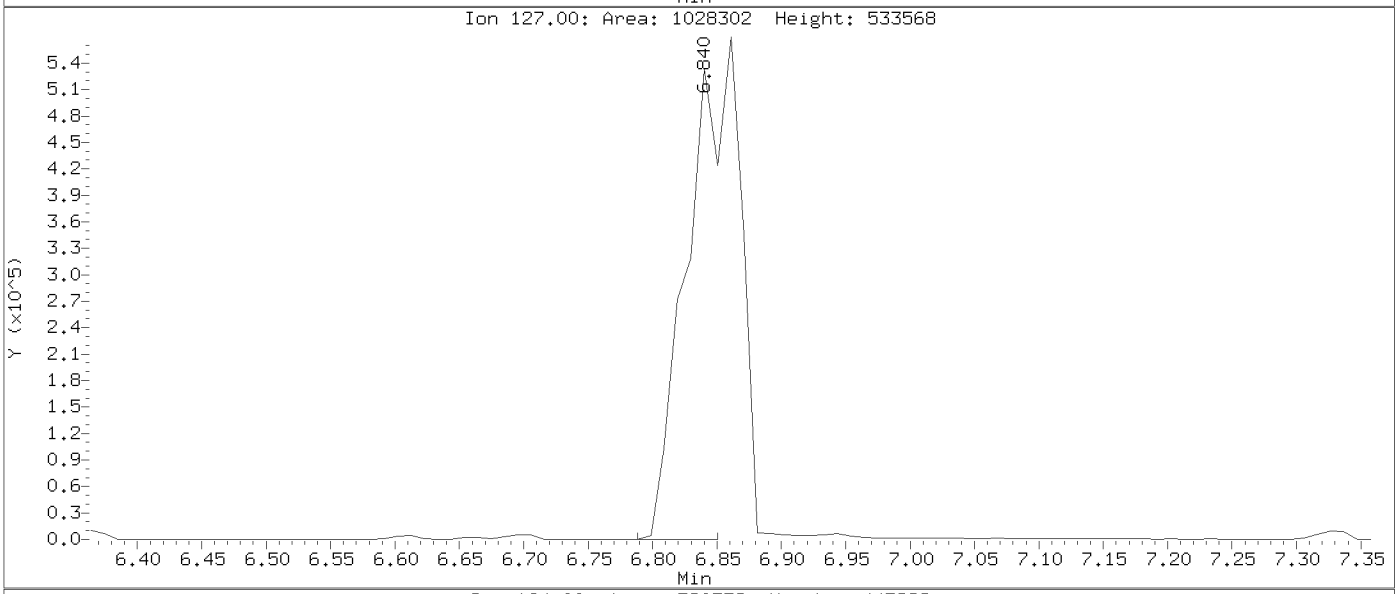


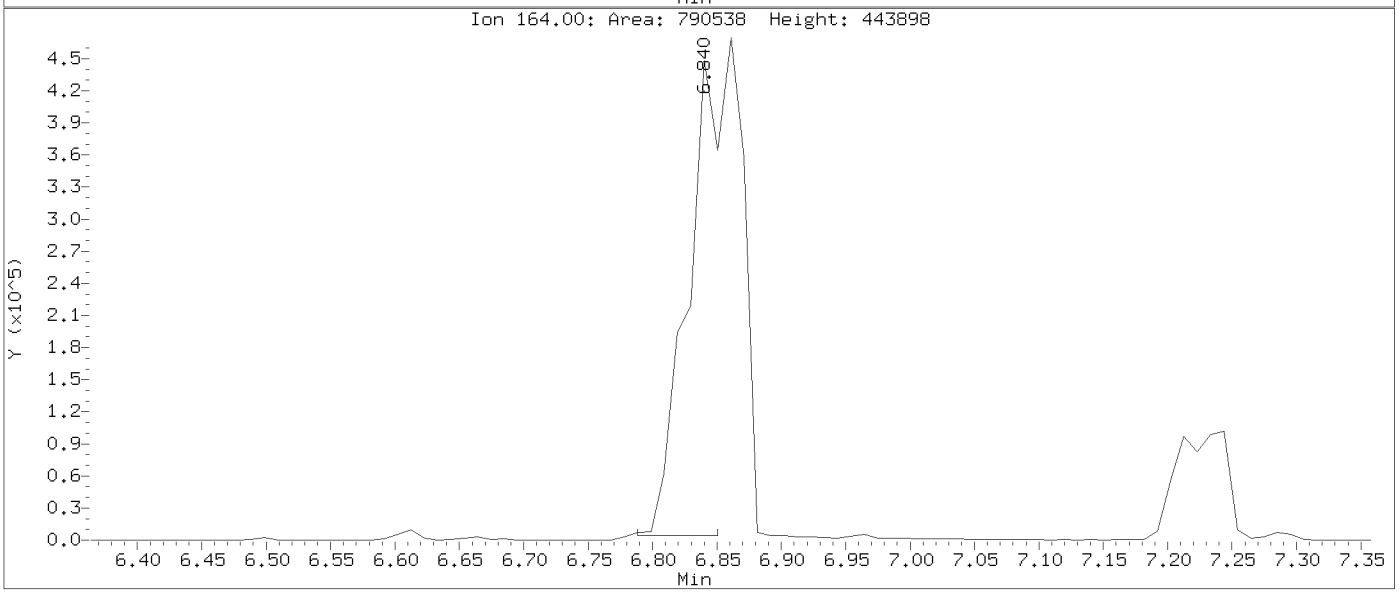
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: 2-Chloronaphthalene
CAS Number: 91-58-7

AFTER MANUAL INTEGRATION



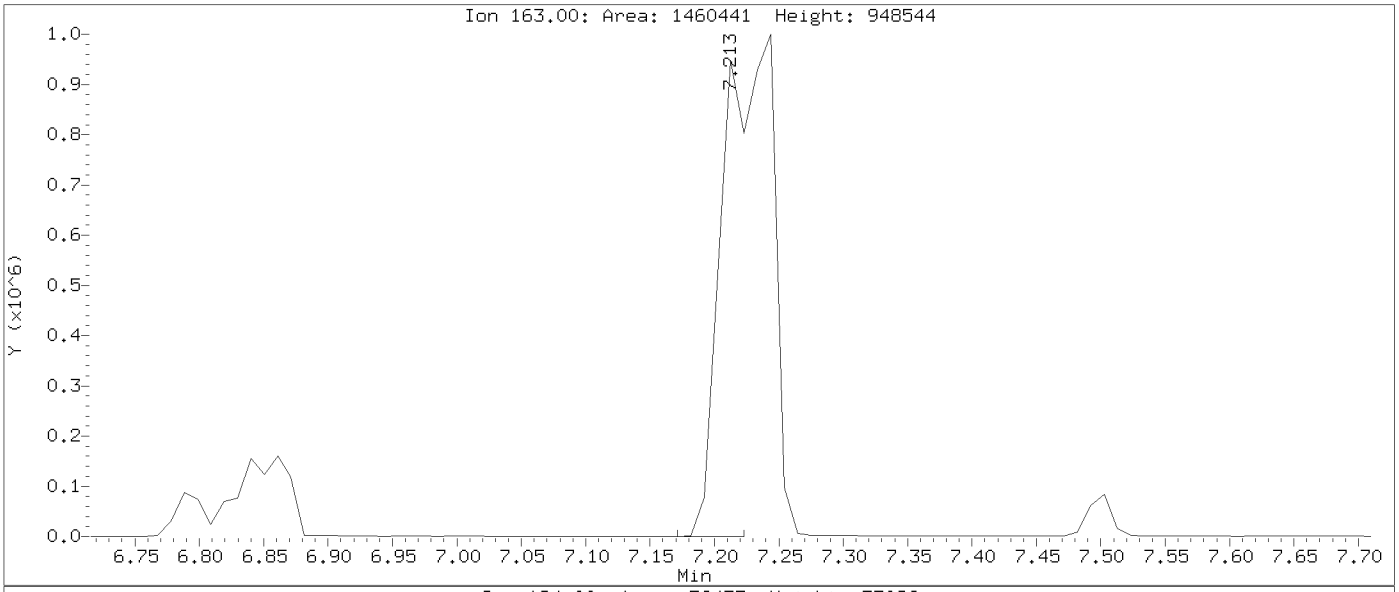


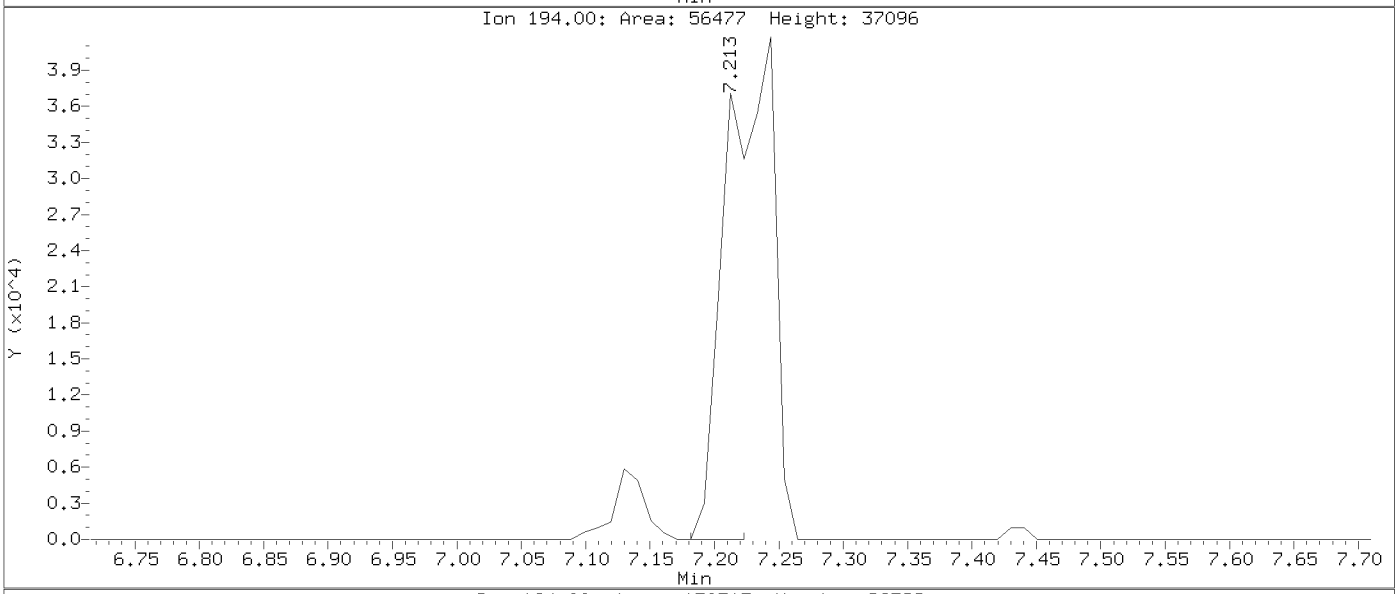


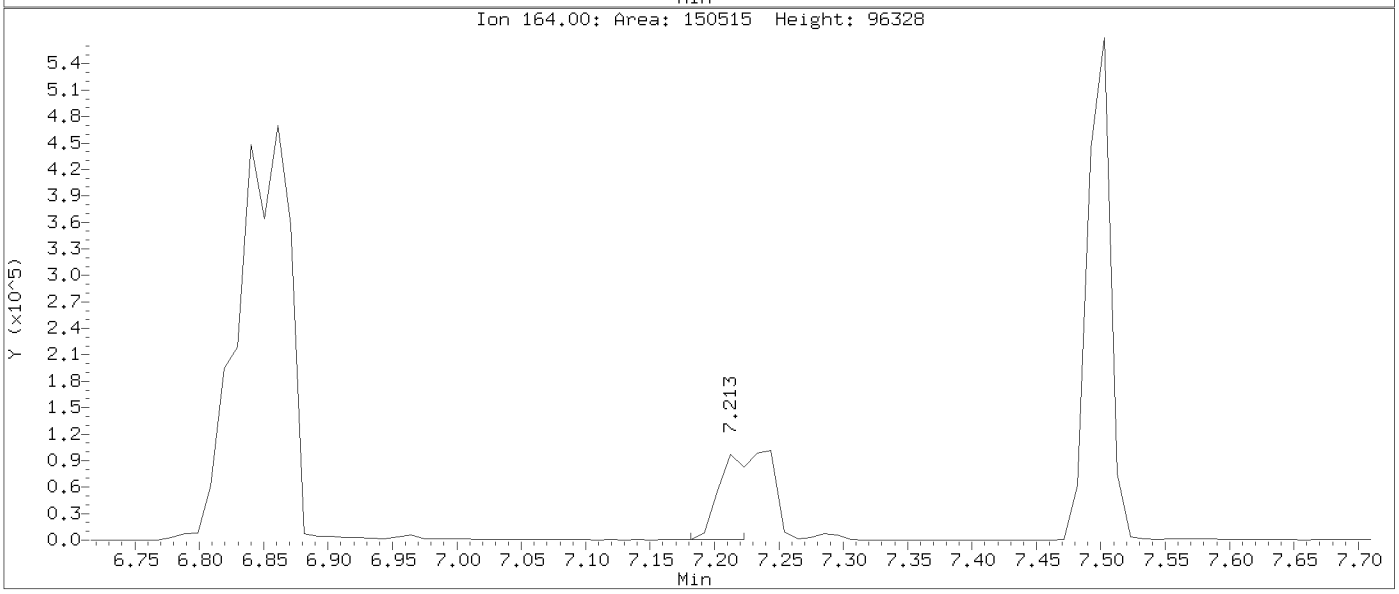
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

BEFORE MANUAL INTEGRATION



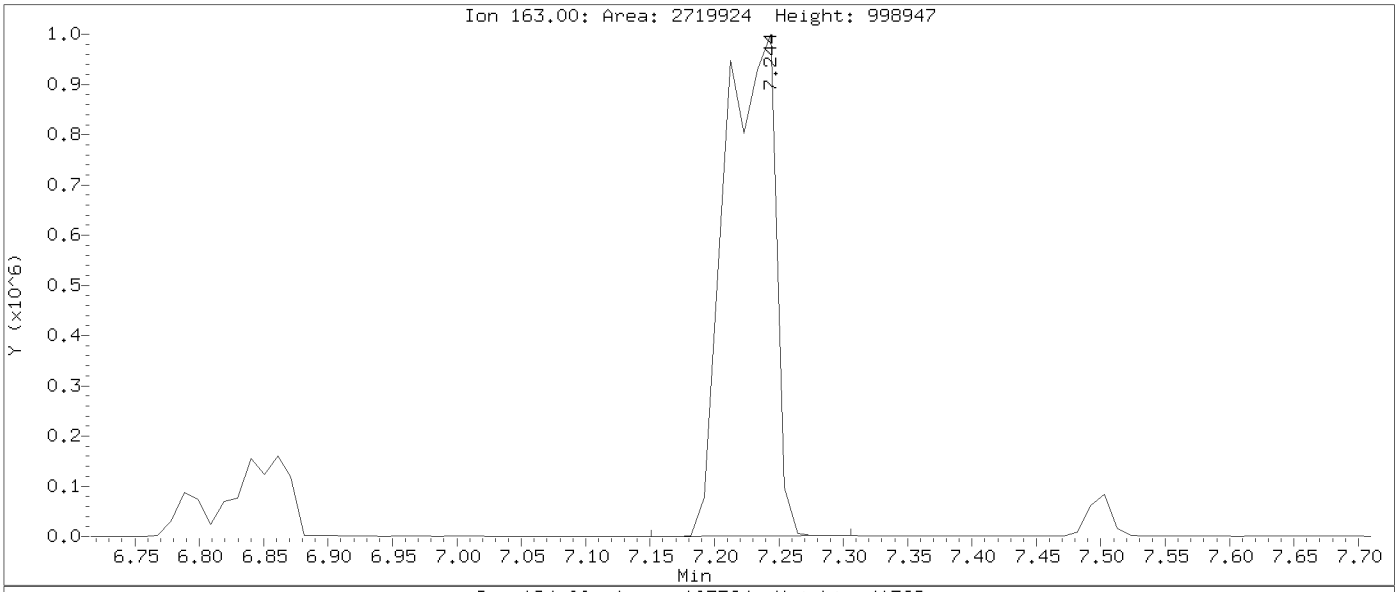


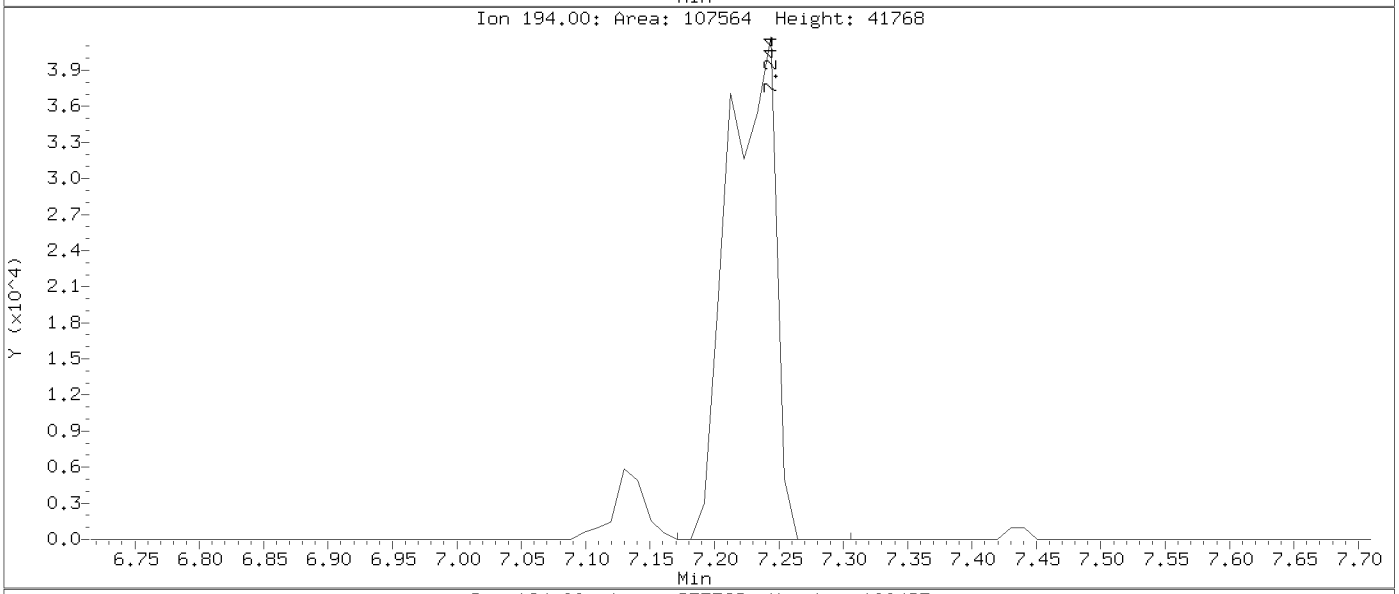


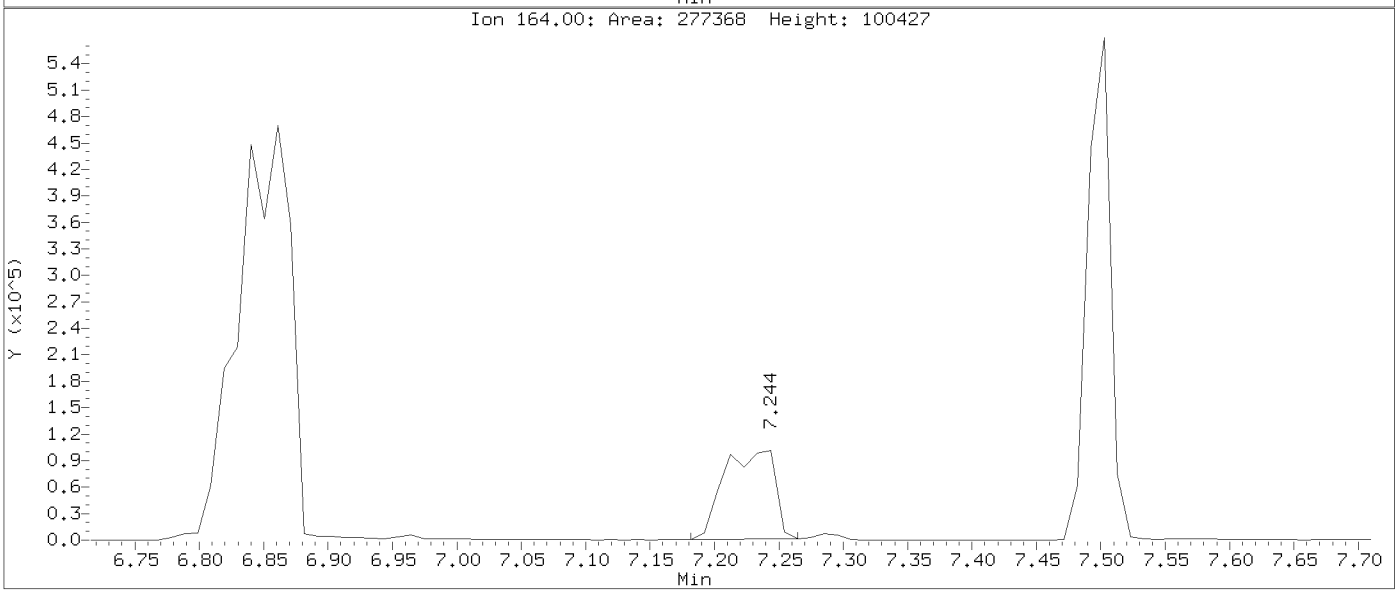
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

AFTER MANUAL INTEGRATION



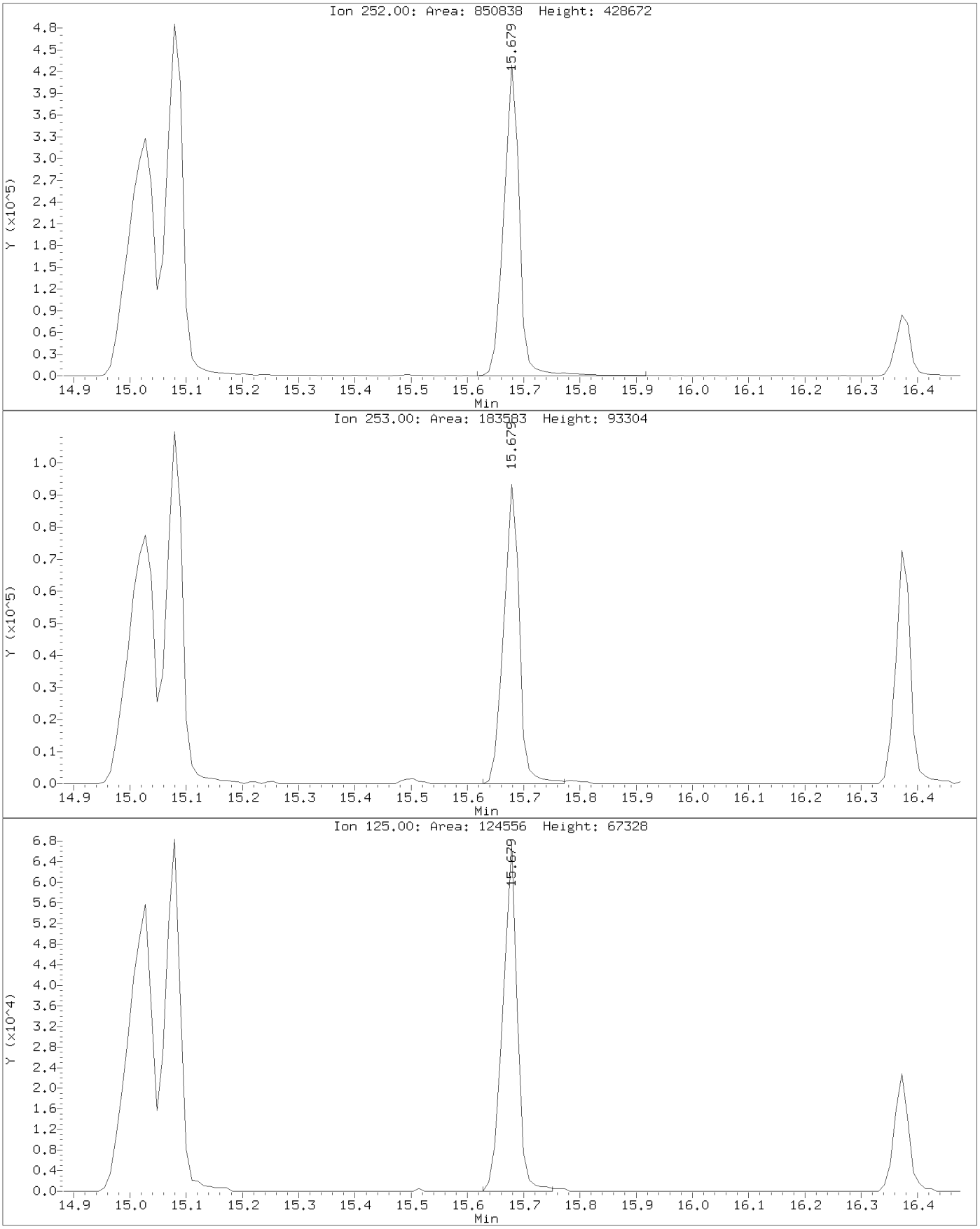




Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

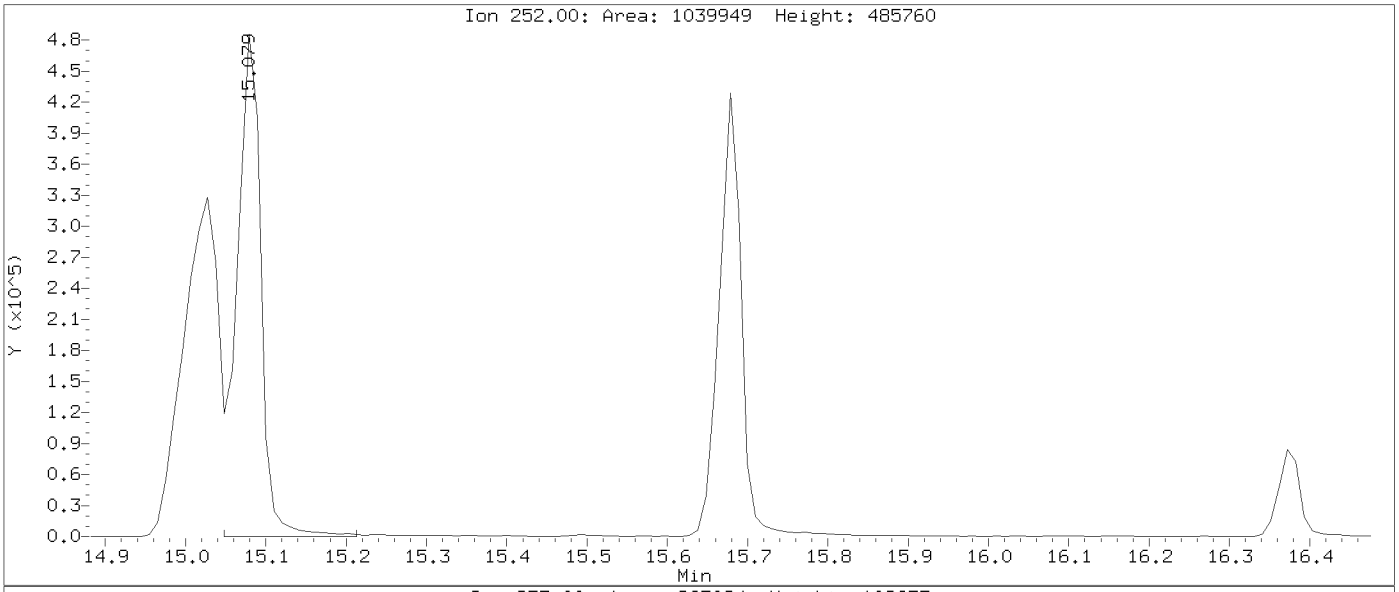
BEFORE MANUAL INTEGRATION

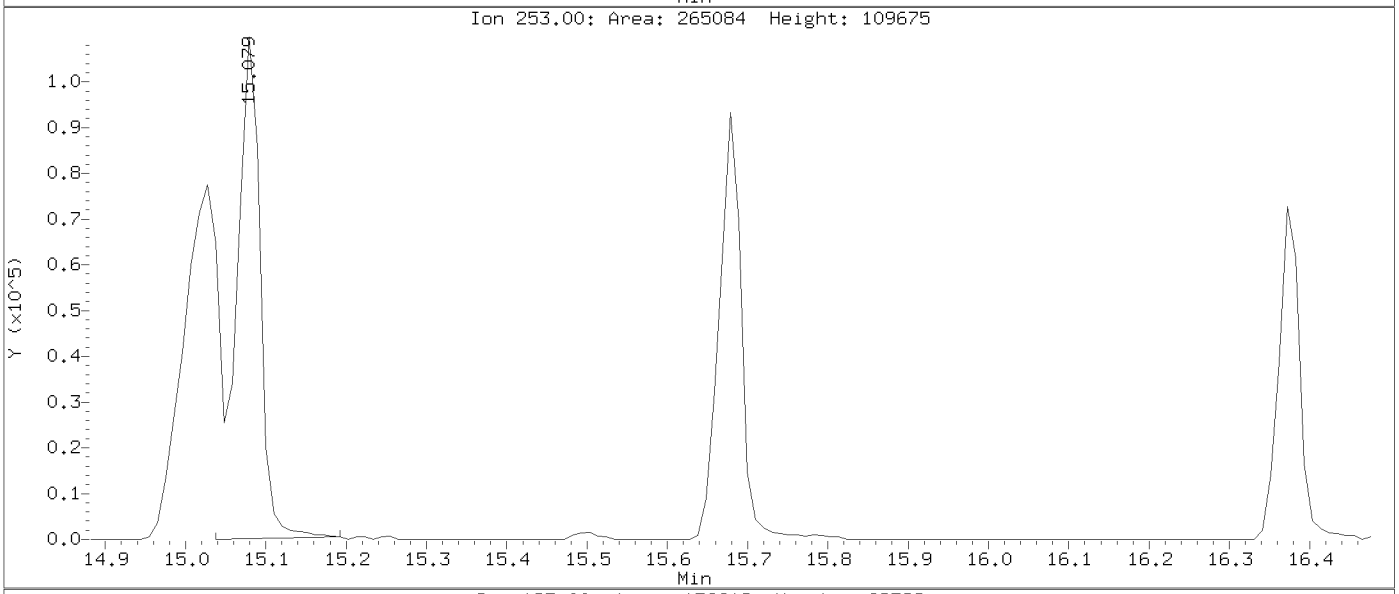


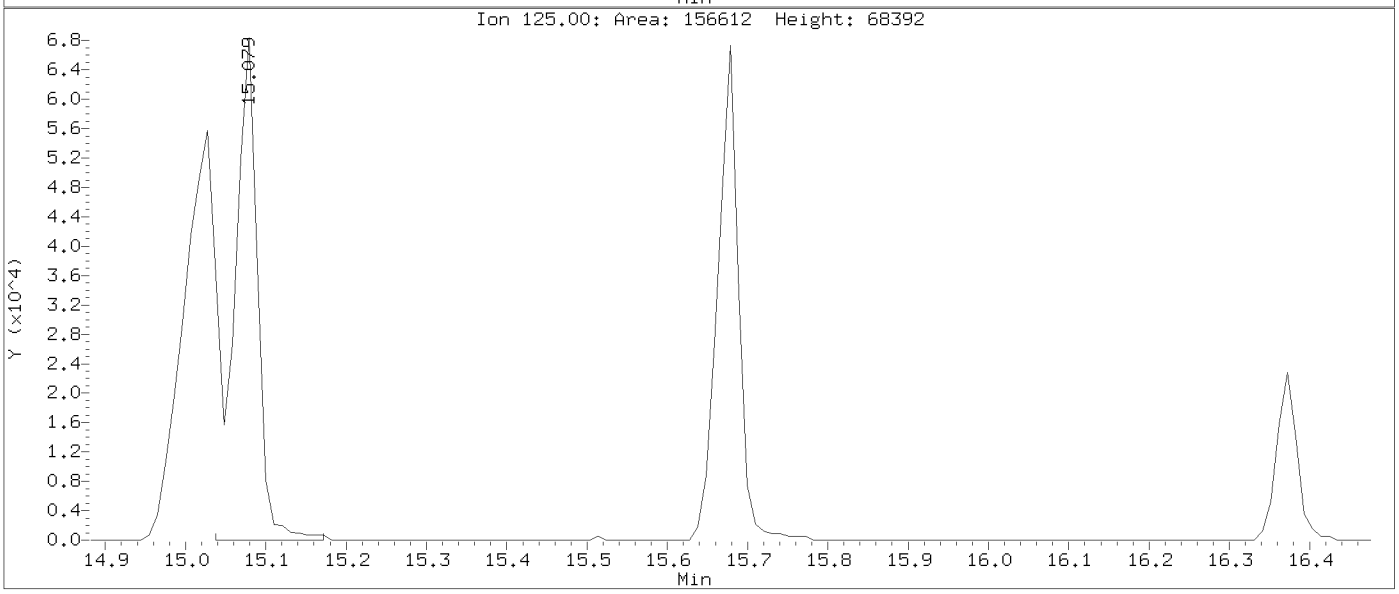
Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

AFTER MANUAL INTEGRATION



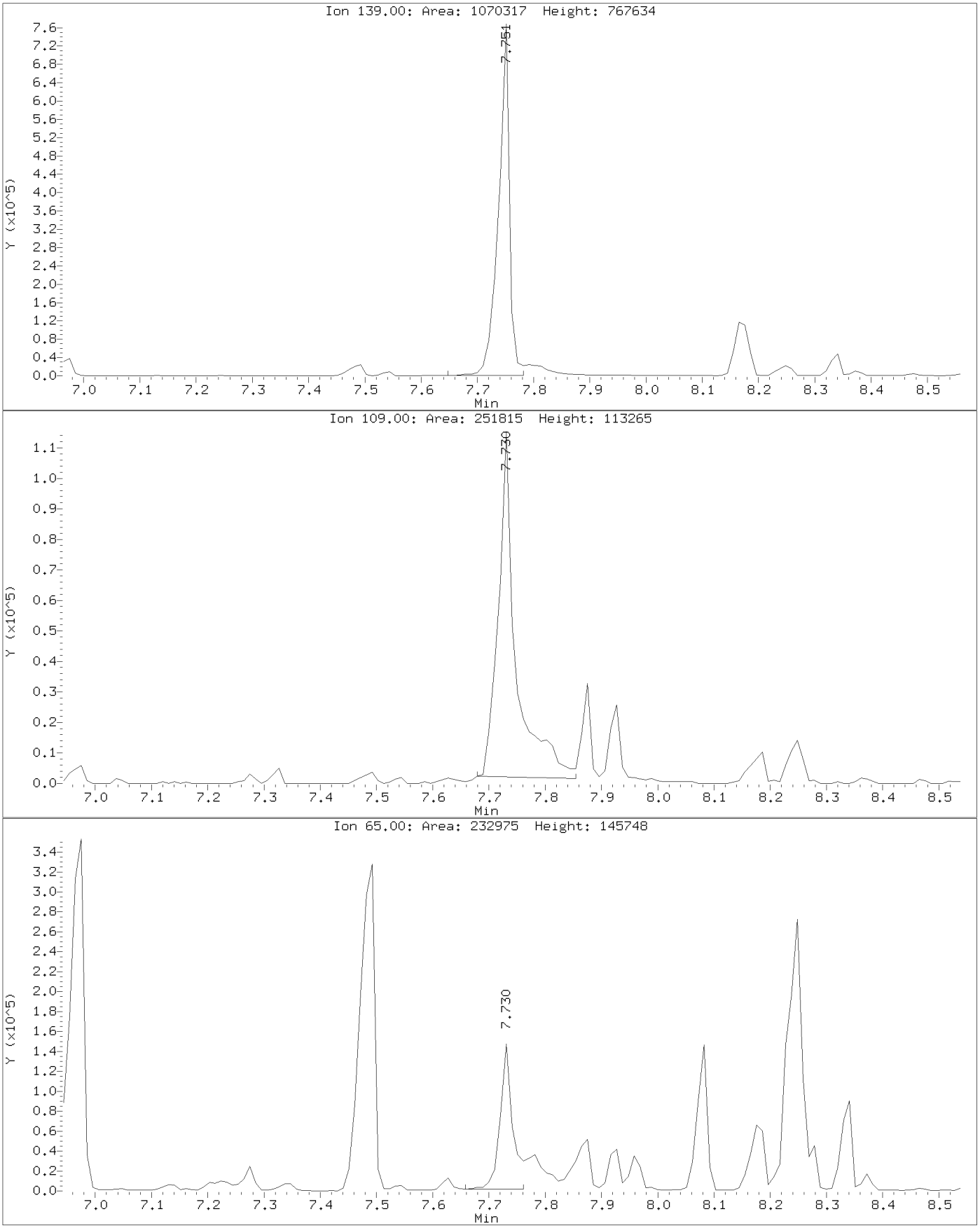




Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

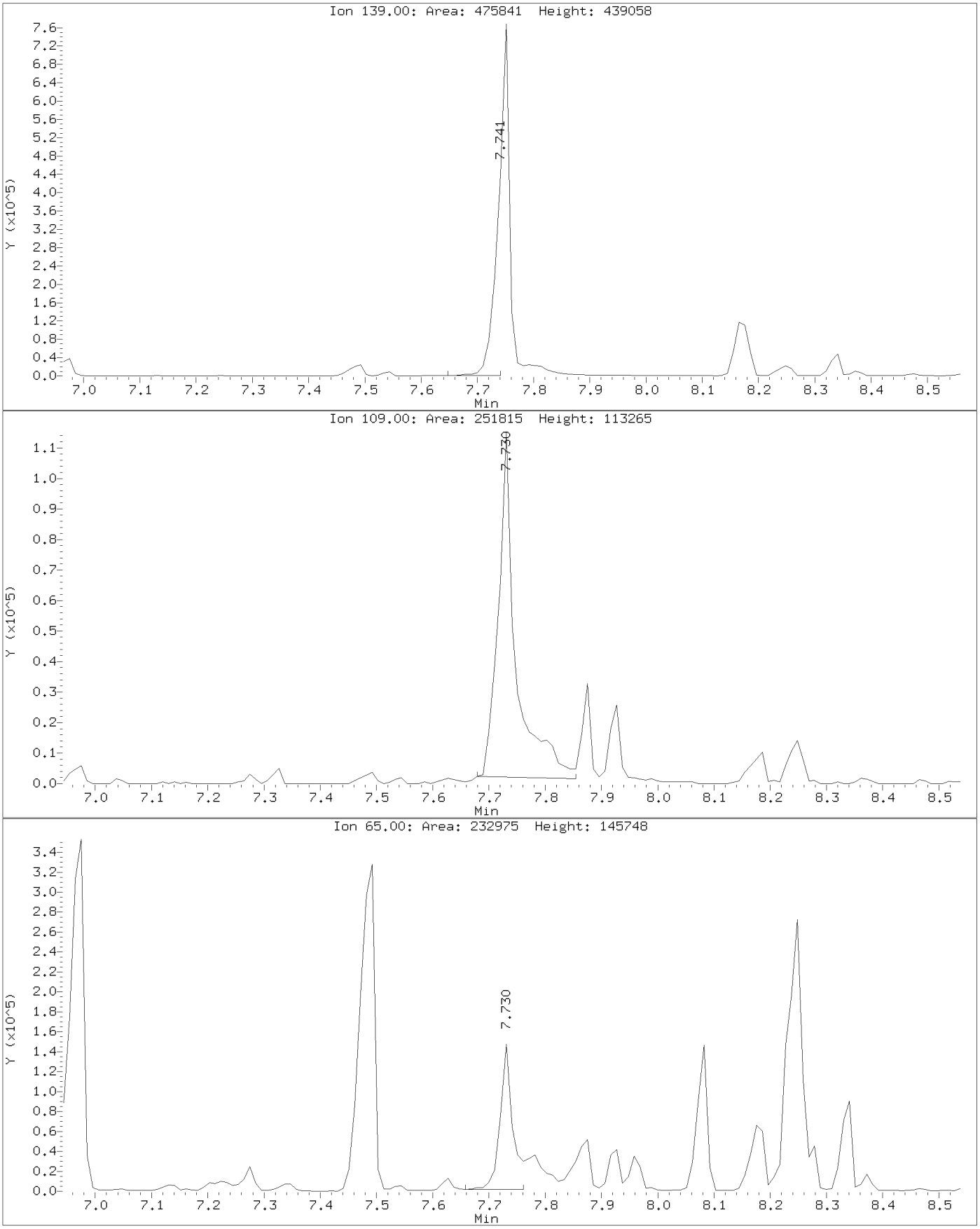
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9725.D
Injection Date: 23-MAR-2015 16:57
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

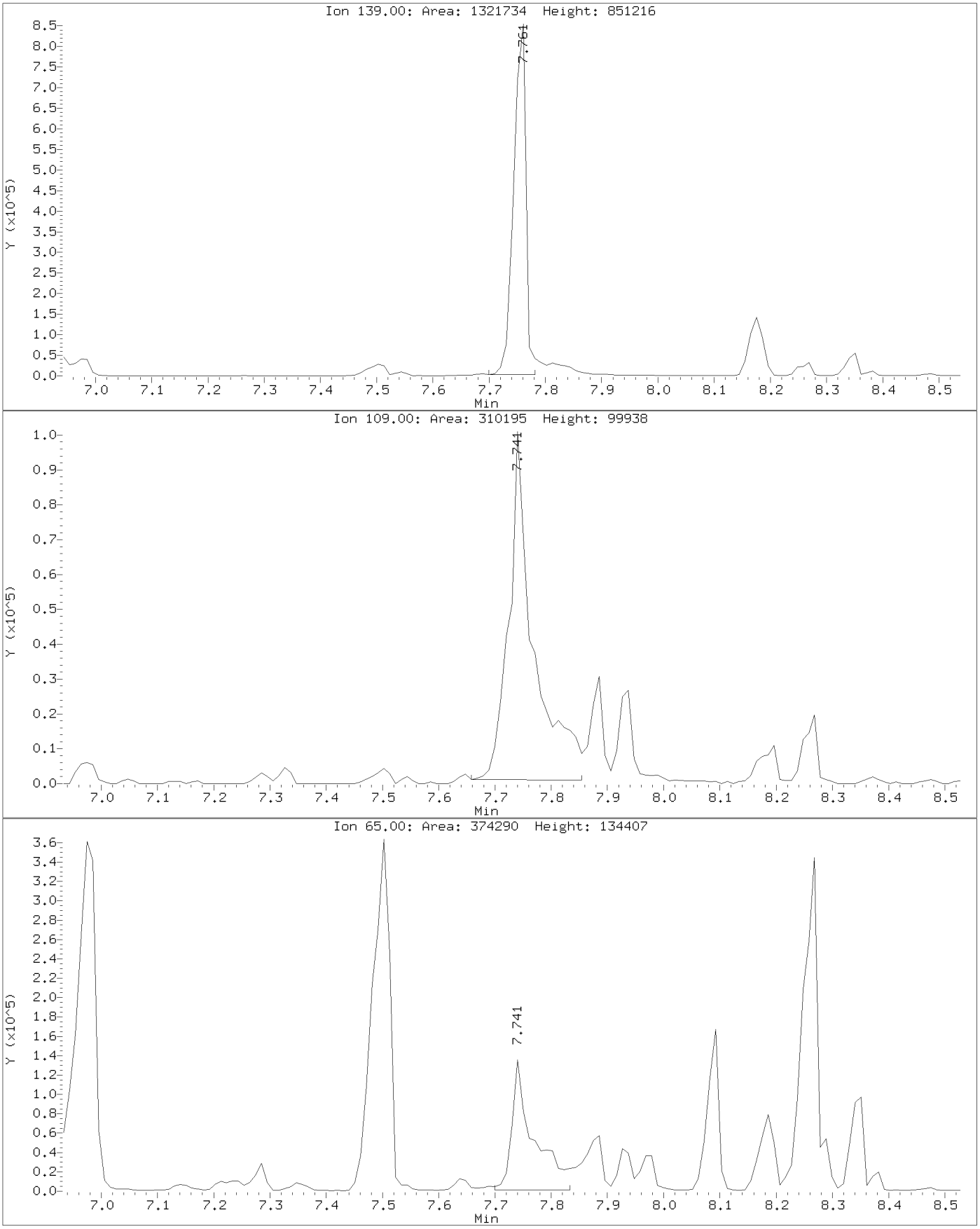
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

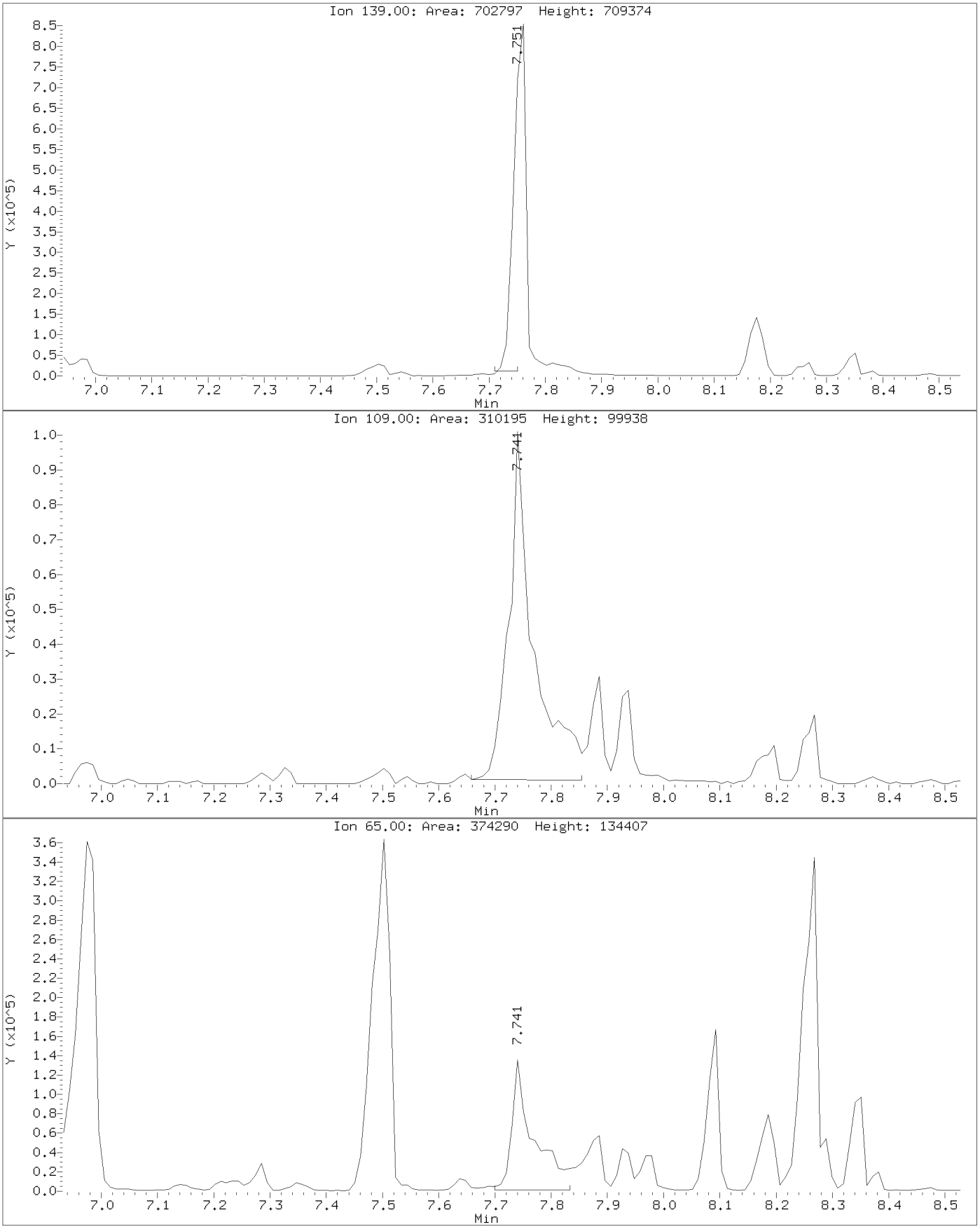
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9726.D
Injection Date: 23-MAR-2015 17:23
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

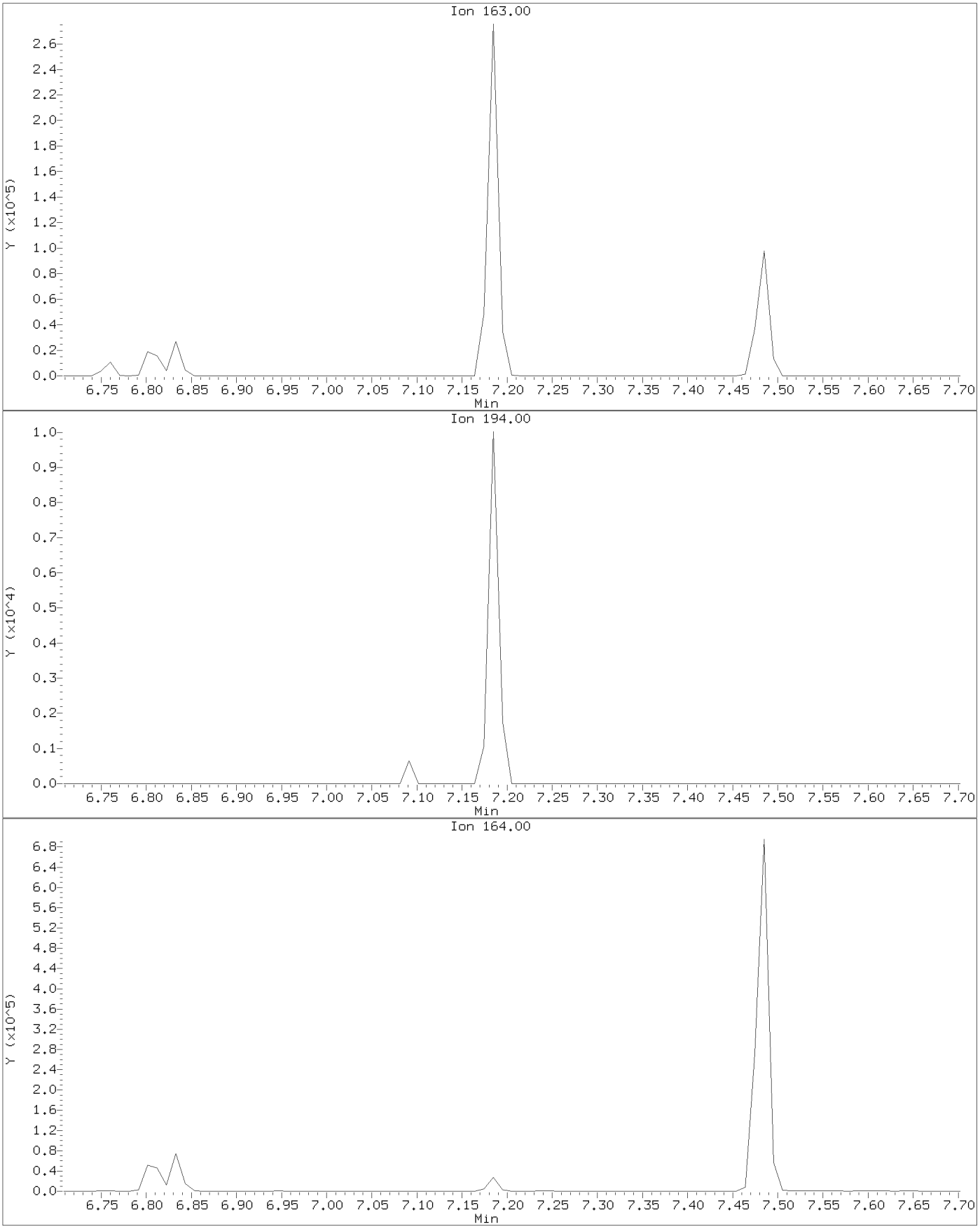
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Injection Date: 23-MAR-2015 15:39
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

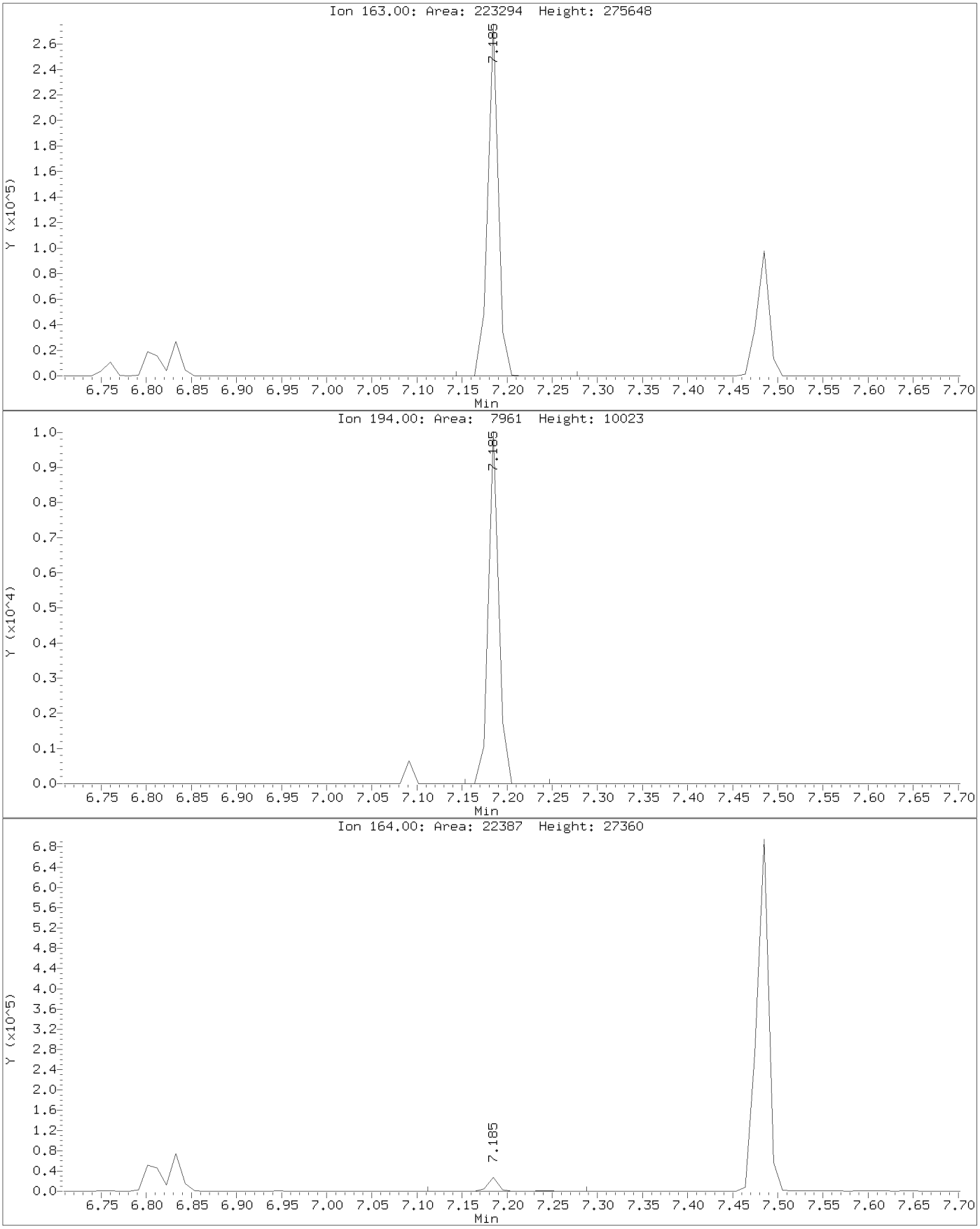
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\U9722.D
Injection Date: 23-MAR-2015 15:39
Instrument: gcms-u.i
Client Sample ID:

Compound: Dimethyl Phthalate
CAS Number: 131-11-3

AFTER MANUAL INTEGRATION



Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2069
Lab ID : WG160781-2
Analytical Date: 04/06/15 15:10
Lab File ID : U9932.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
13 Phenol	1.83280	1.83502	1.83502	0.010	0.12128	20.01000	Averaged	
16 Bis(2-Chloroethyl)ether	1.26825	1.32820	1.32820	0.010	4.72708	20.00000	Averaged	
17 2-Chlorophenol	1.46805	1.43016	1.43016	0.010	-2.58137	20.00000	Averaged	
18 1,3-Dichlorobenzene	1.50750	1.45617	1.45617	0.010	-3.40508	20.00000	Averaged	
20 1,4-Dichlorobenzene	1.41341	1.39400	1.39400	0.010	-1.37357	20.01000	Averaged	
22 1,2-Dichlorobenzene	1.39134	1.37567	1.37567	0.010	-1.12631	20.00000	Averaged	
23 2-Methylphenol	1.35067	1.29392	1.29392	0.010	-4.20154	20.00000	Averaged	
25 2,2'-Oxybis(1-chloropropane	1.46540	1.41168	1.41168	0.010	-3.66625	20.00000	Averaged	
28 3&4-Methylphenol	1.11346	1.25375	1.25375	0.010	12.59927	20.00000	Averaged	
30 N-Nitroso-di-n-propylamine	0.75487	0.75614	0.75614	0.050	0.16804	20.00000	Averaged	
32 Hexachloroethane	0.63826	0.62514	0.62514	0.010	-2.05539	20.00000	Averaged	
34 Nitrobenzene	0.32812	0.32525	0.32525	0.010	-0.87611	20.00000	Averaged	
36 Isophorone	0.68511	0.66238	0.66238	0.010	-3.31762	20.00000	Averaged	
37 2-Nitrophenol	0.19711	0.19219	0.19219	0.010	-2.49360	20.01000	Averaged	
38 2,4-Dimethylphenol	0.35361	0.34121	0.34121	0.010	-3.50778	20.00000	Averaged	
40 Bis(2-Chloroethoxy)methane	0.47995	0.49847	0.49847	0.010	3.85811	20.00000	Averaged	
42 2,4-Dichlorophenol	0.26268	0.27573	0.27573	0.010	4.96607	20.01000	Averaged	
43 1,2,4-Trichlorobenzene	0.27482	0.27973	0.27973	0.010	1.78789	20.00000	Averaged	
46 Naphthalene	50.00000	47.73953	0.86728	0.010	-4.52094	20.00000	Quadratic	
47 4-Chloroaniline	0.40025	0.37782	0.37782	0.010	-5.60465	20.00000	Averaged	
50 Hexachlorobutadiene	50.00000	48.13131	0.14503	0.010	-3.73737	20.01000	Quadratic	
54 4-Chloro-3-Methylphenol	0.28042	0.28288	0.28288	0.010	0.87590	20.01000	Averaged	
56 2-Methylnaphthalene	0.59499	0.61107	0.61107	0.010	2.70240	20.00000	Averaged	
59 Hexachlorocyclopentadiene	0.33335	0.29686	0.29686	0.050	-10.94620	20.00000	Averaged	
61 2,4,6-Trichlorophenol	0.33965	0.34826	0.34826	0.010	2.53637	20.01000	Averaged	
62 2,4,5-Trichlorophenol	0.36064	0.38350	0.38350	0.010	6.33882	20.00000	Averaged	
66 2-Chloronaphthalene	1.15799	1.20620	1.20620	0.010	4.16323	20.00000	Averaged	
69 2-Nitroaniline	0.38426	0.31345	0.31345	0.010	-18.42717	20.00000	Averaged	
72 Dimethyl Phthalate	1.27109	1.29971	1.29971	0.010	2.25102	20.00000	Averaged	
74 2,6-Dinitrotoluene	0.28475	0.29891	0.29891	0.010	4.97059	20.00000	Averaged	
75 Acenaphthylene	1.67812	1.70545	1.70545	0.010	1.62882	20.00000	Averaged	
77 3-Nitroaniline	0.34042	0.34293	0.34293	0.010	0.73954	20.00000	Averaged	
79 Acenaphthene	0.99720	0.98002	0.98002	0.010	-1.72310	20.01000	Averaged	
80 2,4-Dinitrophenol	0.16089	0.16001	0.16001	0.050	-0.54906	20.00000	Averaged	
81 4-Nitrophenol	0.22460	0.13937	0.13937	0.050	-37.94663	20.00000	Averaged	*
83 Dibenzofuran	1.33362	1.42438	1.42438	0.010	6.80532	20.00000	Averaged	
84 2,4-Dinitrotoluene	0.35346	0.38767	0.38767	0.010	9.68090	20.00000	Averaged	
89 Diethylphthalate	1.21459	1.33999	1.33999	0.010	10.32404	20.00000	Averaged	
90 Fluorene	50.00000	48.83274	1.00688	0.010	-2.33451	20.00000	Quadratic	
92 4-Chlorophenyl-phenylether	50.00000	56.61973	0.46754	0.010	13.23946	20.00000	Quadratic	
94 4-Nitroaniline	0.27407	0.27999	0.27999	0.010	2.15795	20.00000	Averaged	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2069
Lab ID : WG160781-2
Analytical Date: 04/06/15 15:10
Lab File ID : U9932.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

	Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
95	4,6-Dinitro-2-Methylphenol	0.12580	0.12676	0.12676	0.010	0.76272	20.00000	Averaged	
96	N-Nitrosodiphenylamine	0.60240	0.63099	0.63099	0.010	4.74448	20.01000	Averaged	
106	4-Bromophenyl-phenylether	50.00000	48.35542	0.19818	0.010	-3.28916	20.00000	Quadratic	
107	Hexachlorobenzene	0.24503	0.25059	0.25059	0.010	2.27211	20.00000	Averaged	
110	Pentachlorophenol	0.14222	0.11211	0.11211	0.010	-21.17084	20.01000	Averaged	*
115	Phenanthrene	50.00000	43.51252	0.78342	0.010	-12.97497	20.00000	Quadratic	
118	Anthracene	0.94324	0.91063	0.91063	0.010	-3.45712	20.00000	Averaged	
119	Carbazole	0.84890	0.84067	0.84067	0.010	-0.97050	20.00000	Averaged	
121	Di-n-butylphthalate	1.26215	1.19499	1.19499	0.010	-5.32087	20.00000	Averaged	
126	Fluoranthene	50.00000	47.07796	0.82999	0.010	-5.84408	20.01000	Quadratic	
128	Pyrene	1.44051	1.42276	1.42276	0.010	-1.23258	20.00000	Averaged	
136	Butylbenzylphthalate	0.75083	0.72235	0.72235	0.010	-3.79291	20.00000	Averaged	
139	Benzo(a)anthracene	0.97686	0.95056	0.95056	0.010	-2.69275	20.00000	Averaged	
140	3,3'-Dichlorobenzidine	0.28036	0.27779	0.27779	0.010	-0.91472	20.00000	Averaged	
142	Chrysene	0.94750	0.90422	0.90422	0.010	-4.56806	20.00000	Averaged	
143	bis(2-Ethylhexyl)phthalate	1.01251	0.99517	0.99517	0.010	-1.71240	20.00000	Averaged	
144	Di-n-octylphthalate	2.59615	2.38987	2.38987	0.010	-7.94557	20.01000	Averaged	
145	Benzo(b)fluoranthene	1.22310	1.14631	1.14631	0.010	-6.27838	20.00000	Averaged	
147	Benzo(k)fluoranthene	1.22644	1.16937	1.16937	0.010	-4.65329	20.00000	Averaged	
149	Benzo(a)pyrene	1.00954	0.97006	0.97006	0.010	-3.91128	20.01000	Averaged	
153	Indeno(1,2,3-cd)pyrene	0.54351	0.60838	0.60838	0.010	11.93498	20.00000	Averaged	
154	Dibenzo(a,h)anthracene	0.54297	0.59735	0.59735	0.010	10.01633	20.00000	Averaged	
155	Benzo(g,h,i)perylene	0.60575	0.68599	0.68599	0.010	13.24683	20.00000	Averaged	
8	2-Fluorophenol	1.51266	1.37274	1.37274	0.010	-9.25015	20.00000	Averaged	
12	Phenol-D6	1.75431	1.70942	1.70942	0.010	-2.55896	20.00000	Averaged	
33	Nitrobenzene-D5	0.35791	0.34806	0.34806	0.010	-2.75157	20.00000	Averaged	
63	2-Fluorobiphenyl	1.16214	1.19792	1.19792	0.010	3.07877	20.00000	Averaged	
100	2,4,6-Tribromophenol	0.21066	0.21463	0.21463	0.010	1.88494	20.00000	Averaged	
129	Terphenyl-D14	0.95170	0.95182	0.95182	0.010	0.01239	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2069
Lab ID : WG160781-2
Analytical Date: 04/06/15 15:10
Lab File ID : U9932.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Report Date: 09-Apr-2015 15:53

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Lab Smp Id: WG160781-2
Inj Date : 06-APR-2015 15:10 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160781-2,SI2069
Misc Info : WG160781,WG160781,WG160080-4,SI2069-3
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.931	2.931	(0.730)	515725	50.0000	45.4	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	642213	50.0000	48.7	
13 Phenol	94	3.676	3.676	(0.915)	689398	50.0000	50.1	
16 Bis(2-Chloroethyl)ether	93	3.759	3.759	(0.936)	498991	50.0000	52.4	
17 2-Chlorophenol	128	3.831	3.831	(0.954)	537296	50.0000	48.7	
18 1,3-Dichlorobenzene	146	3.966	3.966	(0.987)	547069	50.0000	48.3	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	300552	40.0000		
20 1,4-Dichlorobenzene	146	4.038	4.038	(1.005)	523710	50.0000	49.3	
22 1,2-Dichlorobenzene	146	4.194	4.194	(1.044)	516826	50.0000	49.4	
23 2-Methylphenol	108	4.266	4.266	(1.062)	486114	50.0000	47.9	
25 2,2'-Oxybis(1-chloropropane)	45	4.287	4.287	(1.067)	530353	50.0000	48.2	
28 3&4-Methylphenol	108	4.442	4.442	(1.106)	471021	50.0000	56.3	
30 N-Nitroso-di-n-propylamine	70	4.442	4.442	(1.106)	284075	50.0000	50.1	
32 Hexachloroethane	117	4.535	4.535	(1.129)	234860	50.0000	49.0	
$ 33 Nitrobenzene-D5	82	4.587	4.587	(0.854)	504356	50.0000	48.6	
34 Nitrobenzene	77	4.608	4.608	(0.857)	471296	50.0000	49.6	
36 Isophorone	82	4.866	4.866	(0.906)	959823	50.0000	48.3	
37 2-Nitrophenol	139	4.949	4.949	(0.921)	278495	50.0000	48.8	
38 2,4-Dimethylphenol	107	5.011	5.011	(0.933)	494421	50.0000	48.2	
40 Bis(2-Chloroethoxy)methane	93	5.104	5.104	(0.950)	722300	50.0000	51.9	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Report Date: 09-Apr-2015 15:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.229	5.229	(0.973)	399539	50.0000	52.5	
	43 1,2,4-Trichlorobenzene	180	5.311	5.311	(0.988)	405340	50.0000	50.9	
*	45 Naphthalene-D8	136	5.373	5.373	(1.000)	1159234	40.0000		
	46 Naphthalene	128	5.394	5.394	(1.004)	1256723	50.0000	47.7	
	47 4-Chloroaniline	127	5.467	5.467	(1.017)	547478	50.0000	47.2	
	50 Hexachlorobutadiene	225	5.549	5.549	(1.033)	210154	50.0000	48.1	
	54 4-Chloro-3-Methylphenol	107	6.067	6.067	(1.129)	409906	50.0000	50.4	
	56 2-Methylnaphthalene	142	6.201	6.201	(1.154)	885467	50.0000	51.4	
	59 Hexachlorocyclopentadiene	237	6.408	6.408	(0.860)	223686	50.0000	44.5	
	61 2,4,6-Trichlorophenol	196	6.564	6.564	(0.881)	262418	50.0000	51.3	
	62 2,4,5-Trichlorophenol	196	6.605	6.605	(0.886)	288967	50.0000	53.2	
$	63 2-Fluorobiphenyl	172	6.657	6.657	(0.893)	902639	50.0000	51.5	
	66 2-Chloronaphthalene	162	6.781	6.781	(0.910)	908875	50.0000	52.1	
	69 2-Nitroaniline	65	6.926	6.926	(0.929)	236188	50.0000	40.8	
	72 Dimethyl Phthalate	163	7.174	7.174	(0.963)	979332	50.0000	51.1	
	75 Acenaphthylene	152	7.278	7.278	(0.976)	1285063	50.0000	50.8	
	74 2,6-Dinitrotoluene	165	7.226	7.226	(0.969)	225228	50.0000	52.5	
*	78 Acenaphthene-D10	164	7.454	7.454	(1.000)	602802	40.0000		
	77 3-Nitroaniline	138	7.443	7.443	(0.999)	258401	50.0000	50.4	
	79 Acenaphthene	153	7.495	7.495	(1.006)	738449	50.0000	49.1	
	80 2,4-Dinitrophenol	184	7.578	7.578	(1.017)	120567	50.0000	49.7	
	81 4-Nitrophenol	139	7.692	7.692	(1.032)	105015	50.0000	31.0(M)	M3
	83 Dibenzofuran	168	7.702	7.702	(1.033)	1073271	50.0000	53.4	
	84 2,4-Dinitrotoluene	165	7.733	7.733	(1.037)	292114	50.0000	54.8	
	89 Diethylphthalate	149	8.033	8.033	(1.078)	1009683	50.0000	55.2	
	92 4-Chlorophenyl-phenylether	204	8.137	8.137	(1.092)	352293	50.0000	56.6	
	90 Fluorene	166	8.127	8.127	(1.090)	758689	50.0000	48.8	
	94 4-Nitroaniline	138	8.189	8.189	(1.099)	210971	50.0000	51.1	
	95 4,6-Dinitro-2-Methylphenol	198	8.230	8.230	(0.888)	152775	50.0000	50.4	
	96 N-Nitrosodiphenylamine	169	8.292	8.292	(0.895)	760494	50.0000	52.4	
$	100 2,4,6-Tribromophenol	330	8.427	8.427	(1.131)	161725	50.0000	50.9	
	106 4-Bromophenyl-phenylether	248	8.727	8.727	(0.942)	238860	50.0000	48.4	
	107 Hexachlorobenzene	284	8.820	8.820	(0.952)	302026	50.0000	51.1	
	110 Pentachlorophenol	266	9.068	9.068	(0.979)	135117	50.0000	39.4	
*	114 Phenanthrene-D10	188	9.265	9.265	(1.000)	964198	40.0000		
	115 Phenanthrene	178	9.296	9.296	(1.003)	944209	50.0000	43.5	
	118 Anthracene	178	9.358	9.358	(1.010)	1097539	50.0000	48.3	
	119 Carbazole	167	9.565	9.565	(1.032)	1013210	50.0000	49.5	
	121 Di-n-butylphthalate	149	10.031	10.031	(1.083)	1440264	50.0000	47.3	
	126 Fluoranthene	202	10.755	10.755	(1.161)	1000340	50.0000	47.1	
	128 Pyrene	202	11.025	11.025	(0.861)	971113	50.0000	49.4	
$	129 Terphenyl-D14	244	11.242	11.242	(0.878)	649671	50.0000	50.0	
	136 Butylbenzylphthalate	149	11.946	11.946	(0.933)	493046	50.0000	48.1	
*	141 Chrysene-D12	240	12.805	12.805	(1.000)	546045	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.774	12.774	(0.998)	189608	50.0000	49.5	
	139 Benzo(a)anthracene	228	12.784	12.784	(0.998)	648811	50.0000	48.6	
	142 Chrysene	228	12.846	12.846	(1.003)	617181	50.0000	47.7	
	143 bis(2-Ethylhexyl)phthalate	149	12.960	12.960	(1.012)	679262	50.0000	49.1	
	144 Di-n-octylphthalate	149	14.295	14.295	(0.908)	986958	50.0000	46.0	
	145 Benzo(b)fluoranthene	252	14.958	14.958	(0.950)	473398	50.0000	46.9	
	147 Benzo(k)fluoranthene	252	15.009	15.009	(0.953)	482921	50.0000	47.7(H)	
	149 Benzo(a)pyrene	252	15.630	15.630	(0.993)	400610	50.0000	48.0	
*	150 Perylene-D12	264	15.744	15.744	(1.000)	330380	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.504	17.504	(1.112)	251247	50.0000	56.0	

4/9

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Report Date: 09-Apr-2015 15:53

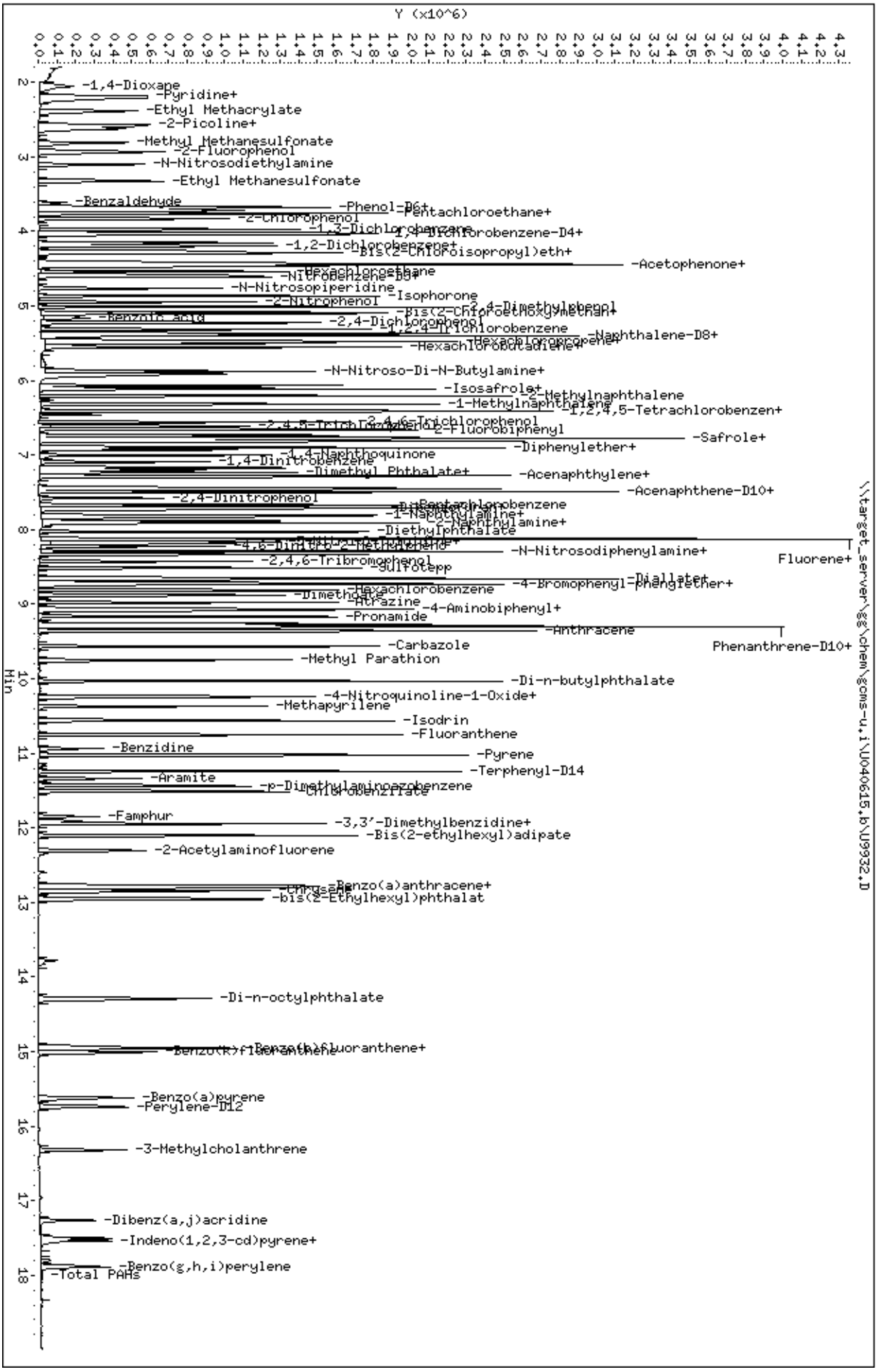
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.545	17.545	(1.114)	246691	50.0000	55.0	
155 Benzo(g,h,i)perylene	276	17.887	17.887	(1.136)	283296	50.0000	56.6	

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Date : 06-APR-2015 15:10
Client ID:
Sample Info: WG160781-2,SI2069
Volume Injected (uL): 1.0
Column phase: ZB5-MS

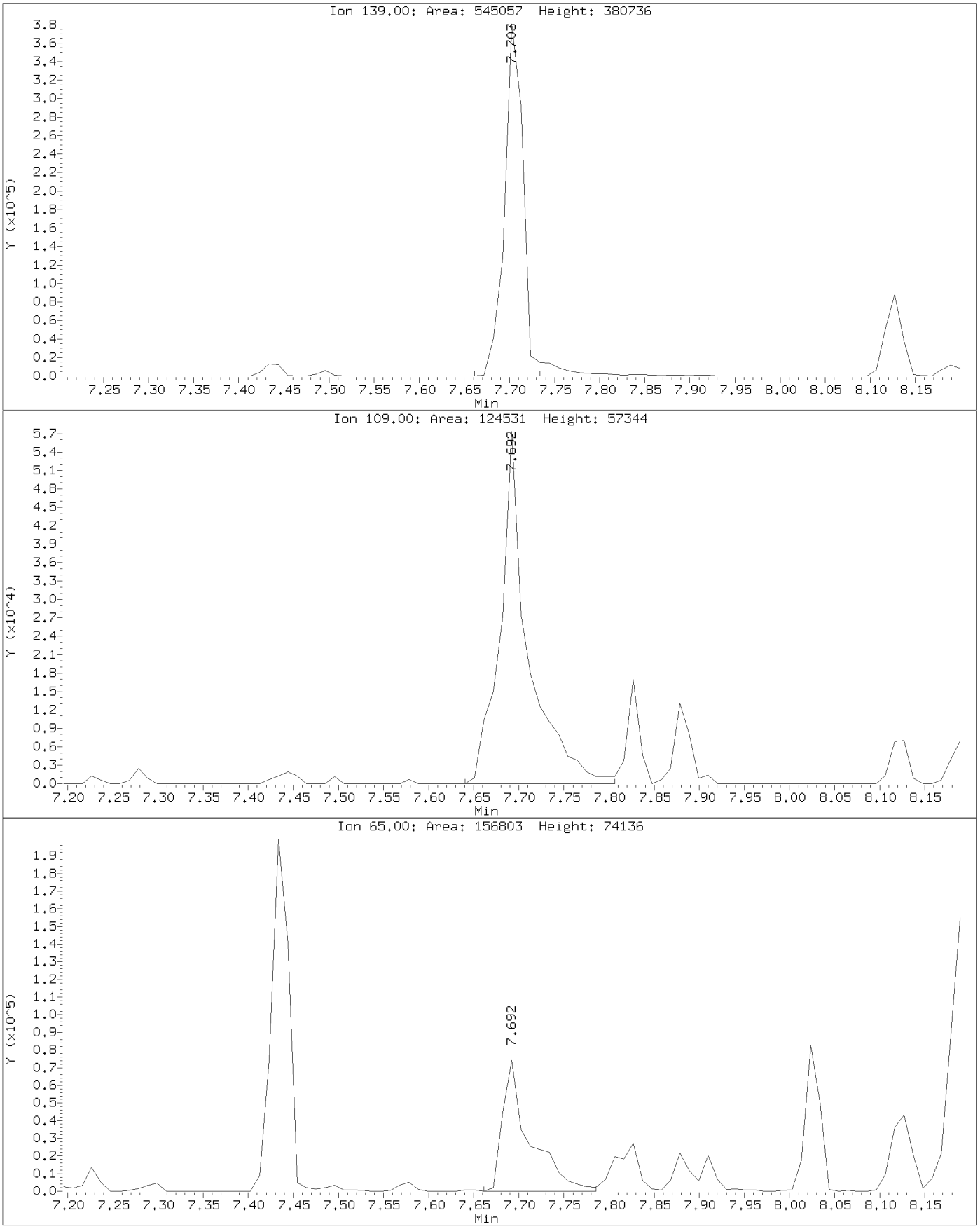
Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Injection Date: 06-APR-2015 15:10
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

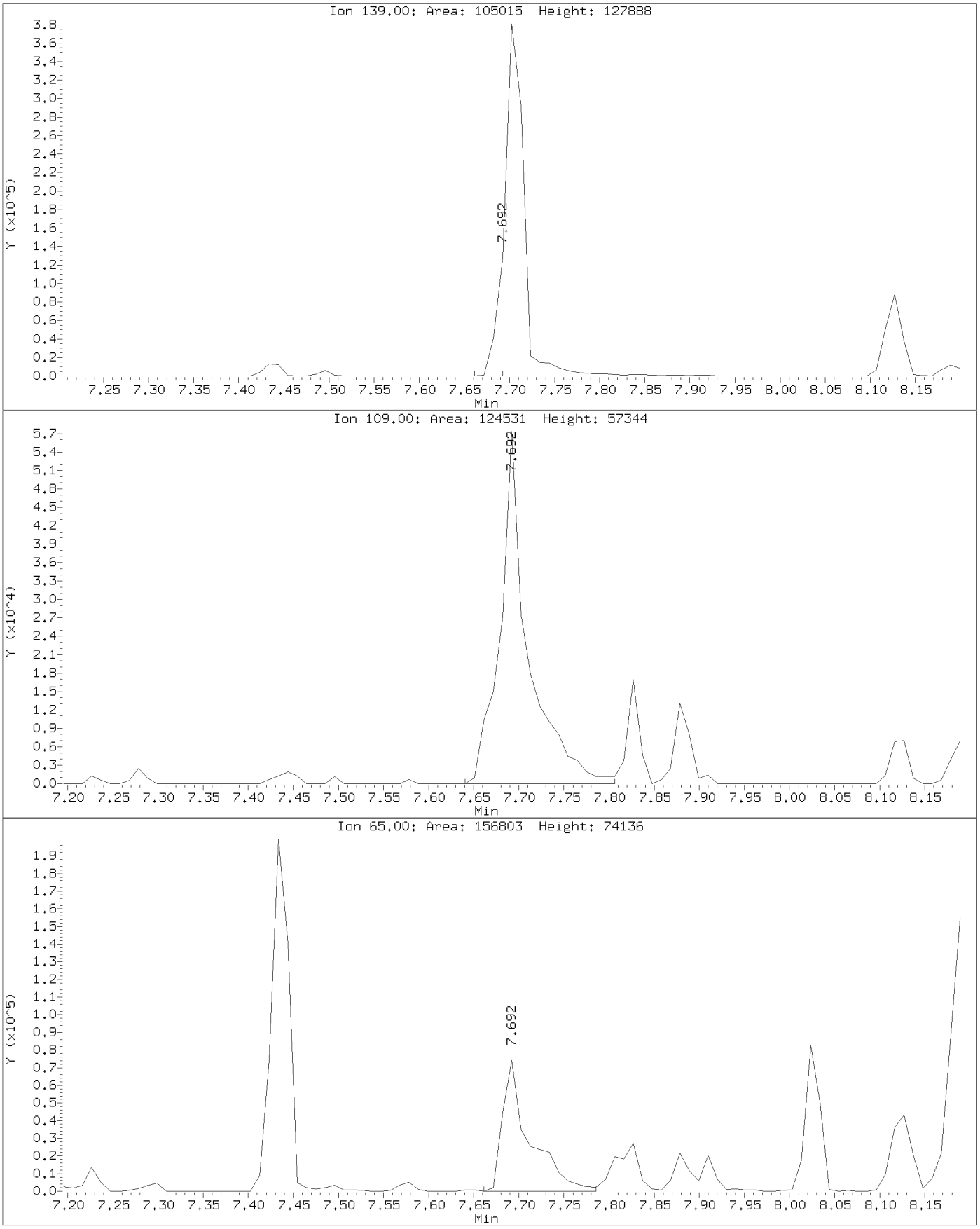
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9932.D
Injection Date: 06-APR-2015 15:10
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

AFTER MANUAL INTEGRATION



Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2069
Lab ID : WG160877-2
Analytical Date: 04/08/15 13:30
Lab File ID : U9982.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
13 Phenol	1.83280	1.83811	1.83811	0.010	0.28994	20.01000	Averaged	
16 Bis(2-Chloroethyl)ether	1.26825	1.27522	1.27522	0.010	0.54975	20.00000	Averaged	
17 2-Chlorophenol	1.46805	1.43339	1.43339	0.010	-2.36143	20.00000	Averaged	
18 1,3-Dichlorobenzene	1.50750	1.50663	1.50663	0.010	-0.05787	20.00000	Averaged	
20 1,4-Dichlorobenzene	1.41341	1.41210	1.41210	0.010	-0.09242	20.01000	Averaged	
22 1,2-Dichlorobenzene	1.39134	1.40312	1.40312	0.010	0.84651	20.00000	Averaged	
23 2-Methylphenol	1.35067	1.29369	1.29369	0.010	-4.21844	20.00000	Averaged	
25 2,2'-Oxybis(1-chloropropane	1.46540	1.40244	1.40244	0.010	-4.29674	20.00000	Averaged	
28 3&4-Methylphenol	1.11346	1.24918	1.24918	0.010	12.18853	20.00000	Averaged	
30 N-Nitroso-di-n-propylamine	0.75487	0.71744	0.71744	0.050	-4.95908	20.00000	Averaged	
32 Hexachloroethane	0.63826	0.63581	0.63581	0.010	-0.38447	20.00000	Averaged	
34 Nitrobenzene	0.32812	0.33730	0.33730	0.010	2.79677	20.00000	Averaged	
36 Isophorone	0.68511	0.64516	0.64516	0.010	-5.83127	20.00000	Averaged	
37 2-Nitrophenol	0.19711	0.20010	0.20010	0.010	1.51824	20.01000	Averaged	
38 2,4-Dimethylphenol	0.35361	0.32879	0.32879	0.010	-7.02005	20.00000	Averaged	
40 Bis(2-Chloroethoxy)methane	0.47995	0.49317	0.49317	0.010	2.75459	20.00000	Averaged	
42 2,4-Dichlorophenol	0.26268	0.27039	0.27039	0.010	2.93315	20.01000	Averaged	
43 1,2,4-Trichlorobenzene	0.27482	0.27854	0.27854	0.010	1.35352	20.00000	Averaged	
46 Naphthalene	50.00000	48.27019	0.87488	0.010	-3.45962	20.00000	Quadratic	
47 4-Chloroaniline	0.40025	0.37902	0.37902	0.010	-5.30524	20.00000	Averaged	
50 Hexachlorobutadiene	50.00000	46.73758	0.14174	0.010	-6.52484	20.01000	Quadratic	
54 4-Chloro-3-Methylphenol	0.28042	0.27520	0.27520	0.010	-1.86394	20.01000	Averaged	
56 2-Methylnaphthalene	0.59499	0.57528	0.57528	0.010	-3.31239	20.00000	Averaged	
59 Hexachlorocyclopentadiene	0.33335	0.31325	0.31325	0.050	-6.03127	20.00000	Averaged	
61 2,4,6-Trichlorophenol	0.33965	0.34236	0.34236	0.010	0.79916	20.01000	Averaged	
62 2,4,5-Trichlorophenol	0.36064	0.37574	0.37574	0.010	4.18884	20.00000	Averaged	
66 2-Chloronaphthalene	1.15799	1.28041	1.28041	0.010	10.57193	20.00000	Averaged	
69 2-Nitroaniline	0.38426	0.29004	0.29004	0.010	-24.51932	20.00000	Averaged	*
72 Dimethyl Phthalate	1.27109	1.20380	1.20380	0.010	-5.29399	20.00000	Averaged	
74 2,6-Dinitrotoluene	0.28475	0.25361	0.25361	0.010	-10.93679	20.00000	Averaged	
75 Acenaphthylene	1.67812	1.59278	1.59278	0.010	-5.08563	20.00000	Averaged	
77 3-Nitroaniline	0.34042	0.29942	0.29942	0.010	-12.04151	20.00000	Averaged	
79 Acenaphthene	0.99720	0.99036	0.99036	0.010	-0.68665	20.01000	Averaged	
80 2,4-Dinitrophenol	0.16089	0.14012	0.14012	0.050	-12.90927	20.00000	Averaged	
81 4-Nitrophenol	0.22460	0.18090	0.18090	0.050	-19.45376	20.00000	Averaged	
83 Dibenzofuran	1.33362	1.28062	1.28062	0.010	-3.97415	20.00000	Averaged	
84 2,4-Dinitrotoluene	0.35346	0.33720	0.33720	0.010	-4.59884	20.00000	Averaged	
89 Diethylphthalate	1.21459	1.08017	1.08017	0.010	-11.06685	20.00000	Averaged	
90 Fluorene	50.00000	44.38835	0.93926	0.010	-11.22329	20.00000	Quadratic	
92 4-Chlorophenyl-phenylether	50.00000	48.03723	0.42104	0.010	-3.92555	20.00000	Quadratic	
94 4-Nitroaniline	0.27407	0.23328	0.23328	0.010	-14.88279	20.00000	Averaged	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2069
Lab ID : WG160877-2
Analytical Date: 04/08/15 13:30
Lab File ID : U9982.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

	Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
95	4,6-Dinitro-2-Methylphenol	0.12580	0.12937	0.12937	0.010	2.83823	20.00000	Averaged
96	N-Nitrosodiphenylamine	0.60240	0.62728	0.62728	0.010	4.12908	20.01000	Averaged
106	4-Bromophenyl-phenylether	50.00000	51.60947	0.20903	0.010	3.21894	20.00000	Quadratic
107	Hexachlorobenzene	0.24503	0.24609	0.24609	0.010	0.43350	20.00000	Averaged
110	Pentachlorophenol	0.14222	0.12465	0.12465	0.010	-12.35155	20.01000	Averaged
115	Phenanthrene	50.00000	48.07170	0.83856	0.010	-3.85659	20.00000	Quadratic
118	Anthracene	0.94324	0.98352	0.98352	0.010	4.27000	20.00000	Averaged
119	Carbazole	0.84890	0.80901	0.80901	0.010	-4.69914	20.00000	Averaged
121	Di-n-butylphthalate	1.26215	1.16534	1.16534	0.010	-7.67065	20.00000	Averaged
126	Fluoranthene	50.00000	43.84457	0.78497	0.010	-12.31085	20.01000	Quadratic
128	Pyrene	1.44051	1.39012	1.39012	0.010	-3.49860	20.00000	Averaged
136	Butylbenzylphthalate	0.75083	0.70579	0.70579	0.010	-5.99862	20.00000	Averaged
139	Benzo(a)anthracene	0.97686	0.97939	0.97939	0.010	0.25801	20.00000	Averaged
140	3,3'-Dichlorobenzidine	0.28036	0.28951	0.28951	0.010	3.26546	20.00000	Averaged
142	Chrysene	0.94750	0.92413	0.92413	0.010	-2.46683	20.00000	Averaged
143	bis(2-Ethylhexyl)phthalate	1.01251	0.95097	0.95097	0.010	-6.07847	20.00000	Averaged
144	Di-n-octylphthalate	2.59615	2.24176	2.24176	0.010	-13.65085	20.01000	Averaged
145	Benzo(b)fluoranthene	1.22310	1.13905	1.13905	0.010	-6.87203	20.00000	Averaged
147	Benzo(k)fluoranthene	1.22644	1.16191	1.16191	0.010	-5.26139	20.00000	Averaged
149	Benzo(a)pyrene	1.00954	0.97218	0.97218	0.010	-3.70121	20.01000	Averaged
153	Indeno(1,2,3-cd)pyrene	0.54351	0.56275	0.56275	0.010	3.53904	20.00000	Averaged
154	Dibenzo(a,h)anthracene	0.54297	0.55672	0.55672	0.010	2.53233	20.00000	Averaged
155	Benzo(g,h,i)perylene	0.60575	0.54832	0.54832	0.010	-9.48031	20.00000	Averaged
8	2-Fluorophenol	1.51266	1.41646	1.41646	0.010	-6.35992	20.00000	Averaged
12	Phenol-D6	1.75431	1.69344	1.69344	0.010	-3.46999	20.00000	Averaged
33	Nitrobenzene-D5	0.35791	0.35588	0.35588	0.010	-0.56706	20.00000	Averaged
63	2-Fluorobiphenyl	1.16214	1.13096	1.13096	0.010	-2.68325	20.00000	Averaged
100	2,4,6-Tribromophenol	0.21066	0.19581	0.19581	0.010	-7.05130	20.00000	Averaged
129	Terphenyl-D14	0.95170	0.93493	0.93493	0.010	-1.76217	20.00000	Averaged

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE15-03-06 NWIRP Bethpage, I
SDG: SI2069
Lab ID : WG160877-2
Analytical Date: 04/08/15 13:30
Lab File ID : U9982.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 03/23/15 15:13 03/23/15 17:23
Column ID:

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9982.D
Report Date: 09-Apr-2015 15:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9982.D
Lab Smp Id: WG160877-2
Inj Date : 08-APR-2015 13:30 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160877-2,SI2069
Misc Info : WG160877,WG160877,WG160080-4,SI2069-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.911	2.911	(0.726)	639422	50.0000	46.8	
$ 12 Phenol-D6	99	3.656	3.656	(0.912)	764457	50.0000	48.3	
13 Phenol	94	3.677	3.677	(0.917)	829764	50.0000	50.1	
16 Bis(2-Chloroethyl)ether	93	3.750	3.750	(0.935)	575663	50.0000	50.3	
17 2-Chlorophenol	128	3.822	3.822	(0.954)	647063	50.0000	48.8	
18 1,3-Dichlorobenzene	146	3.957	3.957	(0.987)	680127	50.0000	50.0	
* 19 1,4-Dichlorobenzene-D4	152	4.008	4.008	(1.000)	361138	40.0000		
20 1,4-Dichlorobenzene	146	4.029	4.029	(1.005)	637455	50.0000	50.0	
22 1,2-Dichlorobenzene	146	4.174	4.174	(1.041)	633400	50.0000	50.4	
23 2-Methylphenol	108	4.257	4.257	(1.062)	584003	50.0000	47.9	
25 2,2'-Oxybis(1-chloropropane)	45	4.277	4.277	(1.067)	633092	50.0000	47.8	
28 3&4-Methylphenol	108	4.433	4.433	(1.106)	563906	50.0000	56.1	
30 N-Nitroso-di-n-propylamine	70	4.433	4.433	(1.106)	323868	50.0000	47.5	
32 Hexachloroethane	117	4.515	4.515	(1.127)	287018	50.0000	49.8	
$ 33 Nitrobenzene-D5	82	4.578	4.578	(0.853)	606458	50.0000	49.7	
34 Nitrobenzene	77	4.598	4.598	(0.857)	574792	50.0000	51.4	
36 Isophorone	82	4.857	4.857	(0.905)	1099427	50.0000	47.1	
37 2-Nitrophenol	139	4.940	4.940	(0.921)	340992	50.0000	50.8	
38 2,4-Dimethylphenol	107	5.002	5.002	(0.932)	560286	50.0000	46.5	
40 Bis(2-Chloroethoxy)methane	93	5.095	5.095	(0.950)	840416	50.0000	51.4	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9982.D
Report Date: 09-Apr-2015 15:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.219	5.219	(0.973)	460767	50.0000	51.5	
	43 1,2,4-Trichlorobenzene	180	5.302	5.302	(0.988)	474655	50.0000	50.7	
*	45 Naphthalene-D8	136	5.364	5.364	(1.000)	1363286	40.0000		
	46 Naphthalene	128	5.385	5.385	(1.004)	1490888	50.0000	48.3	
	47 4-Chloroaniline	127	5.457	5.457	(1.017)	645889	50.0000	47.3	
	50 Hexachlorobutadiene	225	5.540	5.540	(1.033)	241541	50.0000	46.7	
	54 4-Chloro-3-Methylphenol	107	6.058	6.058	(1.129)	468966	50.0000	49.1	
	56 2-Methylnaphthalene	142	6.192	6.192	(1.154)	980344	50.0000	48.3	
	59 Hexachlorocyclopentadiene	237	6.399	6.399	(0.860)	273149	50.0000	47.0	
	61 2,4,6-Trichlorophenol	196	6.554	6.554	(0.880)	298540	50.0000	50.4	
	62 2,4,5-Trichlorophenol	196	6.596	6.596	(0.886)	327648	50.0000	52.1	
$	63 2-Fluorobiphenyl	172	6.637	6.637	(0.892)	986194	50.0000	48.6	
	66 2-Chloronaphthalene	162	6.772	6.772	(0.910)	1116515	50.0000	55.3(H)	
	69 2-Nitroaniline	65	6.917	6.917	(0.929)	252917	50.0000	37.7	
	72 Dimethyl Phthalate	163	7.165	7.165	(0.962)	1049711	50.0000	47.4	
	75 Acenaphthylene	152	7.269	7.269	(0.976)	1388895	50.0000	47.4	
	74 2,6-Dinitrotoluene	165	7.217	7.217	(0.969)	221148	50.0000	44.5	
*	78 Acenaphthene-D10	164	7.445	7.445	(1.000)	697597	40.0000		
	77 3-Nitroaniline	138	7.424	7.424	(0.997)	261097	50.0000	44.0	
	79 Acenaphthene	153	7.486	7.486	(1.006)	863588	50.0000	49.6	
	80 2,4-Dinitrophenol	184	7.569	7.569	(1.017)	122186	50.0000	43.5	
	81 4-Nitrophenol	139	7.683	7.683	(1.032)	157747	50.0000	40.3(M)	
	83 Dibenzofuran	168	7.693	7.693	(1.033)	1116695	50.0000	48.0	
	84 2,4-Dinitrotoluene	165	7.714	7.714	(1.036)	294039	50.0000	47.7	
	89 Diethylphthalate	149	8.014	8.014	(1.076)	941908	50.0000	44.5	
	92 4-Chlorophenyl-phenylether	204	8.117	8.117	(1.090)	367142	50.0000	48.0	
	90 Fluorene	166	8.107	8.107	(1.089)	819031	50.0000	44.4	
	94 4-Nitroaniline	138	8.179	8.179	(1.099)	203422	50.0000	42.6	
	95 4,6-Dinitro-2-Methylphenol	198	8.210	8.210	(0.887)	157288	50.0000	51.4	
	96 N-Nitrosodiphenylamine	169	8.273	8.273	(0.894)	762650	50.0000	52.1	
$	100 2,4,6-Tribromophenol	330	8.417	8.417	(1.131)	170742	50.0000	46.5	
	106 4-Bromophenyl-phenylether	248	8.718	8.718	(0.942)	254140	50.0000	51.6	
	107 Hexachlorobenzene	284	8.800	8.800	(0.951)	299195	50.0000	50.2	
	110 Pentachlorophenol	266	9.059	9.059	(0.979)	151550	50.0000	43.8	
*	114 Phenanthrene-D10	188	9.256	9.256	(1.000)	972646	40.0000		
	115 Phenanthrene	178	9.287	9.287	(1.003)	1019526	50.0000	48.1	
	118 Anthracene	178	9.349	9.349	(1.010)	1195770	50.0000	52.1	
	119 Carbazole	167	9.556	9.556	(1.032)	983604	50.0000	47.6	
	121 Di-n-butylphthalate	149	10.011	10.011	(1.082)	1416825	50.0000	46.2	
	126 Fluoranthene	202	10.736	10.736	(1.160)	954373	50.0000	43.8	
	128 Pyrene	202	11.005	11.005	(0.861)	972192	50.0000	48.2	
$	129 Terphenyl-D14	244	11.222	11.222	(0.878)	653854	50.0000	49.1	
	136 Butylbenzylphthalate	149	11.926	11.926	(0.934)	493602	50.0000	47.0	
*	141 Chrysene-D12	240	12.775	12.775	(1.000)	559488	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.754	12.754	(0.998)	202472	50.0000	51.6	
	139 Benzo(a)anthracene	228	12.764	12.764	(0.999)	684943	50.0000	50.1	
	142 Chrysene	228	12.827	12.827	(1.004)	646299	50.0000	48.8	
	143 bis(2-Ethylhexyl)phthalate	149	12.930	12.930	(1.012)	665068	50.0000	47.0	
	144 Di-n-octylphthalate	149	14.265	14.265	(0.908)	991125	50.0000	43.2	
	145 Benzo(b)fluoranthene	252	14.928	14.928	(0.950)	503597	50.0000	46.6	
	147 Benzo(k)fluoranthene	252	14.979	14.979	(0.953)	513705	50.0000	47.4(H)	
	149 Benzo(a)pyrene	252	15.600	15.600	(0.993)	429820	50.0000	48.1	
*	150 Perylene-D12	264	15.714	15.714	(1.000)	353696	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.474	17.474	(1.112)	248803	50.0000	51.8	

M3

4:08 pm, Apr 09, 2015

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9982.D
Report Date: 09-Apr-2015 15:54

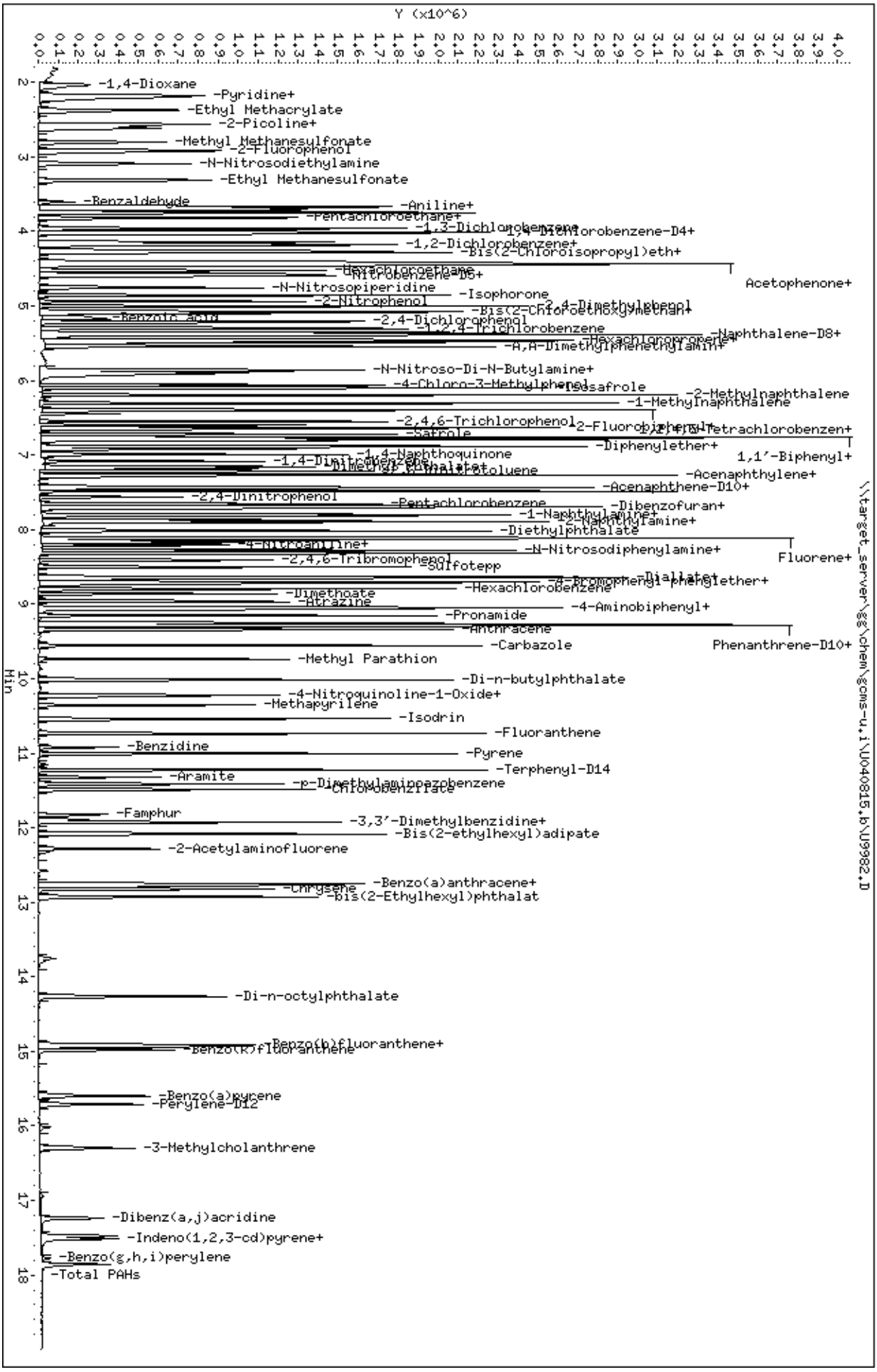
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.515	17.515	(1.115)	246135	50.0000	51.3	
155 Benzo(g,h,i)perylene	276	17.857	17.857	(1.136)	242423	50.0000	45.2	

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9982,D
Date : 08-APR-2015 13:30
Client ID:
Sample Info: WG160877-2,SI2069
Volume Injected (uL): 1.0
Column phase: ZB5-MS

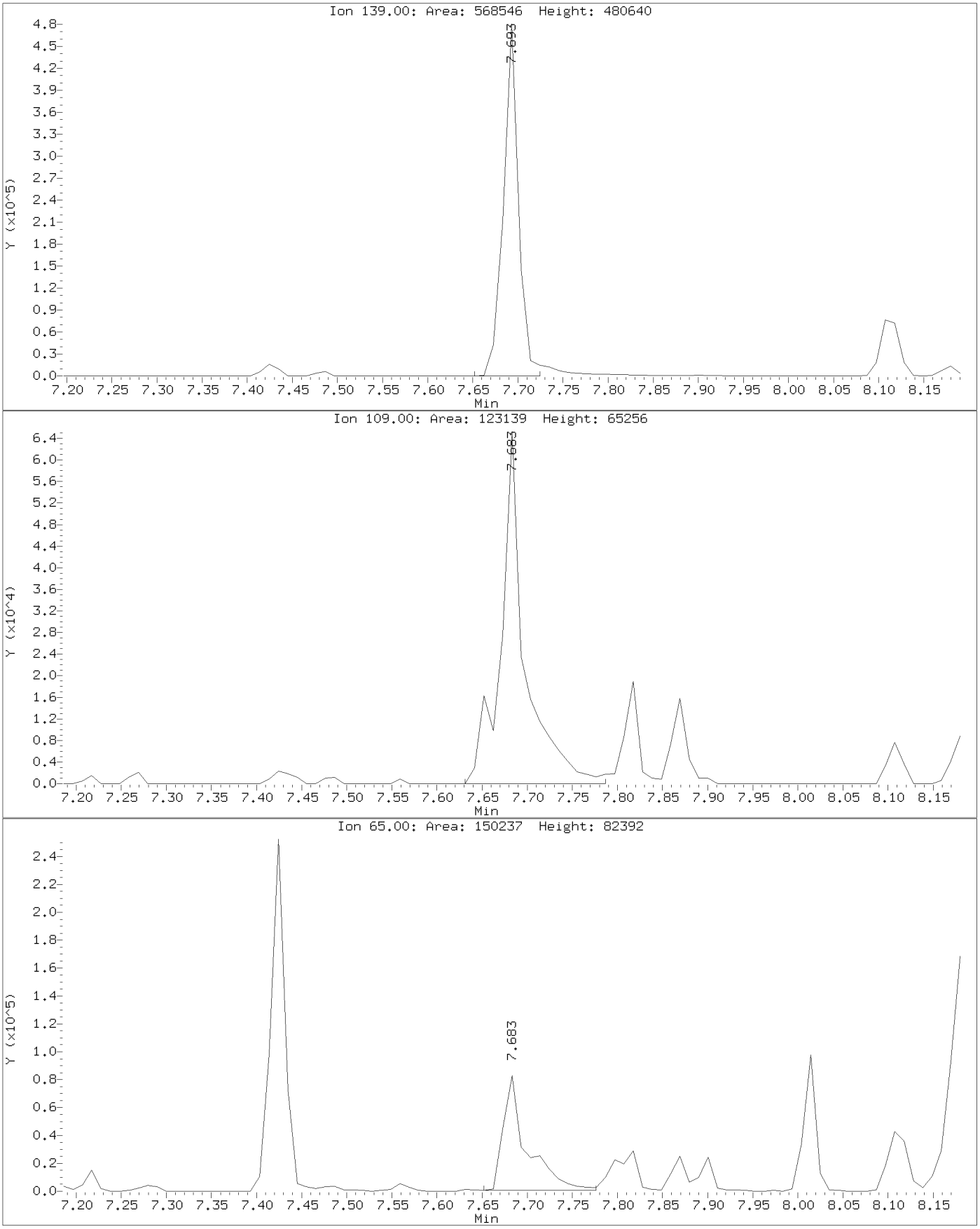
Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9982.D
Injection Date: 08-APR-2015 13:30
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

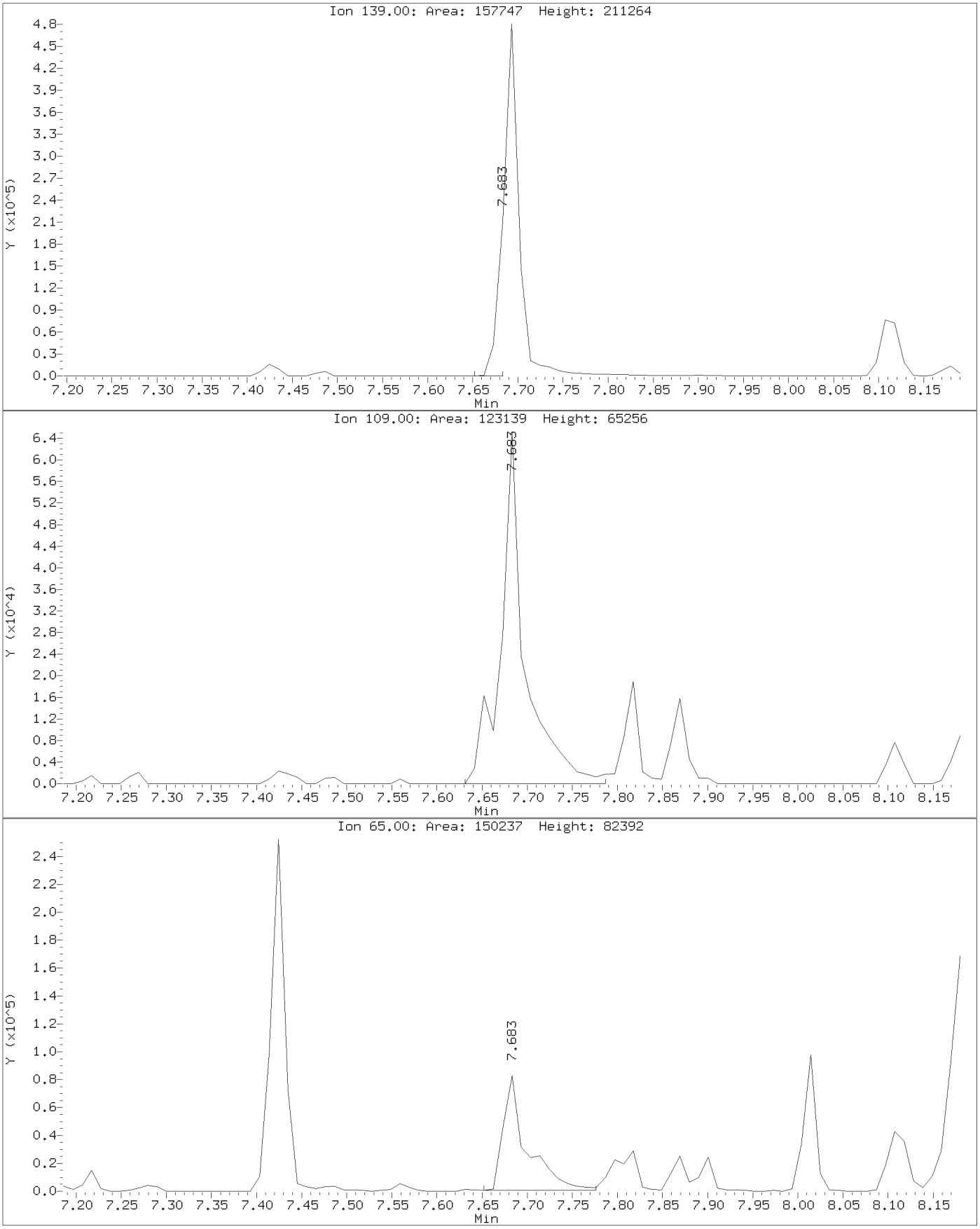
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9982.D
Injection Date: 08-APR-2015 13:30
Instrument: gcms-u.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\UD340.D

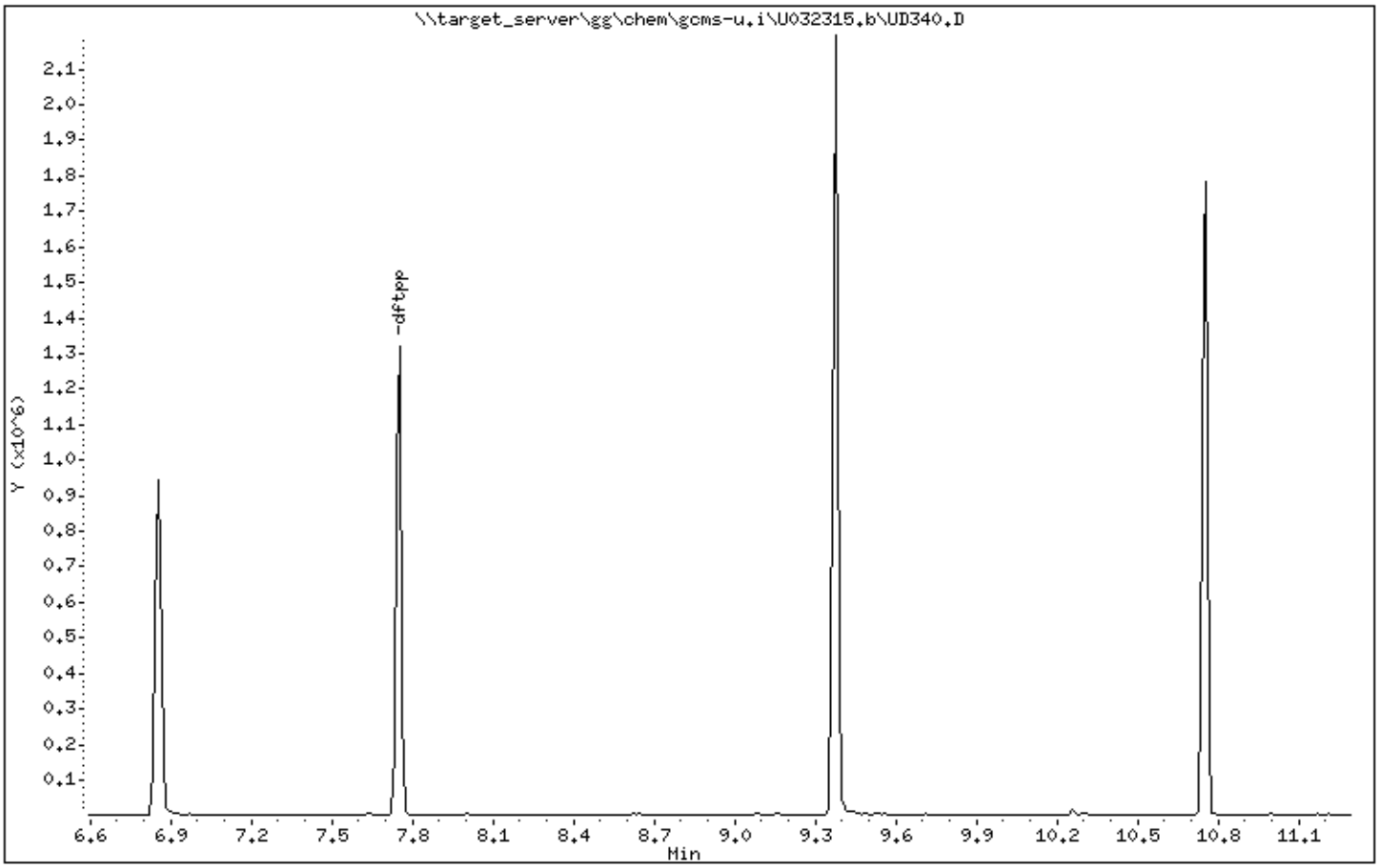
Date : 23-MAR-2015 14:55

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160080-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\UD340.D

Date : 23-MAR-2015 14:55

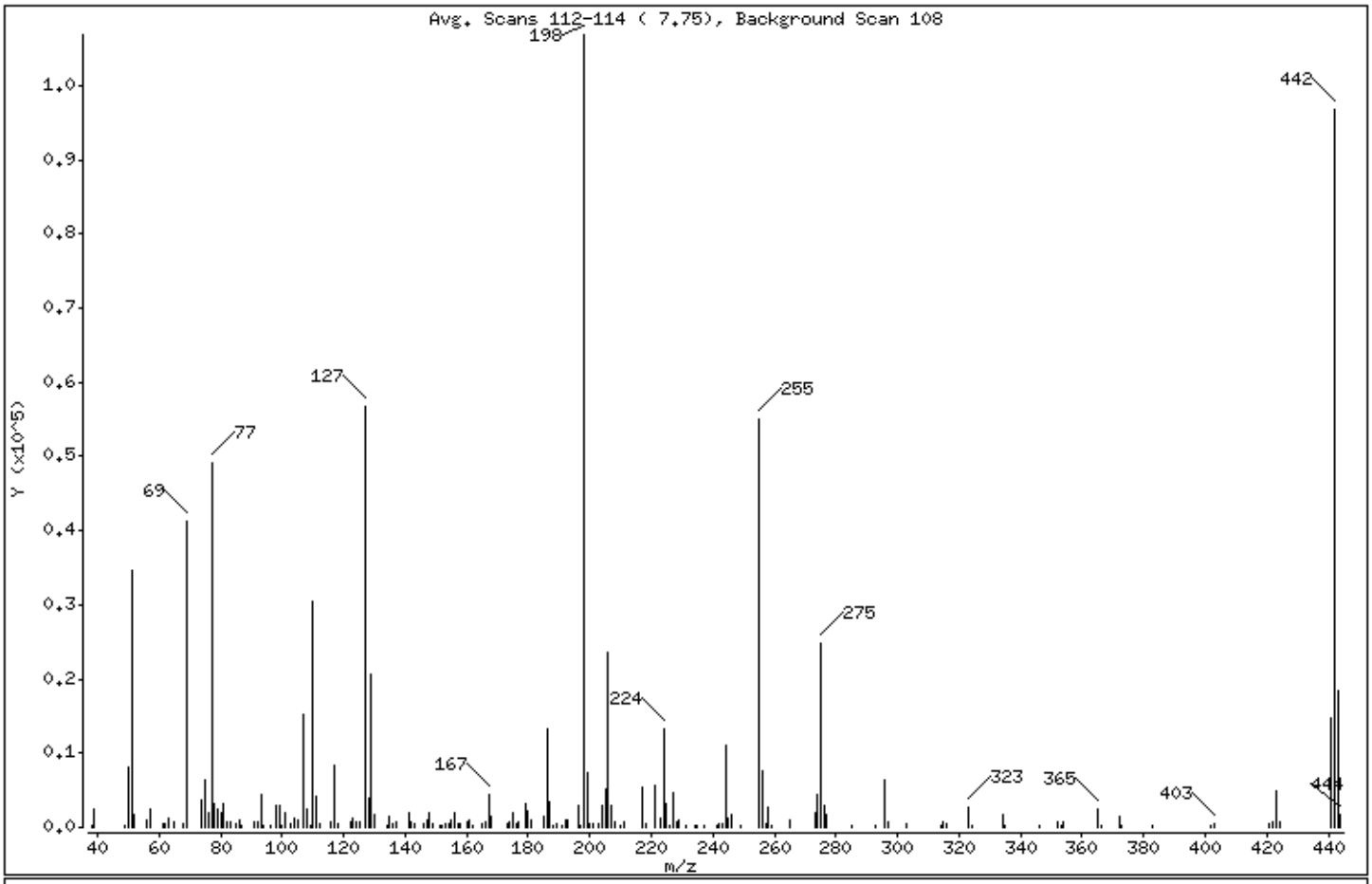
Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160080-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	32.43
68	Less than 2.00% of mass 69	0.52 (1.33)
69	Less than 100.00% of mass 198	38.71
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	53.02
197	Less than 1.00% of mass 198	0.19
199	5.00 - 9.00% of mass 198	6.86
275	10.00 - 30.00% of mass 198	23.26
365	1.00 - 100.00% of mass 198	2.39
441	0.01 - 100.00% of mass 443	13.90 (81.06)
442	40.00 - 100.00% of mass 198	90.57
443	17.00 - 23.00% of mass 442	17.14 (18.93)

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\UD340.D

Date : 23-MAR-2015 14:55

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160080-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: UD340.D
Spectrum: Avg. Scans 112-114 (7.75), Background Scan 108
Location of Maximum: 198.00
Number of points: 175

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	184	112.00	543	180.00	2200	249.00	245
39.00	2443	116.00	652	181.00	901	255.00	55024
49.00	202	117.00	8388	185.00	1411	256.00	7550
50.00	8002	118.00	562	186.00	13285	257.00	534
51.00	34656	122.00	820	187.00	3499	258.00	2780
52.00	1682	123.00	1299	188.00	199	259.00	317
56.00	1050	124.00	682	189.00	576	265.00	1013
57.00	2575	125.00	630	191.00	185	273.00	1909
61.00	508	127.00	56664	192.00	866	274.00	4421
62.00	493	128.00	4036	193.00	892	275.00	24856
63.00	1185	129.00	20552	196.00	3015	276.00	2935
65.00	761	130.00	1647	197.00	206	277.00	1840
68.00	552	134.00	185	198.00	106864	285.00	207
69.00	41368	135.00	1546	199.00	7329	293.00	281
74.00	3577	136.00	538	200.00	432	296.00	6403
75.00	6441	137.00	779	201.00	606	297.00	757
76.00	1885	141.00	1876	203.00	390	303.00	501
77.00	49168	142.00	842	204.00	3070	314.00	200
78.00	3305	143.00	500	205.00	5157	315.00	710
79.00	2474	146.00	413	206.00	23664	316.00	388
80.00	1935	147.00	1015	207.00	3050	323.00	2629
81.00	3139	148.00	2038	208.00	785	324.00	224
82.00	792	149.00	581	210.00	313	334.00	1688
83.00	760	151.00	168	211.00	774	335.00	250
85.00	582	152.00	226	217.00	5497	346.00	291
86.00	1087	153.00	522	218.00	562	352.00	799
87.00	168	154.00	519	221.00	5591	353.00	341
91.00	730	155.00	984	223.00	1262	354.00	696
92.00	660	156.00	1974	224.00	13178	365.00	2550
93.00	4363	157.00	419	225.00	3233	366.00	184
94.00	208	158.00	525	226.00	174	372.00	1421
96.00	203	160.00	755	227.00	4669	373.00	257
98.00	3051	161.00	932	228.00	629	383.00	210
99.00	2834	162.00	184	229.00	1037	402.00	315
100.00	193	165.00	555	231.00	265	403.00	471

Data File: \\target_server\gg\chem\gcms-u.i\U032315.b\UD340.D

Date : 23-MAR-2015 14:55

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160080-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

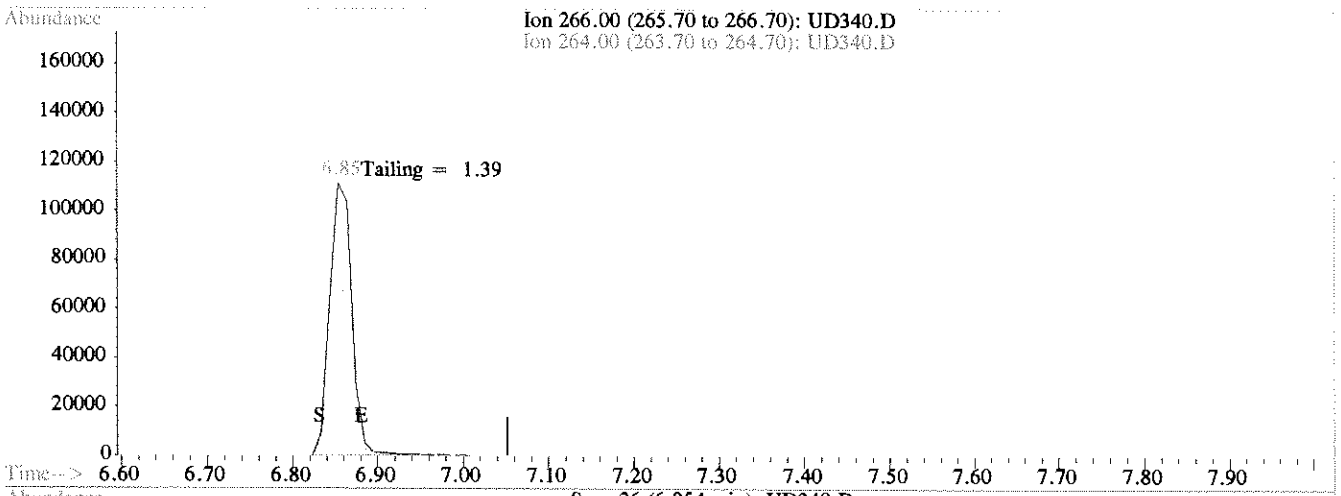
Data File: UD340.D
Spectrum: Avg. Scans 112-114 (7.75), Background Scan 108
Location of Maximum: 198.00
Number of points: 175

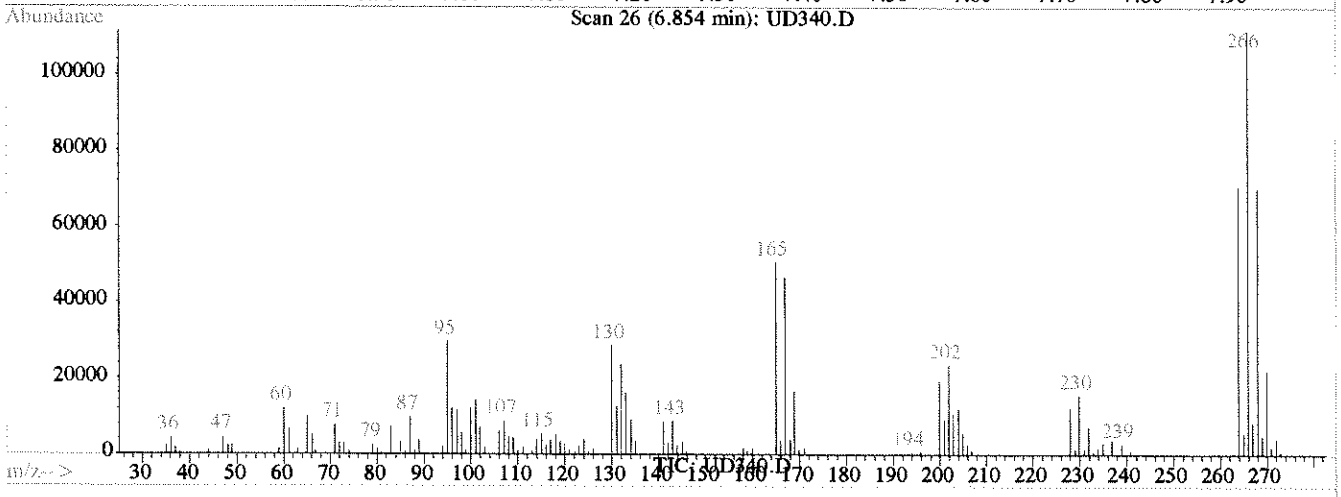
m/z	Y	m/z	Y	m/z	Y	m/z	Y
101.00	1962	166.00	631	234.00	175	421.00	544
103.00	599	167.00	4508	235.00	238	422.00	630
104.00	1113	168.00	1567	237.00	212	423.00	4928
105.00	991	173.00	455	241.00	240	424.00	768
107.00	15282	174.00	832	242.00	537	441.00	14850
108.00	2407	175.00	1874	243.00	378	442.00	96784
109.00	195	176.00	597	244.00	11100	443.00	18320
110.00	30584	177.00	778	245.00	1322	444.00	1816
111.00	4138	179.00	3293	246.00	1703		

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U032315\UD340.D Vial: 1
Acq On : 23 Mar 2015 2:55 pm Operator: JCG
Sample : WG160080-1 Inst : GC/MS Ins
Misc : WG160080,WG160080,WG160080-4 Multiplr: 1.00
MS Integration Params: 38EI0P5 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration





(1) Pentachlorophenol (CM)

6.85min 92.52ug/L

response 204569

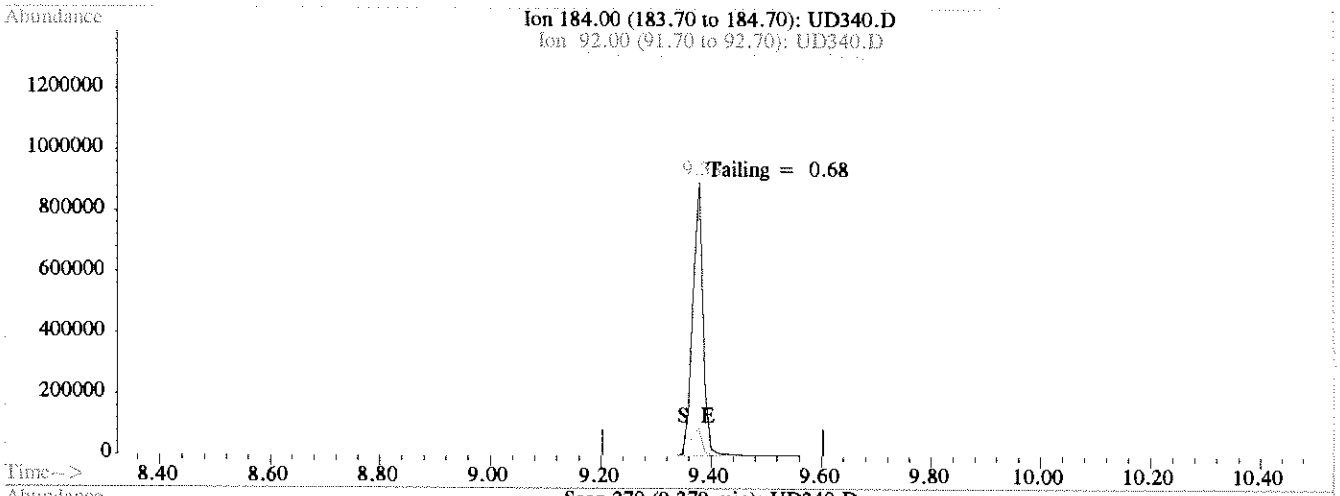
Ion	Exp%	Act%
266.00	100	100
264.00	62.00	61.39
268.00	63.50	61.38
0.00	0.00	0.00

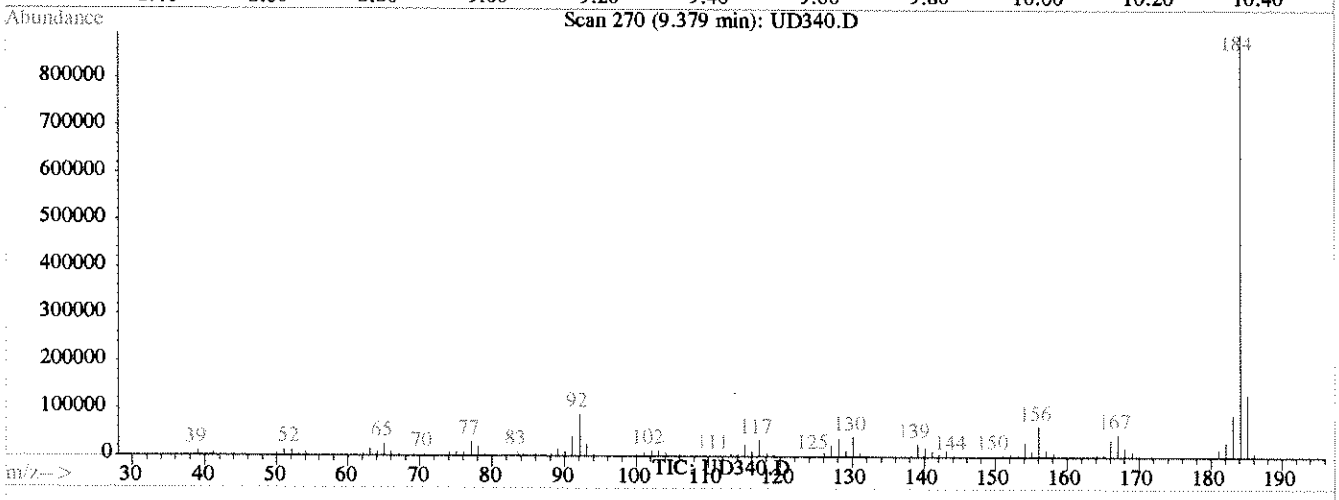
UD340.D TUNETAIL.M Tue Mar 24 10:38:37 2015

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U032315\UD340.D Vial: 1
Acq On : 23 Mar 2015 2:55 pm Operator: JCG
Sample : WG160080-1 Inst : GC/MS Ins
Misc : WG160080,WG160080,WG160080-4 Multiplr: 1.00
MS Integration Params: 38EP01 Quant Results File: temp.res
Quant Time: Mar 24 09:15 2015

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration





(2) Benzidine (T)

9.38min 263.52ug/L

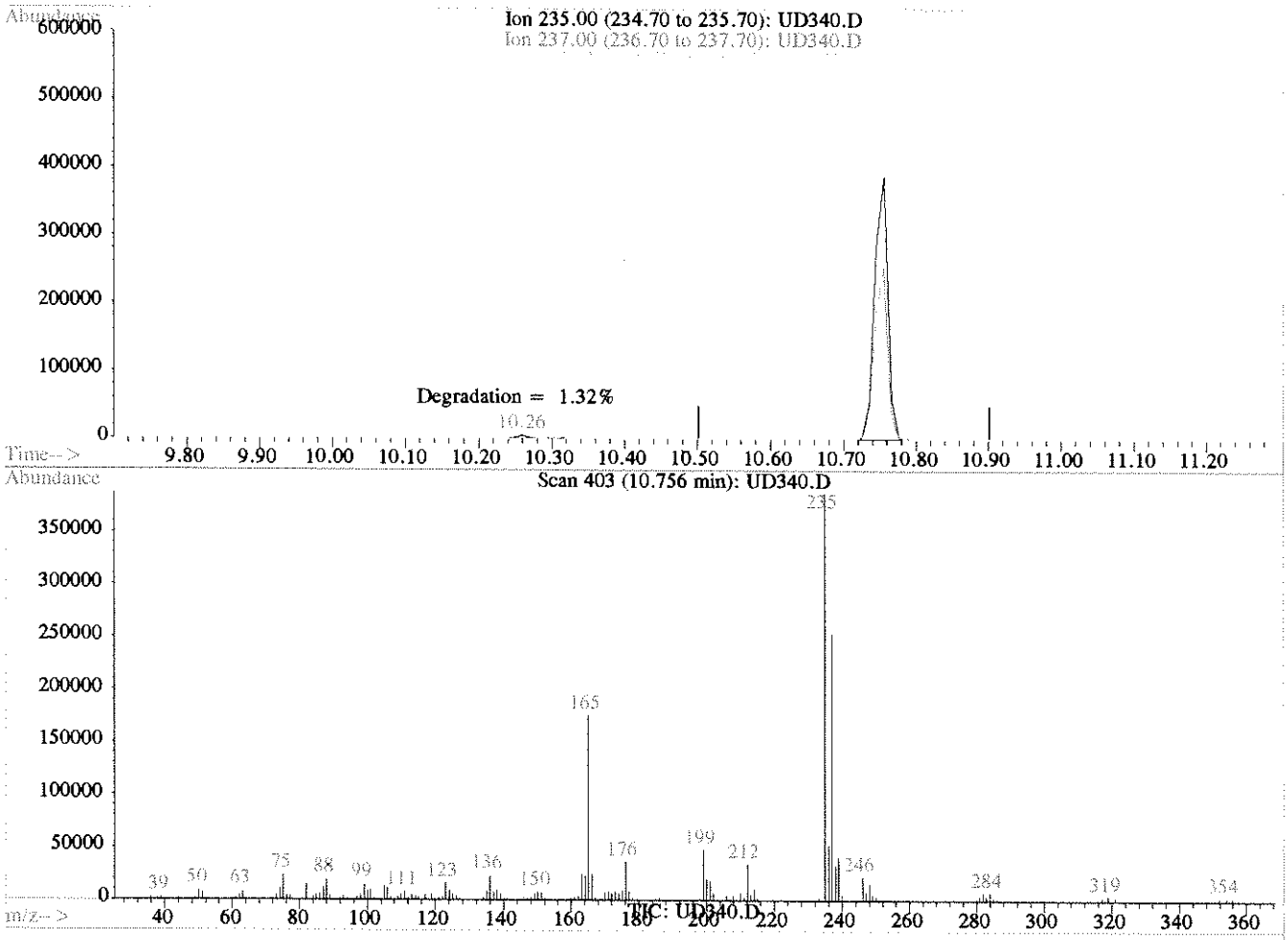
response 1182207

Ion	Exp%	Act%
184.00	100	100
92.00	12.20	10.51
185.00	14.40	14.37
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U032315\UD340.D
Acq On : 23 Mar 2015 2:55 pm
Sample : WG160080-1
Misc : WG160080,WG160080,WG160080-4
Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Quant Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res



(3) 4,4'-DDT (T)

10.76min 109.90ug/L

response 493042

Ion	Exp%	Act%
235.00	100	100
237.00	50.00	65.14
165.00	50.00	51.04
0.00	0.00	0.00

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\UD349.D

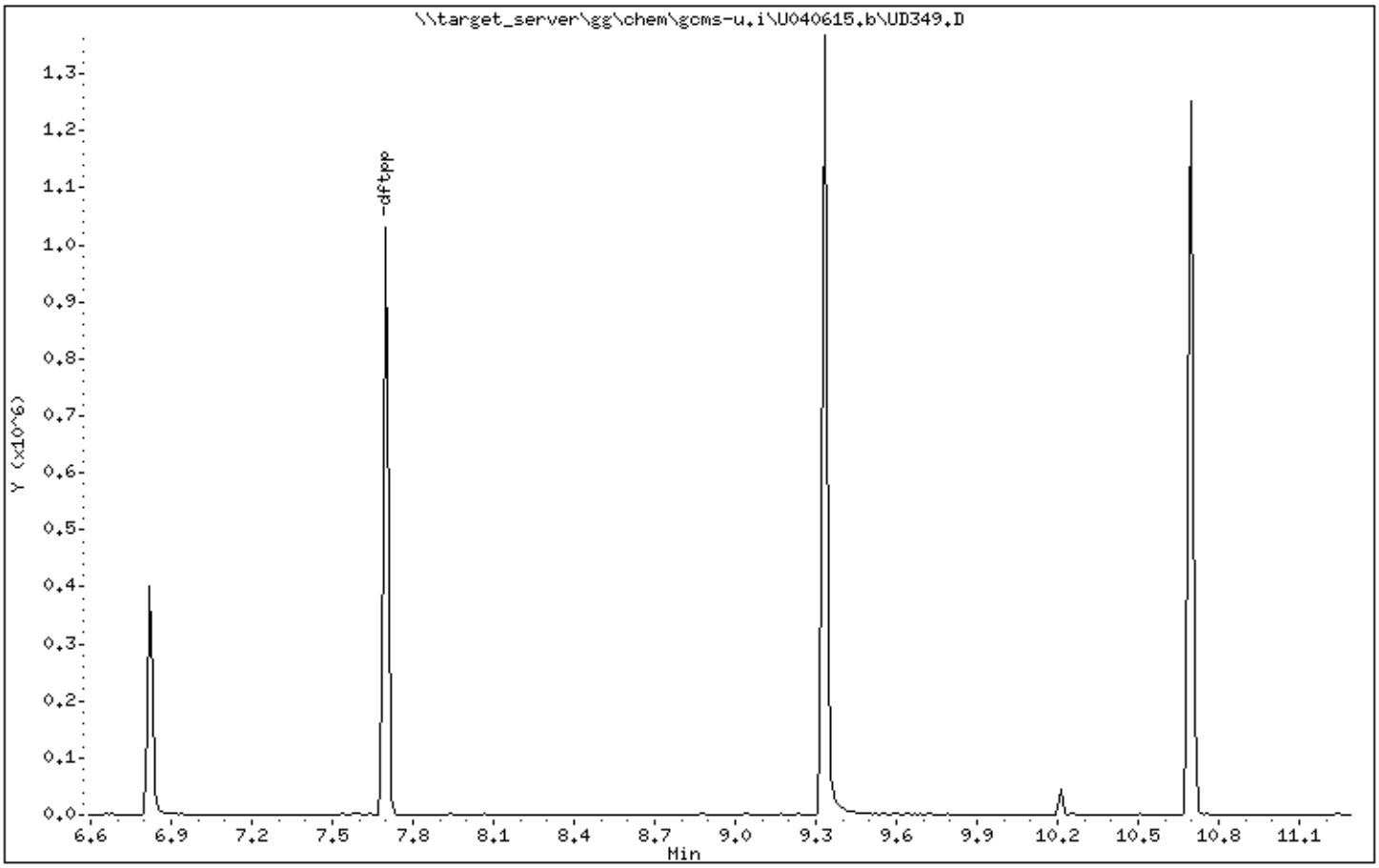
Date : 06-APR-2015 14:49

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160781-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\UD349.D

Date : 06-APR-2015 14:49

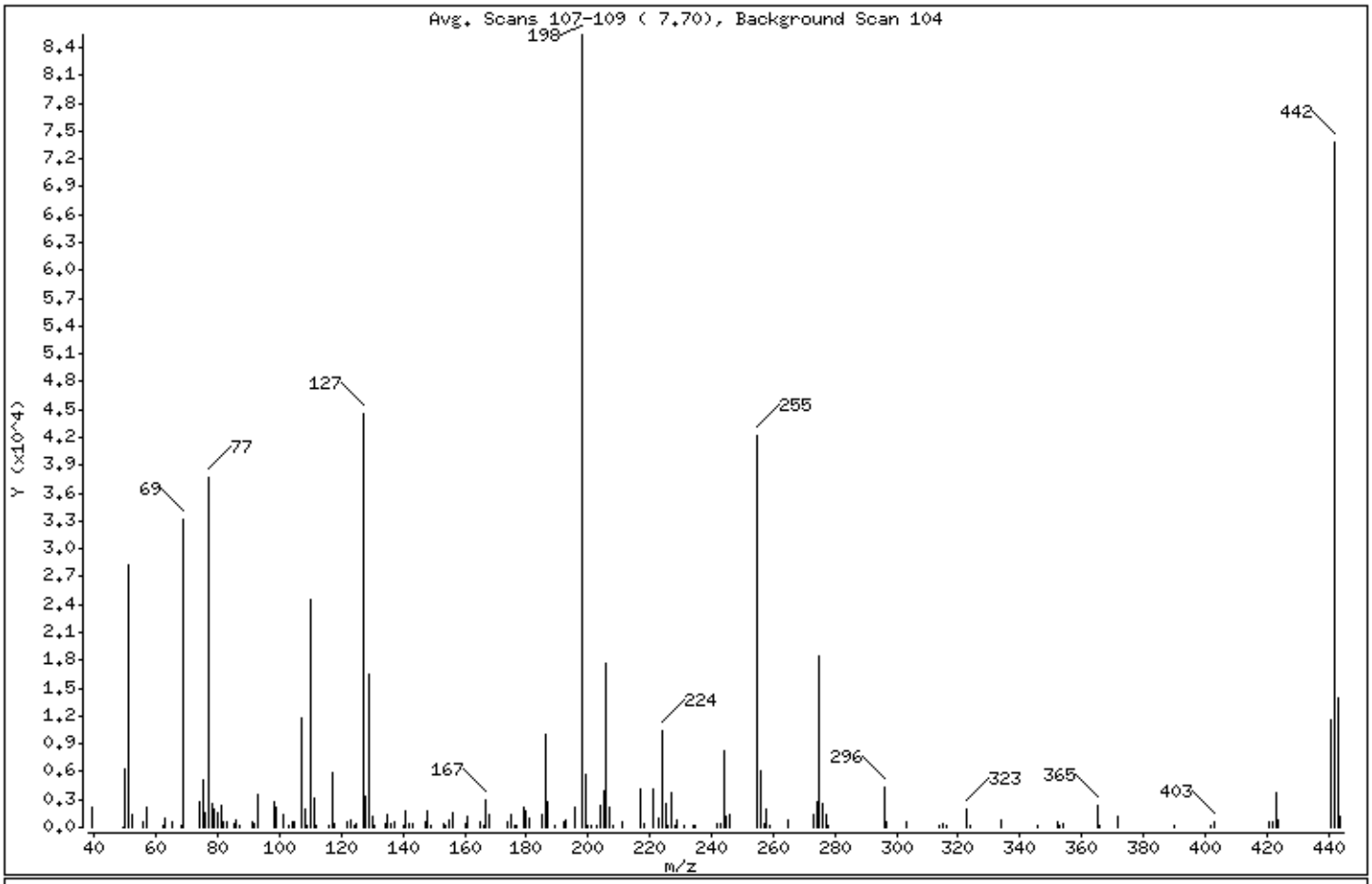
Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160781-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	33.11
68	Less than 2.00% of mass 69	0.24 (0.63)
69	Less than 100.00% of mass 198	38.92
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	52.16
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.73
275	10.00 - 30.00% of mass 198	21.68
365	1.00 - 100.00% of mass 198	2.70
441	0.01 - 100.00% of mass 443	13.62 (82.94)
442	40.00 - 100.00% of mass 198	86.47
443	17.00 - 23.00% of mass 442	16.42 (19.00)

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\UD349.D

Date : 06-APR-2015 14:49

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160781-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: UD349.D
Spectrum: Avg. Scans 107-109 (7.70), Background Scan 104
Location of Maximum: 198.00
Number of points: 155

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	2071	112.00	216	180.00	1745	256.00	6007
49.00	91	116.00	287	181.00	947	257.00	313
50.00	6322	117.00	5849	185.00	1357	258.00	1900
51.00	28272	118.00	435	186.00	9931	259.00	220
52.00	1356	122.00	573	187.00	2759	265.00	859
56.00	634	123.00	864	189.00	217	273.00	1385
57.00	2141	124.00	222	192.00	594	274.00	2843
62.00	192	125.00	443	193.00	882	275.00	18512
63.00	946	127.00	44528	196.00	2240	276.00	2591
65.00	568	128.00	3354	198.00	85376	277.00	1288
68.00	208	129.00	16560	199.00	5745	278.00	171
69.00	33232	130.00	1109	200.00	279	296.00	4342
74.00	2684	131.00	202	201.00	181	297.00	598
75.00	5031	134.00	321	203.00	226	303.00	534
76.00	1554	135.00	1340	204.00	2441	314.00	179
77.00	37624	136.00	341	205.00	3831	315.00	471
78.00	2610	137.00	666	206.00	17624	316.00	186
79.00	1974	140.00	173	207.00	2217	323.00	2004
80.00	1529	141.00	1740	208.00	234	324.00	203
81.00	2285	142.00	314	211.00	639	334.00	879
82.00	616	143.00	406	217.00	4047	346.00	197
83.00	506	147.00	587	218.00	299	352.00	611
85.00	391	148.00	1704	221.00	4026	353.00	189
86.00	862	149.00	223	223.00	1039	354.00	442
87.00	278	153.00	300	224.00	10399	365.00	2306
91.00	500	154.00	171	225.00	2480	366.00	171
92.00	429	155.00	833	226.00	188	372.00	1108
93.00	3595	156.00	1586	227.00	3642	390.00	169
98.00	2676	160.00	463	228.00	225	402.00	168
99.00	2202	161.00	1088	229.00	876	403.00	570
101.00	1308	165.00	539	231.00	224	421.00	499
103.00	210	166.00	207	234.00	212	422.00	611
104.00	607	167.00	2983	235.00	207	423.00	3800
105.00	613	168.00	1411	242.00	355	424.00	860
107.00	11813	174.00	546	243.00	448	441.00	11631

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\UD349.D

Date : 06-APR-2015 14:49

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160781-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: UD349.D
Spectrum: Avg. Scans 107-109 (7.70), Background Scan 104
Location of Maximum: 198.00
Number of points: 155

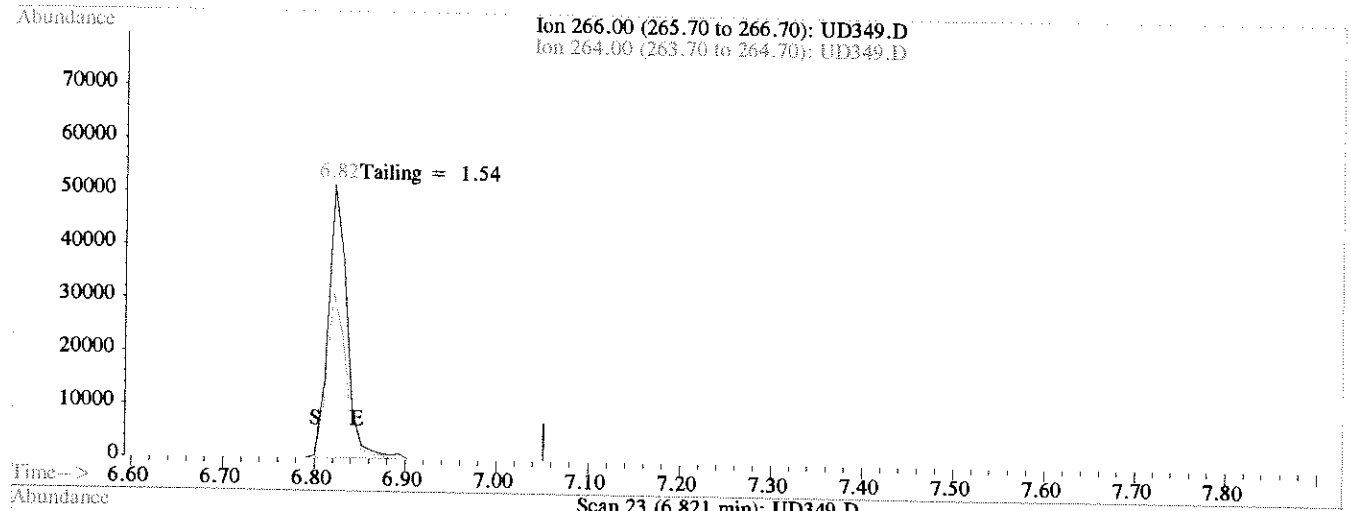
m/z	Y	m/z	Y	m/z	Y	m/z	Y
108.00	1987	175.00	1350	244.00	8231	442.00	73824
109.00	186	176.00	264	245.00	1142	443.00	14023
110.00	24440	177.00	198	246.00	1422	444.00	1207
111.00	3193	179.00	2217	255.00	42160		

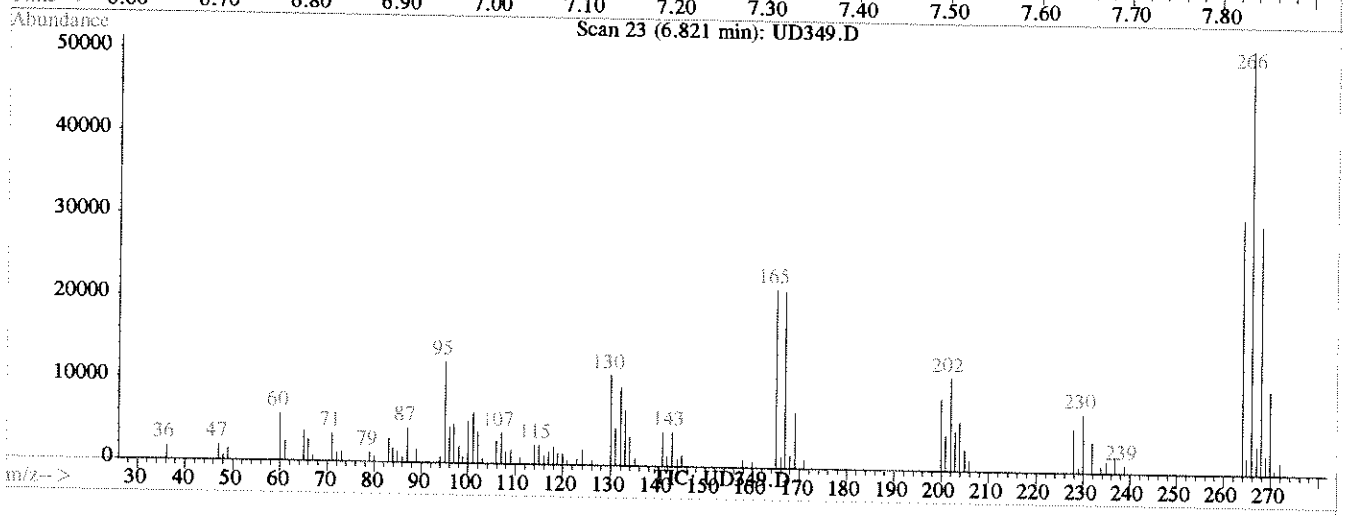
Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040615\UD349.D
Acq On : 6 Apr 2015 2:49 pm
Sample : WG160781-1
Misc : WG160781,WG160781,WG160080-4
Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Quant Time : Apr 6 15:06 2015

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration





(1) Pentachlorophenol (CM)

6.82min 33.52ug/L

response 74117

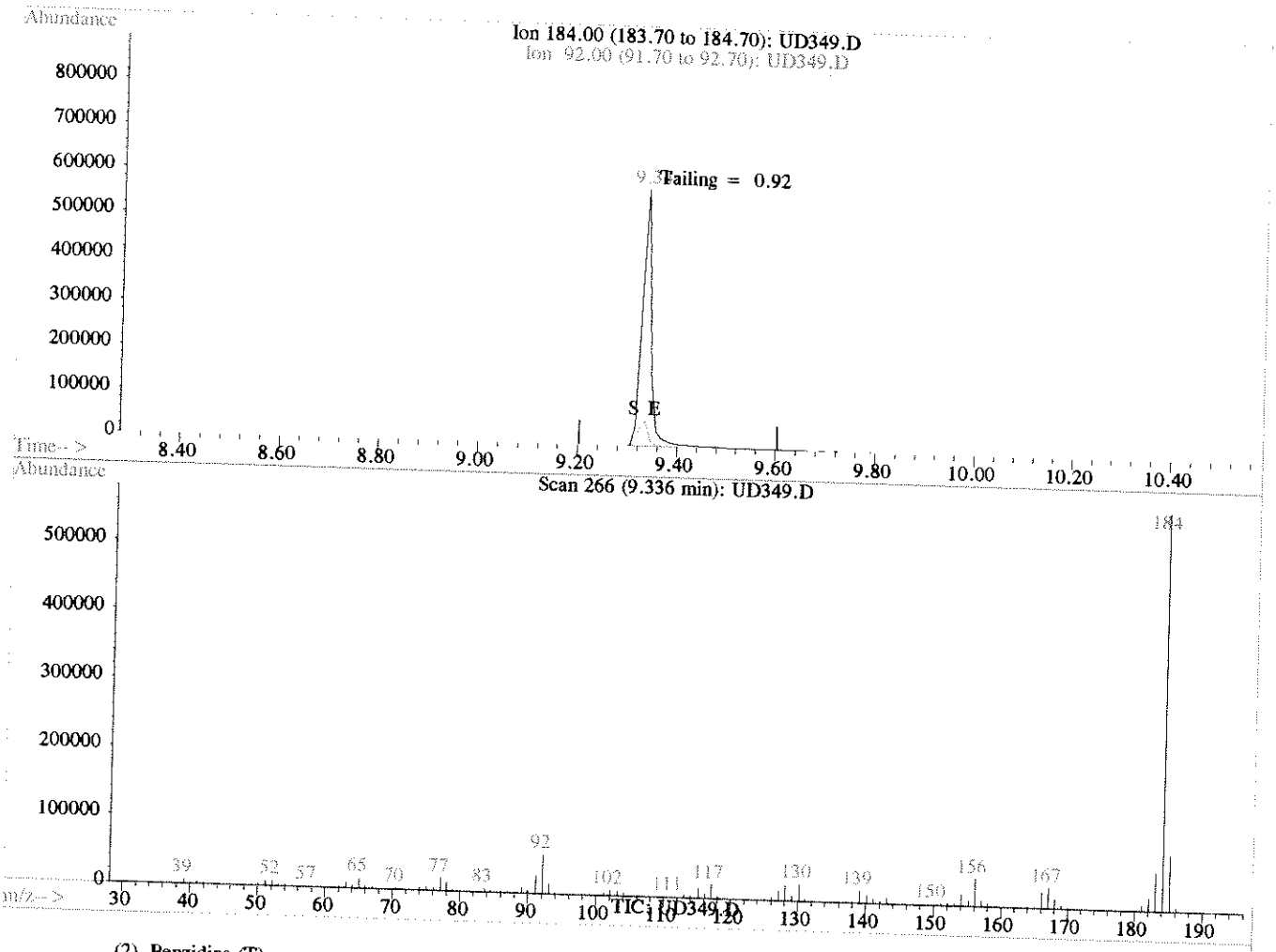
Ion	Exp%	Act%
266.00	100	100
264.00	62.00	60.45
268.00	63.50	61.13
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040615\UD349.D
Acq On : 6 Apr 2015 2:49 pm
Sample : WG160781-1
Misc : WG160781,WG160781,WG160080-4
Quant Time : Apr 6 15:06 2015

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration



(2) Benzidine (T)

9.34min 172.35ug/L

response 773169

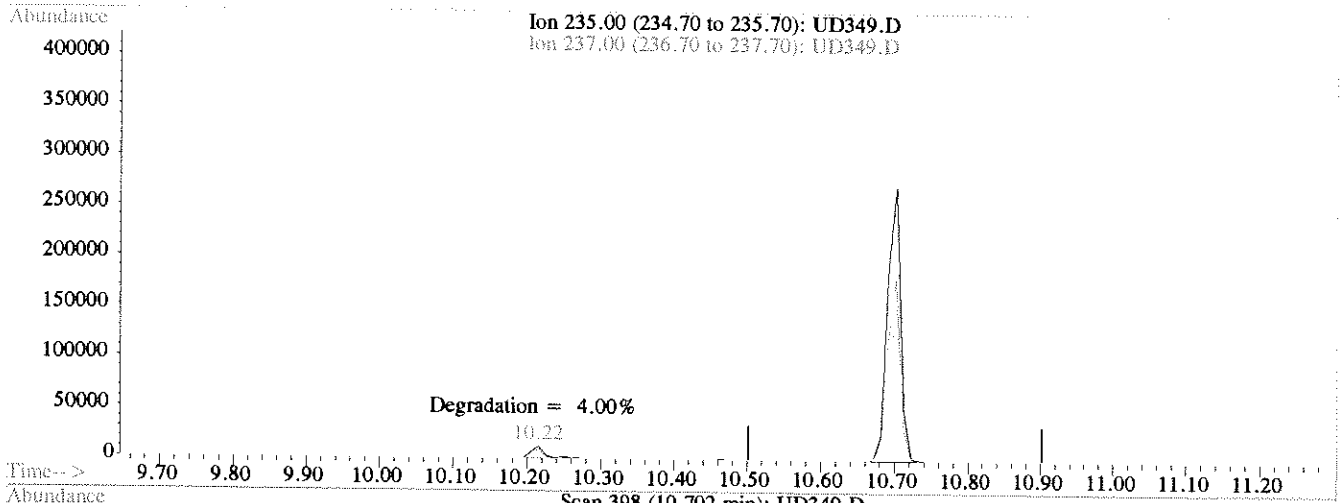
Ion	Exp%	Act%
184.00	100	100
92.00	12.20	10.29
185.00	14.40	14.03
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040615\UD349.D
Acq On : 6 Apr 2015 2:49 pm
Sample : WG160781-1
Misc : WG160781,WG160781,WG160080-4
MS Integration Params : SEP05
Quant Time : Apr 6 15:06 2015

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration



(3) 4,4'-DDT (T)

10.70min 75.13ug/L

response 337059

Ion	Exp%	Act%
235.00	100	100
237.00	50.00	64.50
165.00	50.00	49.88
0.00	0.00	0.00

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\UD351.D

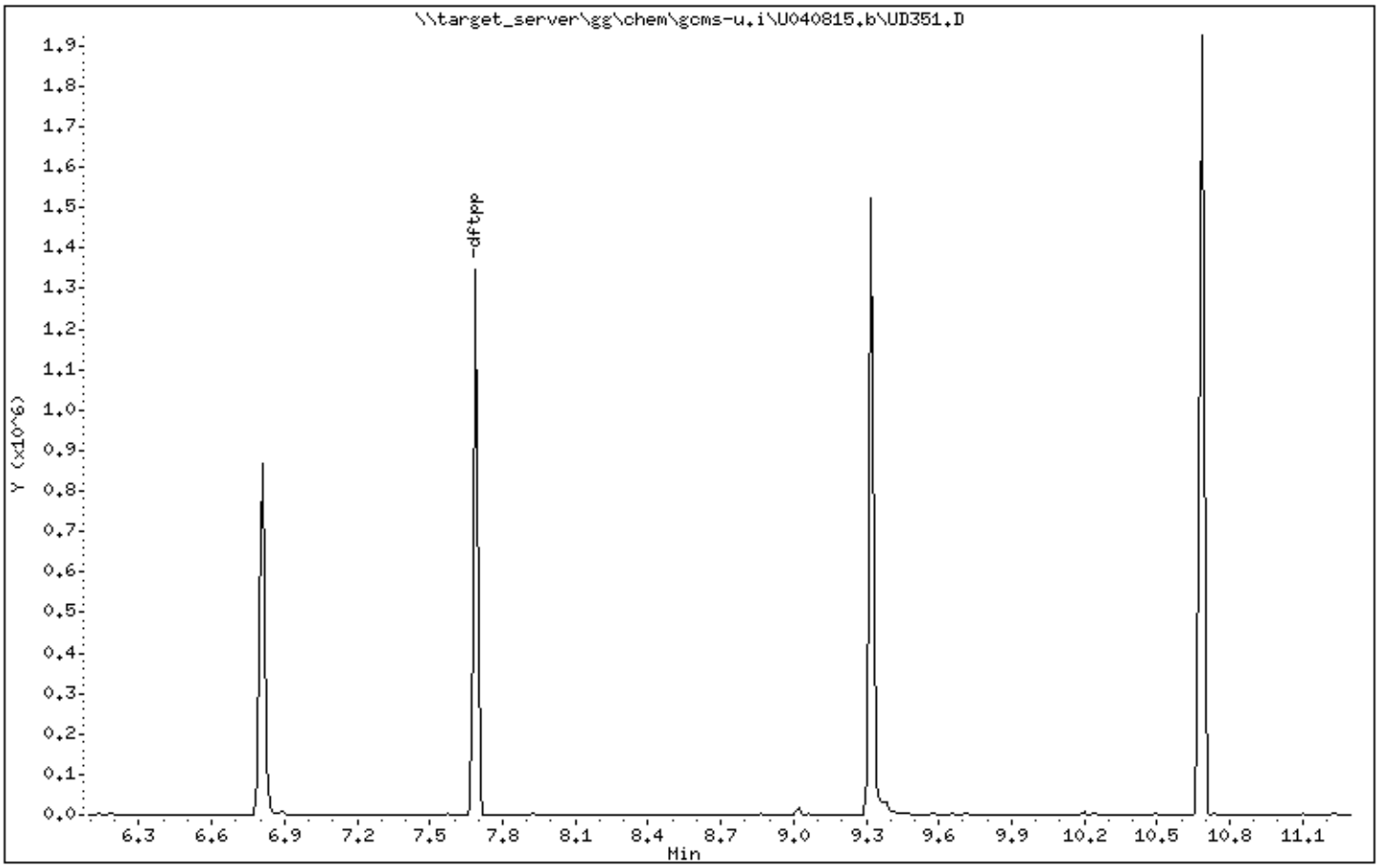
Date : 08-APR-2015 12:54

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160877-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\UD351.D

Date : 08-APR-2015 12:54

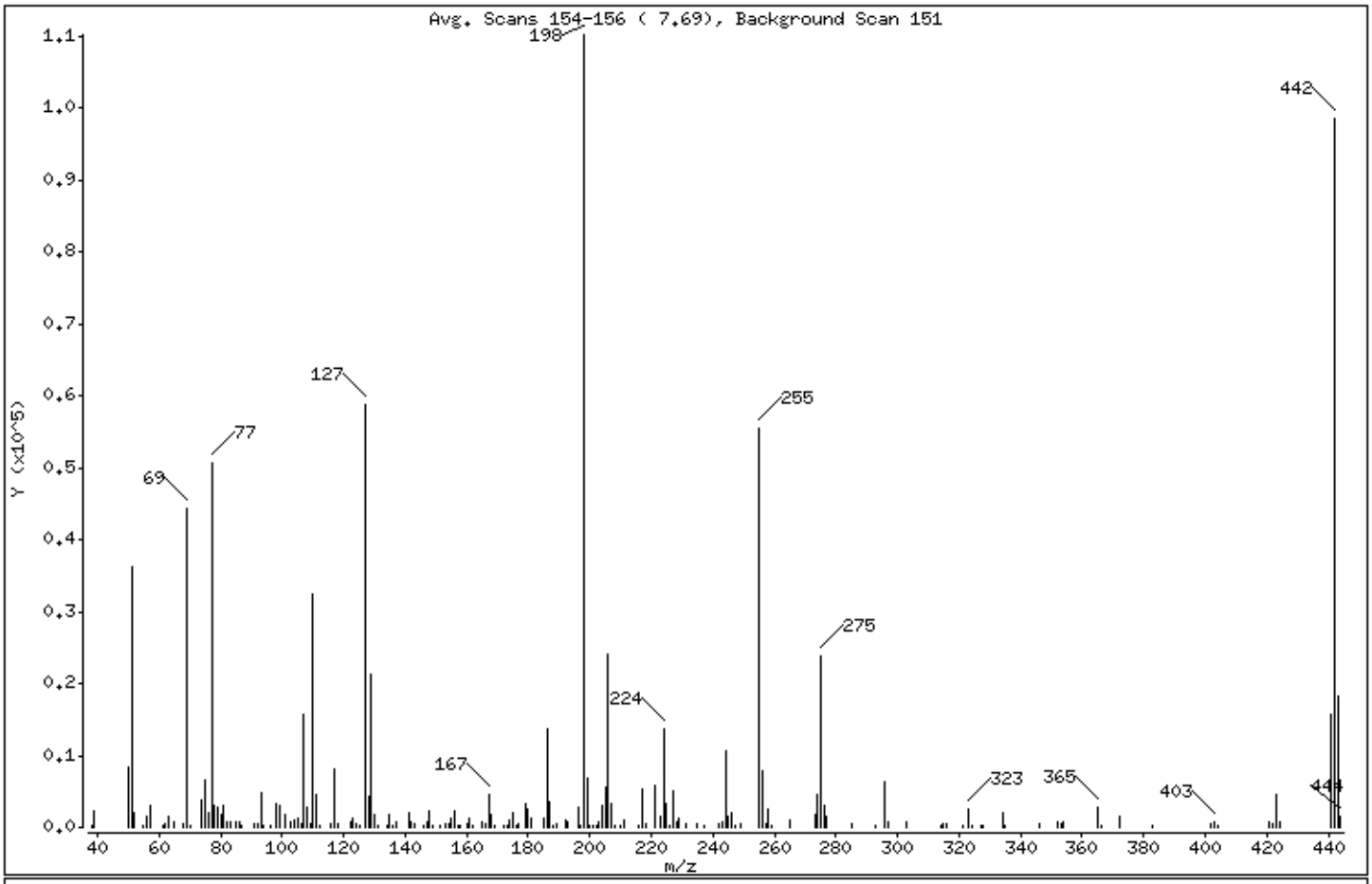
Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160877-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	32.80
68	Less than 2.00% of mass 69	0.49 (1.23)
69	Less than 100.00% of mass 198	40.14
70	Less than 2.00% of mass 69	0.17 (0.41)
127	40.00 - 60.00% of mass 198	53.33
197	Less than 1.00% of mass 198	0.18
199	5.00 - 9.00% of mass 198	6.29
275	10.00 - 30.00% of mass 198	21.68
365	1.00 - 100.00% of mass 198	2.47
441	0.01 - 100.00% of mass 443	14.32 (86.78)
442	40.00 - 100.00% of mass 198	89.50
443	17.00 - 23.00% of mass 442	16.50 (18.44)

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\UD351.D

Date : 08-APR-2015 12:54

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160877-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: UD351.D
Spectrum: Avg. Scans 154-156 (7.69), Background Scan 151
Location of Maximum: 198.00
Number of points: 181

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	205	116.00	381	181.00	1287	257.00	469
39.00	2394	117.00	8206	185.00	1350	258.00	2436
50.00	8265	118.00	633	186.00	13796	259.00	281
51.00	36128	122.00	824	187.00	3537	265.00	966
52.00	1943	123.00	1250	188.00	365	273.00	1660
55.00	201	124.00	568	189.00	535	274.00	4540
56.00	1420	125.00	336	192.00	921	275.00	23880
57.00	2968	127.00	58744	193.00	868	276.00	3096
61.00	296	128.00	4196	196.00	2814	277.00	1639
62.00	475	129.00	21200	197.00	202	285.00	428
63.00	1526	130.00	1821	198.00	110144	293.00	292
65.00	756	131.00	231	199.00	6925	296.00	6213
68.00	542	134.00	246	200.00	294	297.00	780
69.00	44216	135.00	1662	201.00	274	303.00	684
70.00	182	136.00	354	202.00	283	314.00	223
74.00	3830	137.00	733	203.00	744	315.00	584
75.00	6524	141.00	2003	204.00	3098	316.00	425
76.00	2016	142.00	743	205.00	5495	321.00	168
77.00	50744	143.00	523	206.00	24032	323.00	2512
78.00	3095	146.00	365	207.00	3206	324.00	198
79.00	2848	147.00	871	208.00	360	327.00	176
80.00	1846	148.00	2249	210.00	221	328.00	214
81.00	3139	149.00	245	211.00	1037	334.00	2036
82.00	722	151.00	178	216.00	200	335.00	167
83.00	808	153.00	622	217.00	5222	346.00	549
85.00	794	154.00	560	218.00	614	352.00	730
86.00	808	155.00	1342	221.00	5837	353.00	484
87.00	240	156.00	2235	223.00	1483	354.00	785
91.00	419	157.00	254	224.00	13633	365.00	2716
92.00	580	158.00	219	225.00	3350	366.00	222
93.00	4760	160.00	500	226.00	275	372.00	1432
94.00	215	161.00	1163	227.00	5132	383.00	265
96.00	242	162.00	177	228.00	819	402.00	616
98.00	3340	165.00	866	229.00	1353	403.00	746
99.00	2968	166.00	525	231.00	541	404.00	188

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\UD351.D

Date : 08-APR-2015 12:54

Client ID: DFTPP02 Instrument: gcms-u.i

Sample Info: WG160877-1,SI2069

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

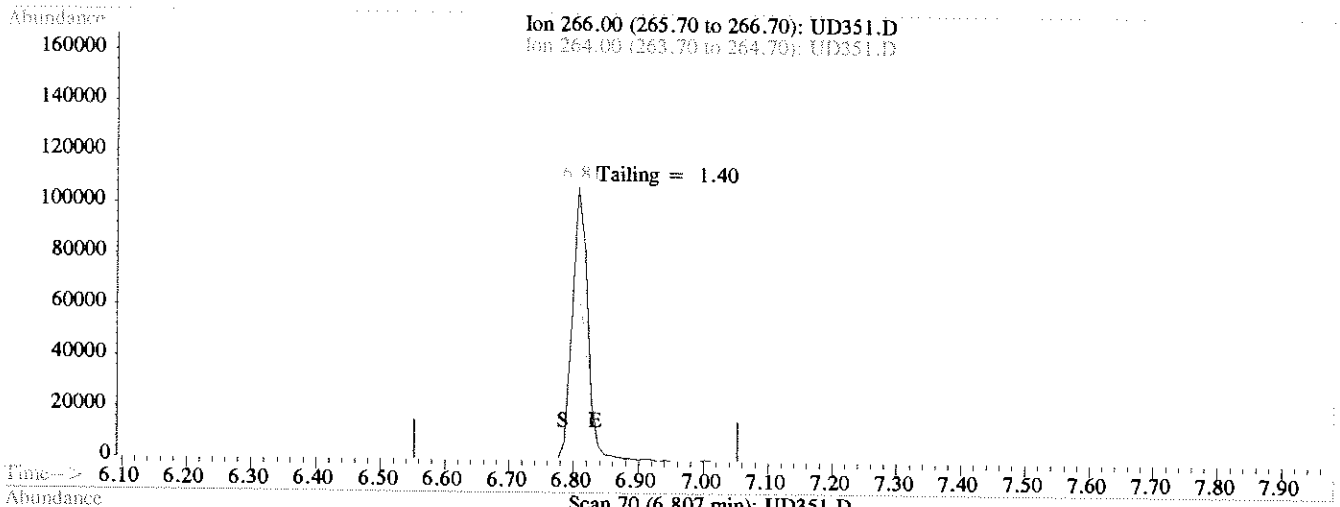
Data File: UD351.D
Spectrum: Avg. Scans 154-156 (7.69), Background Scan 151
Location of Maximum: 198.00
Number of points: 181

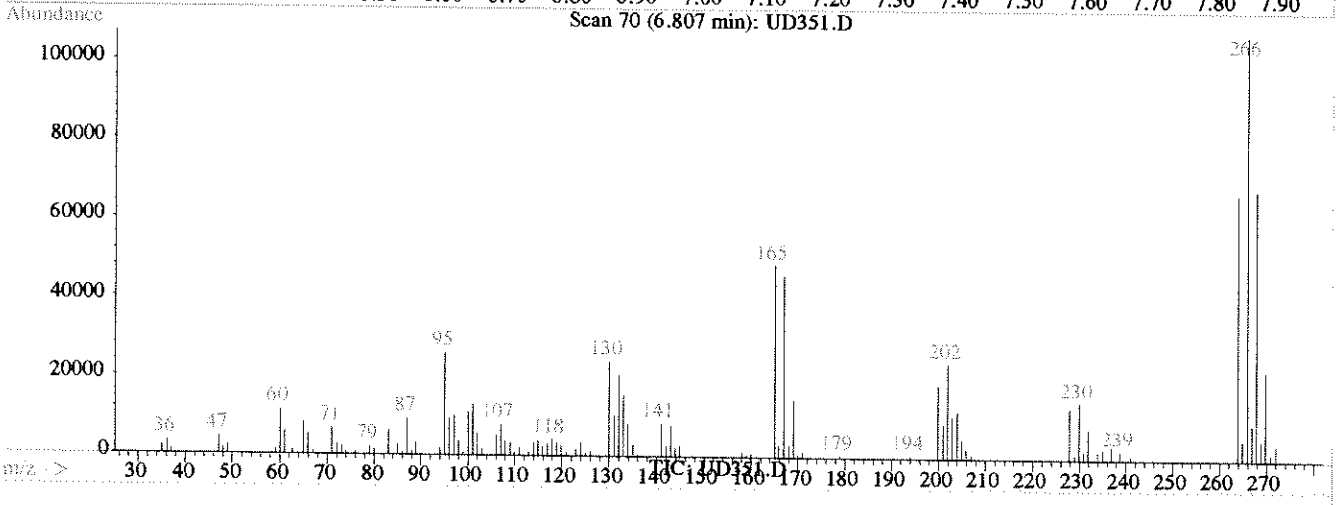
m/z	Y	m/z	Y	m/z	Y	m/z	Y
101.00	1840	167.00	4630	235.00	405	421.00	728
103.00	712	168.00	1878	237.00	191	422.00	521
104.00	1101	169.00	170	242.00	585	423.00	4648
105.00	1256	172.00	260	243.00	730	424.00	853
106.00	518	173.00	315	244.00	10523	441.00	15773
107.00	15794	174.00	1038	245.00	1580	442.00	98576
108.00	2865	175.00	1933	246.00	1915	443.00	18176
109.00	417	176.00	289	247.00	266	444.00	1480
110.00	32368	177.00	609	249.00	417		
111.00	4656	179.00	3336	255.00	55512		
112.00	252	180.00	2498	256.00	7782		

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040815\UD351.D
Acq On : 8 Apr 2015 12:54 pm
Sample : WG160877-1
Misc : WG160877,WG160877,WG160080-4
Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Quant Title : Katahdin 8270C Water Calibration
Last Quantitation : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res





(1) Pentachlorophenol (CM)

6.81min 81.14ug/L

response 179399

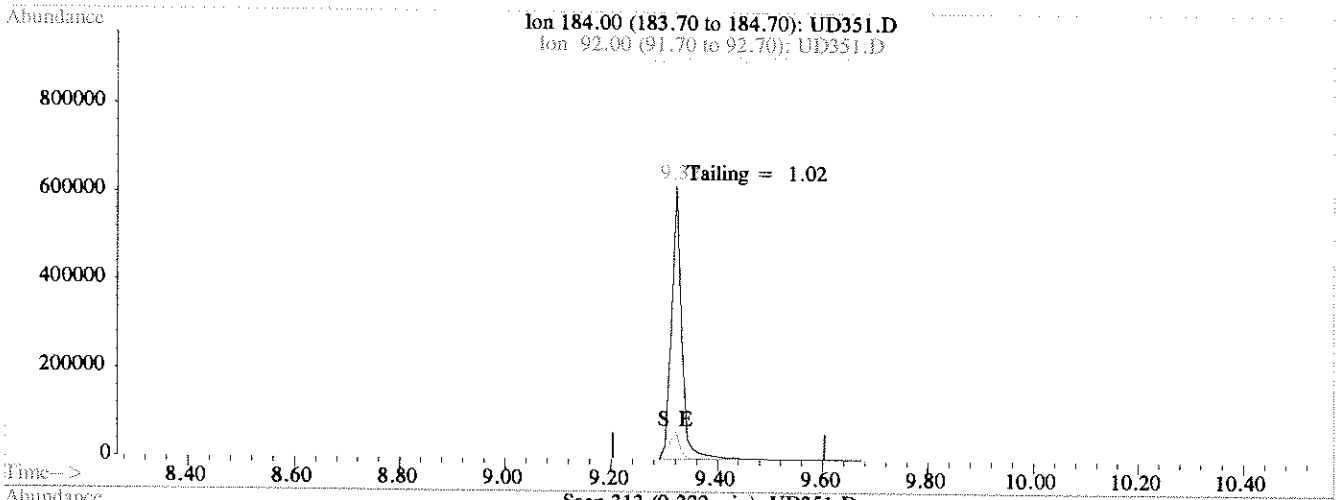
Ion	Exp%	Act%
266.00	100	100
264.00	62.00	61.03
268.00	63.50	63.35
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040815\UD351.D
Acq On : 8 Apr 2015 12:54 pm
Sample : WG160877-1
Misc : WG160877,WG160877,WG160080-4
MSD Tune Date : 26 Feb 2015 13:26

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res

Quant Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Quant Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration



(2) Benzidine (T)

9.32min 187.13ug/L

response 839496

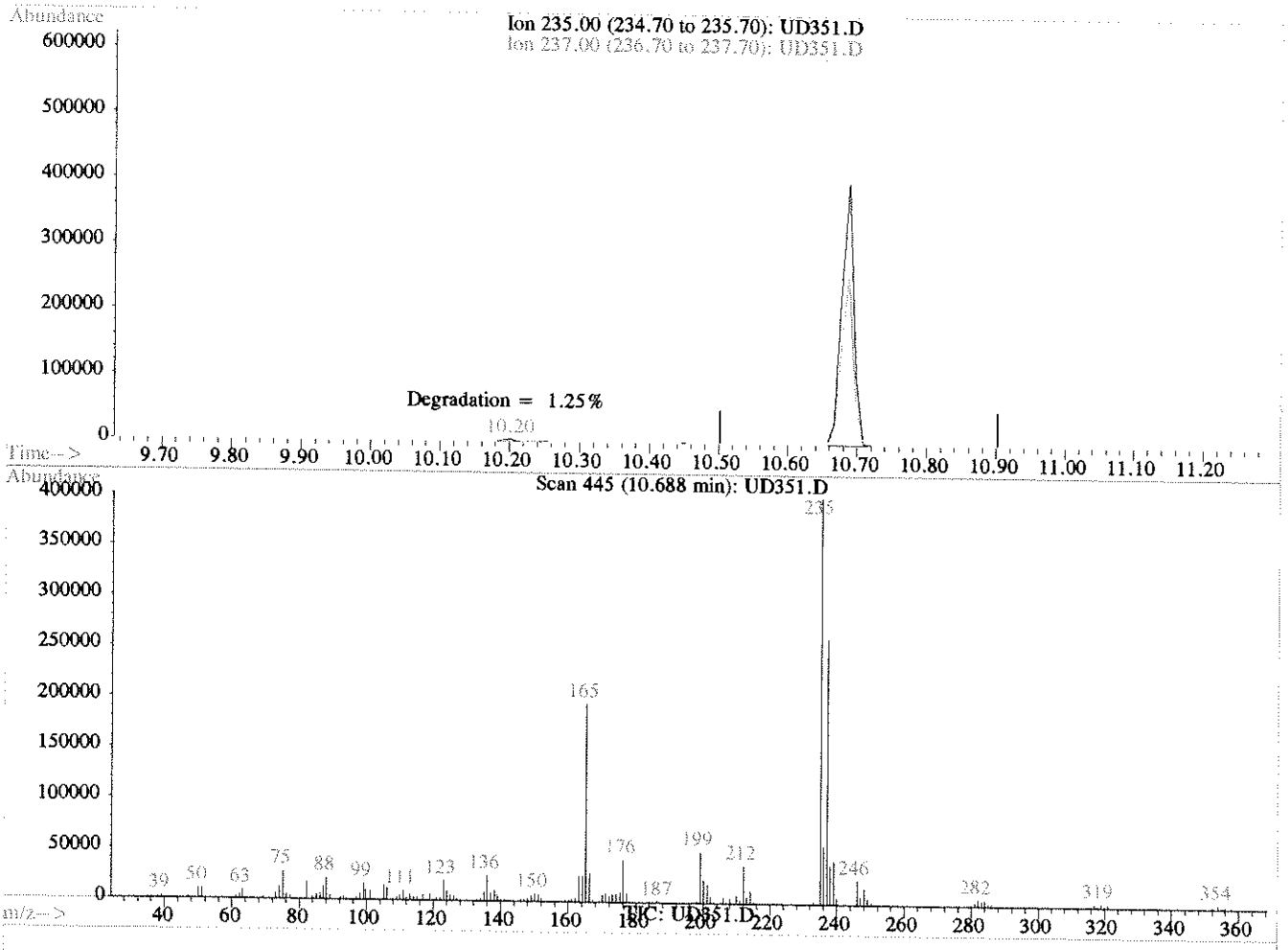
Ion	Exp%	Act%
184.00	100	100
92.00	12.20	10.17
185.00	14.40	14.41
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\U040815\UD351.D
Acq On : 8 Apr 2015 12:54 pm
Sample : WG160877-1
Misc : WG160877,WG160877,WG160080-4
Quant Time : Apr 8 13:26 2015

Vial: 1
Operator: JCG
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\TUNETAIL.M (RTE Integrator)
Title : Katahdin 8270C Water Calibration
Last Update : Mon Mar 23 13:41:55 2015
Response via : Multiple Level Calibration



(3) 4,4'-DDT (T)

10.69min 108.20ug/L

response 485383

Ion	Exp%	Act%
235.00	100	100
237.00	50.00	64.63
165.00	50.00	50.58
0.00	0.00	0.00

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160777-1
Client ID: Method Blank Sample
Project:
SDG: SI2069
Lab File ID: U9933.D

Sample Date:
Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
Bis(2-Chloroethyl)Ether	U	7.5	ug/L	1	10	10.	2.0	7.5
2-Chlorophenol	U	7.5	ug/L	1	10	10.	3.2	7.5
1,3-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
1,4-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.2	7.5
1,2-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.4	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
2,2'-Oxybis(1-Chloropropane)	U	7.5	ug/L	1	10	10.	2.1	7.5
3&4-Methylphenol	U	7.5	ug/L	1	10	10.	5.6	7.5
N-Nitroso-Di-N-Propylamine	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachloroethane	U	7.5	ug/L	1	10	10.	2.3	7.5
Nitrobenzene	U	7.5	ug/L	1	10	10.	3.1	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2-Nitrophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Bis(2-Chloroethoxy)Methane	U	7.5	ug/L	1	10	10.	2.1	7.5
2,4-Dichlorophenol	U	7.5	ug/L	1	10	10.	3.0	7.5
1,2,4-Trichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Naphthalene	U	7.5	ug/L	1	10	10.	2.2	7.5
4-Chloroaniline	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobutadiene	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Methylnaphthalene	U	7.5	ug/L	1	10	10.	3.2	7.5
Hexachlorocyclopentadiene	U	7.5	ug/L	1	10	10.	1.2	7.5
2,4,6-Trichlorophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.9	7.5
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
2,6-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.0	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	1.0	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160777-1
Client ID: Method Blank Sample
Project:
SDG: SI2069
Lab File ID: U9933.D

Sample Date:
Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.
Dibenzofuran	U	7.5	ug/L	1	10	10.	1.6	7.5
2,4-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.2	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
4-Chlorophenyl-Phenylether	U	7.5	ug/L	1	10	10.	2.2	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.
4,6-Dinitro-2-Methylphenol	U	19	ug/L	1	25	25.	2.0	19.
N-Nitrosodiphenylamine	U	7.5	ug/L	1	10	10.	3.7	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Phenanthrene	U	7.5	ug/L	1	10	10.	2.4	7.5
Anthracene	U	7.5	ug/L	1	10	10.	1.7	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
Di-N-Butylphthalate	U	7.5	ug/L	1	10	10.	2.5	7.5
Fluoranthene	U	7.5	ug/L	1	10	10.	2.4	7.5
Pyrene	U	7.5	ug/L	1	10	10.	1.9	7.5
Butylbenzylphthalate	U	7.5	ug/L	1	10	10.	1.9	7.5
3,3’-Dichlorobenzidine	U	7.5	ug/L	1	10	10.	1.1	7.5
Benzo(a)anthracene	U	7.5	ug/L	1	10	10.	1.6	7.5
Chrysene	U	7.5	ug/L	1	10	10.	1.7	7.5
Bis(2-Ethylhexyl)Phthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Di-N-Octylphthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Benzo(b)fluoranthene	U	7.5	ug/L	1	10	10.	1.2	7.5
Benzo(k)fluoranthene	U	7.5	ug/L	1	10	10.	1.6	7.5
Benzo(a)pyrene	U	7.5	ug/L	1	10	10.	1.2	7.5
Indeno(1,2,3-cd)pyrene	U	7.5	ug/L	1	10	10.	1.9	7.5
Dibenzo(a,h)anthracene	U	7.5	ug/L	1	10	10.	1.7	7.5
Benzo(g,h,i)perylene	U	7.5	ug/L	1	10	10.	1.5	7.5
2-Fluorophenol		34.2	%					
Phenol-d6		24.9	%					
Nitrobenzene-d5		87.9	%					
2-Fluorobiphenyl		75.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160777-1
Client ID: Method Blank Sample
Project:
SDG: SI2069
Lab File ID: U9933.D

Sample Date:
Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
2,4,6-Tribromophenol		54.5	%					
Terphenyl-d14		81.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9933.D
Report Date: 09-Apr-2015 15:53

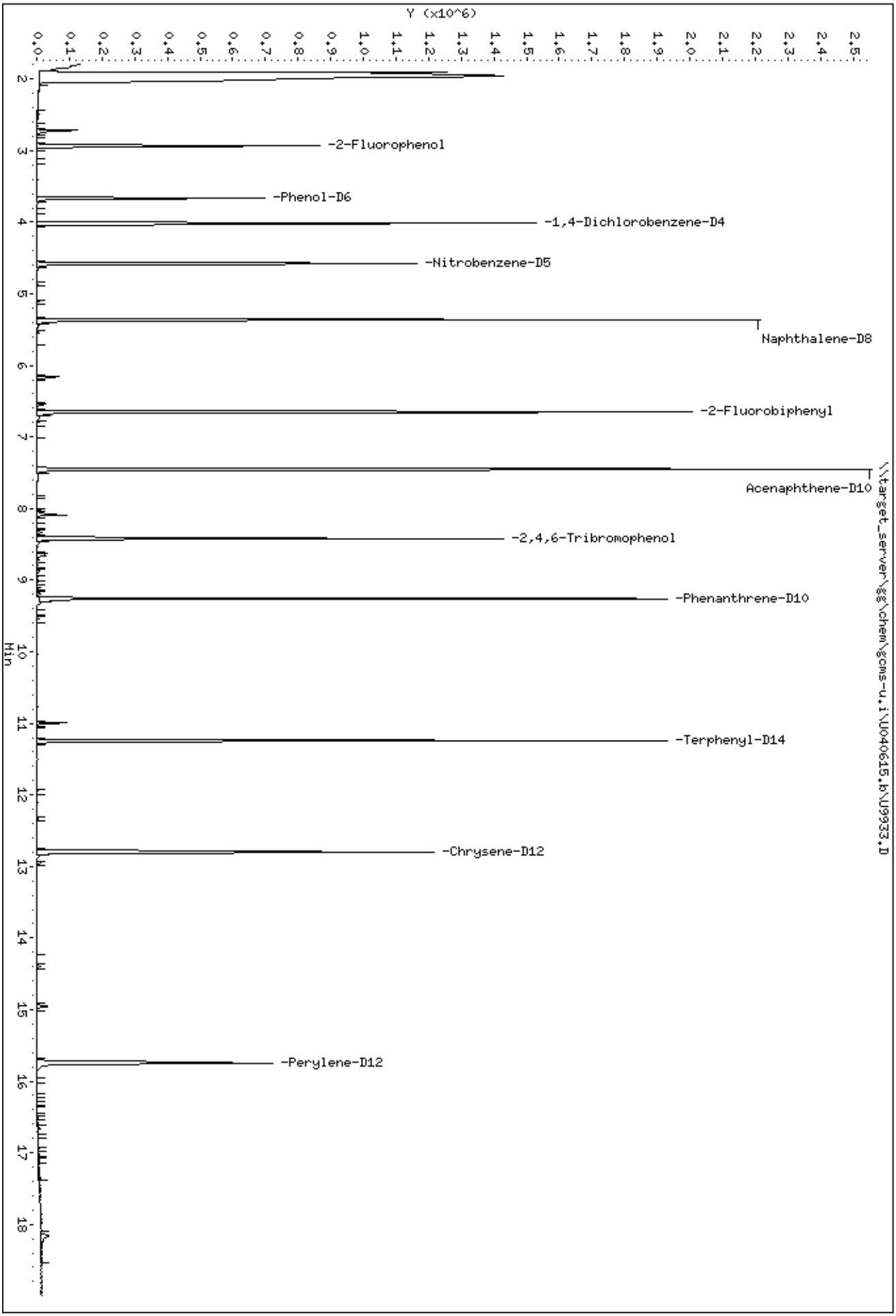
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9933.D
Lab Smp Id: WG160777-1 Client Smp ID: WG160777-Blank
Inj Date : 06-APR-2015 15:39 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160777-1,SI2069
Misc Info : WG160781,WG160777,WG160080-4,SI2069-3
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.931	2.931	(0.730)	451482	34.1843	34.2	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	382073	24.9441	24.9	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	349246	40.0000		
$ 33 Nitrobenzene-D5	82	4.577	4.587	(0.853)	476905	43.9512	44.0	
* 45 Naphthalene-D8	136	5.363	5.373	(1.000)	1212683	40.0000		
$ 63 2-Fluorobiphenyl	172	6.647	6.657	(0.892)	741206	37.6752	37.7	
* 78 Acenaphthene-D10	164	7.454	7.454	(1.000)	677147	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.416	8.427	(1.129)	194428	54.5197	54.5	
* 114 Phenanthrene-D10	188	9.265	9.265	(1.000)	996678	40.0000		
$ 129 Terphenyl-D14	244	11.242	11.242	(0.879)	751378	40.5760	40.6	
* 141 Chrysene-D12	240	12.795	12.805	(1.000)	778301	40.0000		
* 150 Perylene-D12	264	15.744	15.744	(1.000)	521755	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9933,D
Date : 06-APR-2015 15:39
Client ID: WG160777-Blank
Sample Info: WG160777-1,SI2069
Instrument: gcms-u,i
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl
Acenaphthene-D10
-2,4,6-Tribromophenol
-Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12
\\target_server\gg\chem\gcms-u,i\U040615,b\U9933,D

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160882-1
Client ID: Method Blank Sample
Project:
SDG: SI2069
Lab File ID: U9983.D

Sample Date:
Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
Bis(2-Chloroethyl)Ether	U	7.5	ug/L	1	10	10.	2.0	7.5
2-Chlorophenol	U	7.5	ug/L	1	10	10.	3.2	7.5
1,3-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
1,4-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.2	7.5
1,2-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.4	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
2,2'-Oxybis(1-Chloropropane)	U	7.5	ug/L	1	10	10.	2.1	7.5
3&4-Methylphenol	U	7.5	ug/L	1	10	10.	5.6	7.5
N-Nitroso-Di-N-Propylamine	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachloroethane	U	7.5	ug/L	1	10	10.	2.3	7.5
Nitrobenzene	U	7.5	ug/L	1	10	10.	3.1	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2-Nitrophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Bis(2-Chloroethoxy)Methane	U	7.5	ug/L	1	10	10.	2.1	7.5
2,4-Dichlorophenol	U	7.5	ug/L	1	10	10.	3.0	7.5
1,2,4-Trichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Naphthalene	U	7.5	ug/L	1	10	10.	2.2	7.5
4-Chloroaniline	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobutadiene	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Methylnaphthalene	U	7.5	ug/L	1	10	10.	3.2	7.5
Hexachlorocyclopentadiene	U	7.5	ug/L	1	10	10.	1.2	7.5
2,4,6-Trichlorophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.9	7.5
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
2,6-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.0	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	1.0	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160882-1
Client ID: Method Blank Sample
Project:
SDG: SI2069
Lab File ID: U9983.D

Sample Date:
Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.
Dibenzofuran	U	7.5	ug/L	1	10	10.	1.6	7.5
2,4-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.2	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
4-Chlorophenyl-Phenylether	U	7.5	ug/L	1	10	10.	2.2	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.
4,6-Dinitro-2-Methylphenol	U	19	ug/L	1	25	25.	2.0	19.
N-Nitrosodiphenylamine	U	7.5	ug/L	1	10	10.	3.7	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Phenanthrene	U	7.5	ug/L	1	10	10.	2.4	7.5
Anthracene	U	7.5	ug/L	1	10	10.	1.7	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
Di-N-Butylphthalate	U	7.5	ug/L	1	10	10.	2.5	7.5
Fluoranthene	U	7.5	ug/L	1	10	10.	2.4	7.5
Pyrene	U	7.5	ug/L	1	10	10.	1.9	7.5
Butylbenzylphthalate	U	7.5	ug/L	1	10	10.	1.9	7.5
3,3’-Dichlorobenzidine	U	7.5	ug/L	1	10	10.	1.1	7.5
Benzo(a)anthracene	U	7.5	ug/L	1	10	10.	1.6	7.5
Chrysene	U	7.5	ug/L	1	10	10.	1.7	7.5
Bis(2-Ethylhexyl)Phthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Di-N-Octylphthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Benzo(b)fluoranthene	U	7.5	ug/L	1	10	10.	1.2	7.5
Benzo(k)fluoranthene	U	7.5	ug/L	1	10	10.	1.6	7.5
Benzo(a)pyrene	U	7.5	ug/L	1	10	10.	1.2	7.5
Indeno(1,2,3-cd)pyrene	U	7.5	ug/L	1	10	10.	1.9	7.5
Dibenzo(a,h)anthracene	U	7.5	ug/L	1	10	10.	1.7	7.5
Benzo(g,h,i)perylene	U	7.5	ug/L	1	10	10.	1.5	7.5
2-Fluorophenol		28.2	%					
Phenol-d6		16.9	%					
Nitrobenzene-d5		68.9	%					
2-Fluorobiphenyl		63.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG160882-1
Client ID: Method Blank Sample
Project:
SDG: SI2069
Lab File ID: U9983.D

Sample Date:
Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-APR-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
2,4,6-Tribromophenol		62.0	%					
Terphenyl-d14		79.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9983.D
Report Date: 09-Apr-2015 15:55

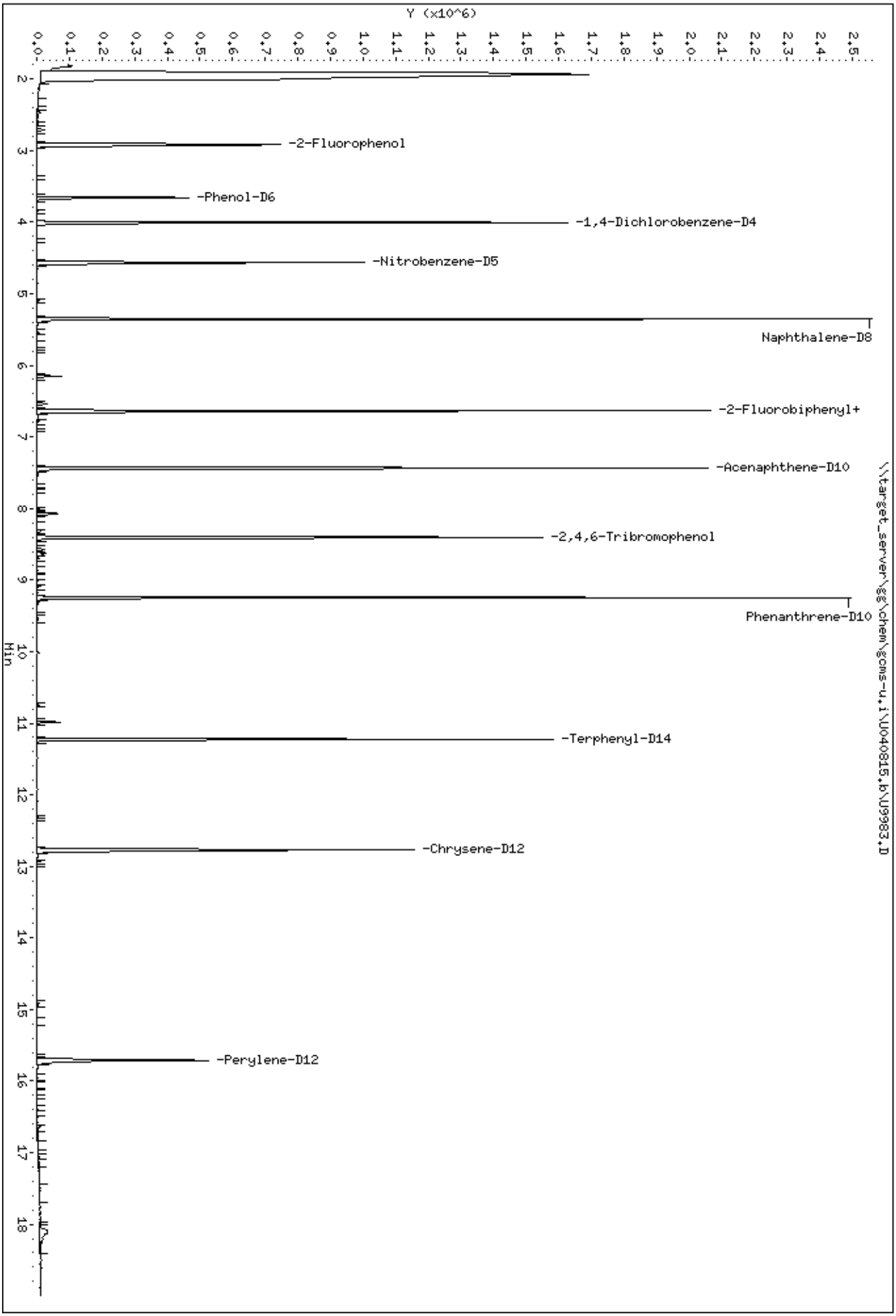
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9983.D
Lab Smp Id: WG160882-1 Client Smp ID: WG160882-Blank
Inj Date : 08-APR-2015 14:03 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160882-1,SI2069
Misc Info : WG160877,WG160882,WG160080-4,SI2069-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.912	2.911	(0.726)	406394	28.1767	28.2	
$ 12 Phenol-D6	99	3.657	3.656	(0.912)	282841	16.9091	16.9	
* 19 1,4-Dichlorobenzene-D4	152	4.009	4.008	(1.000)	381394	40.0000		
$ 33 Nitrobenzene-D5	82	4.568	4.578	(0.853)	419886	34.4588	34.4	
* 45 Naphthalene-D8	136	5.354	5.364	(1.000)	1361815	40.0000		
$ 63 2-Fluorobiphenyl	172	6.638	6.637	(0.892)	646544	31.4848	31.5	
* 78 Acenaphthene-D10	164	7.445	7.445	(1.000)	706801	40.0000		
$ 100 2,4,6-Tribromophenol	330	8.407	8.417	(1.129)	230871	62.0226	62.0	
* 114 Phenanthrene-D10	188	9.246	9.256	(1.000)	984920	40.0000		
$ 129 Terphenyl-D14	244	11.223	11.222	(0.878)	620272	39.5844	39.6	
* 141 Chrysene-D12	240	12.775	12.775	(1.000)	658592	40.0000		
* 150 Perylene-D12	264	15.715	15.714	(1.000)	384362	40.0000		


Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9983,D
Date : 08-APR-2015 14:03
Client ID: WG160882-Blank
Sample Info: WG160882-1,SI2069
Instrument: gcms-u,i
\\target_server\gg\chem\gcms-u,i\U040815,b\U9983,D
Y (x10^6)
Min
-2-Fluorophenol
-Phenol-D6
-1,4-Dichlorobenzene-D4
-Nitrobenzene-D5
Naphthalene-D8
-2-Fluorobiphenyl+
-Acenaphthene-D10
-2,4,6-Tribromophenol
Phenanthrene-D10
-Terphenyl-D14
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160777-2
LCSD ID: WG160777-3
Project:
SDG: SI2069
Report Date: 09-APR-15
LCS File ID: U9934.D

Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777
LCSD File ID: U9935.D

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Phenol	100.	25.8	25.8	20.8	20.8	ug/L	21	30	0-115
Bis(2-Chloroethyl)Ether	50.0	40.4	80.8	36.3	72.6	ug/L	11	30	35-110
2-Chlorophenol	100.	62.7	62.7	51.8	51.8	ug/L	19	30	35-105
1,3-Dichlorobenzene	50.0	33.0	66.0	30.8	61.6	ug/L	7	30	30-100
1,4-Dichlorobenzene	50.0	34.6	69.2	31.8	63.6	ug/L	8	30	30-100
1,2-Dichlorobenzene	50.0	34.7	69.4	32.4	64.8	ug/L	7	30	35-100
2-Methylphenol	100.	53.3	53.3	48.8	48.8	ug/L	9	30	40-110
2,2'-Oxybis(1-Chloropropane)	50.0	33.8	67.6	30.5	61.0	ug/L	10	30	25-130
3&4-Methylphenol	100.	55.6	55.6	52.1	52.1	ug/L	6	30	30-110
N-Nitroso-Di-N-Propylamine	50.0	37.2	74.4	33.2	66.4	ug/L	11	30	35-130
Hexachloroethane	50.0	33.7	67.4	30.3	60.6	ug/L	11	30	30-100
Nitrobenzene	50.0	38.6	77.2	33.4	66.8	ug/L	14	30	45-110
Isophorone	50.0	30.2	60.4	27.4	54.8	ug/L	10	30	50-110
2-Nitrophenol	100.	67.9	67.9	57.4	57.4	ug/L	17	30	40-115
2,4-Dimethylphenol	100.	67.5	67.5	60.1	60.1	ug/L	12	30	30-110
Bis(2-Chloroethoxy)Methane	50.0	33.0	66.0	29.1	58.2	ug/L	12	30	45-105
2,4-Dichlorophenol	100.	67.1	67.1	58.0	58.0	ug/L	14	30	50-105
1,2,4-Trichlorobenzene	50.0	36.6	73.2	32.4	64.8	ug/L	12	30	35-105
Naphthalene	50.0	36.2	72.4	31.7	63.4	ug/L	13	30	40-100
4-Chloroaniline	50.0	32.3	64.6	31.5	63.0	ug/L	2	30	15-110
Hexachlorobutadiene	50.0	33.9	67.8	29.5	59.0	ug/L	14	30	25-105
4-Chloro-3-Methylphenol	100.	71.6	71.6	66.8	66.8	ug/L	7	30	45-110
2-Methylnaphthalene	50.0	38.1	76.2	34.3	68.6	ug/L	10	30	45-105
Hexachlorocyclopentadiene	50.0	21.9	43.8	19.7	39.4	ug/L	10	30	23-70
2,4,6-Trichlorophenol	100.	64.6	64.6	53.2	53.2	ug/L	19	30	50-115
2,4,5-Trichlorophenol	100.	65.2	65.2	56.7	56.7	ug/L	14	30	50-110
2-Chloronaphthalene	50.0	28.7	57.4	29.2	58.4	ug/L	2	30	50-105
2-Nitroaniline	50.0	34.0	68.0	32.4	64.8	ug/L	5	30	50-115
Dimethyl Phthalate	50.0	40.0	80.0	38.6	77.2	ug/L	4	30	25-125
Acenaphthylene	50.0	37.4	74.8	35.3	70.6	ug/L	6	30	50-105
2,6-Dinitrotoluene	50.0	43.5	87.0	41.8	83.6	ug/L	4	30	50-115
3-Nitroaniline	50.0	35.4	70.8	33.2	66.4	ug/L	6	30	20-125
Acenaphthene	50.0	39.2	78.4	36.1	72.2	ug/L	8	30	45-110
2,4-Dinitrophenol	100.	67.8	67.8	51.8	51.8	ug/L	27	30	15-140

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160777-2
LCSD ID: WG160777-3
Project:
SDG: SI2069
Report Date: 09-APR-15
LCS File ID: U9934.D

Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777
LCSD File ID: U9935.D

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
4-Nitrophenol	100.	28.8	28.8	23.6	23.6	ug/L	20	30	0-125
Dibenzofuran	50.0	38.4	76.8	37.5	75.0	ug/L	2	30	55-105
2,4-Dinitrotoluene	50.0	46.2	92.4	42.6	85.2	ug/L	8	30	50-120
Diethylphthalate	50.0	42.0	84.0	42.0	84.0	ug/L	0	30	40-120
4-Chlorophenyl-Phenylether	50.0	40.7	81.4	36.4	72.8	ug/L	11	30	50-110
Fluorene	50.0	40.1	80.2	38.4	76.8	ug/L	4	30	50-110
4-Nitroaniline	50.0	44.4	88.8	41.2	82.4	ug/L	7	30	35-120
4,6-Dinitro-2-Methylphenol	100.	86.5	86.5	65.2	65.2	ug/L	28	30	40-130
N-Nitrosodiphenylamine	50.0	31.9	63.8	30.4	60.8	ug/L	5	30	50-110
4-Bromophenyl-Phenylether	50.0	42.2	84.4	40.0	80.0	ug/L	5	30	50-115
Hexachlorobenzene	50.0	40.2	80.4	40.0	80.0	ug/L	0	30	50-110
Pentachlorophenol	100.	70.4	70.4	60.2	60.2	ug/L	16	30	40-115
Phenanthrene	50.0	48.2	96.4	46.5	93.0	ug/L	4	30	50-115
Anthracene	50.0	45.0	90.0	42.9	85.8	ug/L	5	30	55-110
Carbazole	50.0	43.6	87.2	43.3	86.6	ug/L	1	30	50-115
Di-N-Butylphthalate	50.0	47.8	95.6	47.0	94.0	ug/L	2	30	55-115
Fluoranthene	50.0	44.4	88.8	40.0	80.0	ug/L	10	30	55-115
Pyrene	50.0	43.0	86.0	44.3	88.6	ug/L	3	30	50-130
Butylbenzylphthalate	50.0	43.6	87.2	42.2	84.4	ug/L	3	30	45-115
3,3'-Dichlorobenzidine	100.	79.5	79.5	74.5	74.5	ug/L	6	30	20-110
Benzo(a)anthracene	50.0	42.1	84.2	41.5	83.0	ug/L	1	30	55-110
Chrysene	50.0	41.6	83.2	40.0	80.0	ug/L	4	30	55-110
Bis(2-Ethylhexyl)Phthalate	50.0	44.6	89.2	42.5	85.0	ug/L	5	30	40-125
Di-N-Octylphthalate	50.0	39.5	79.0	38.6	77.2	ug/L	2	30	35-135
Benzo(b)fluoranthene	50.0	40.2	80.4	37.9	75.8	ug/L	6	30	45-120
Benzo(k)fluoranthene	50.0	42.3	84.6	38.2	76.4	ug/L	10	30	45-125
Benzo(a)pyrene	50.0	40.9	81.8	38.4	76.8	ug/L	6	30	55-110
Indeno(1,2,3-cd)pyrene	50.0	63.0	126.*	45.1	90.2	ug/L	33*	30	45-125
Dibenzo(a,h)anthracene	50.0	50.0	100.	44.1	88.2	ug/L	12	30	40-125
Benzo(g,h,i)perylene	50.0	47.2	94.4	44.8	89.6	ug/L	5	30	40-125
2-Fluorophenol			35.7		29.1				20-110
Phenol-d6			23.6		19.9				10-115
Nitrobenzene-d5			74.3		65.3				40-110
2-Fluorobiphenyl			72.3		65.8				50-110

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160777-2
LCSD ID: WG160777-3
Project:
SDG: SI2069
Report Date: 09-APR-15
LCS File ID: U9934.D

Received Date:
Extract Date: 06-APR-15
Extracted By: JMS
Extraction Method: SW846 3510
Lab Prep Batch: WG160777
LCSD File ID: U9935.D

Analysis Date: 06-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

2,4,6-Tribromophenol	77.2	68.4	40-125
Terphenyl-d14	84.8	86.6	50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9934.D
Report Date: 09-Apr-2015 15:53

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9934.D
Lab Smp Id: WG160777-2 Client Smp ID: WG160777-LCS
Inj Date : 06-APR-2015 16:05 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160777-2,SI2069
Misc Info : WG160781,WG160777,WG160080-4,SI2069-3
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.931	2.931	(0.730)	441268	35.7219	35.7	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	337489	23.5574	23.6	
13 Phenol	94	3.676	3.676	(0.915)	385503	25.7566	25.8	
16 Bis(2-Chloroethyl)ether	93	3.759	3.759	(0.936)	417937	40.3535	40.4	
17 2-Chlorophenol	128	3.832	3.831	(0.954)	751470	62.6822	62.7	
18 1,3-Dichlorobenzene	146	3.966	3.966	(0.987)	406711	33.0371	33.0	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	326652	40.0000		
20 1,4-Dichlorobenzene	146	4.039	4.038	(1.005)	399946	34.6504	34.6	
22 1,2-Dichlorobenzene	146	4.184	4.194	(1.041)	394610	34.7303	34.7	
23 2-Methylphenol	108	4.266	4.266	(1.062)	587848	53.2954	53.3	
25 2,2'-Oxybis(1-chloropropane)	45	4.287	4.287	(1.067)	404992	33.8426	33.8	
28 3&4-Methylphenol	108	4.432	4.442	(1.103)	505381	55.5800	55.6(Q)	
30 N-Nitroso-di-n-propylamine	70	4.442	4.442	(1.106)	229298	37.1964	37.2(Q)	
32 Hexachloroethane	117	4.525	4.535	(1.126)	175569	33.6840	33.7	
$ 33 Nitrobenzene-D5	82	4.577	4.587	(0.852)	409297	37.1302	37.1	
34 Nitrobenzene	77	4.598	4.608	(0.856)	390393	38.6305	38.6	
36 Isophorone	82	4.877	4.866	(0.908)	638432	30.2562	30.2	
37 2-Nitrophenol	139	4.949	4.949	(0.921)	412049	67.8747	67.9	
38 2,4-Dimethylphenol	107	5.012	5.011	(0.933)	735061	67.4935	67.5	
40 Bis(2-Chloroethoxy)methane	93	5.105	5.104	(0.950)	487833	33.0018	33.0	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9934.D
Report Date: 09-Apr-2015 15:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.219	5.229	(0.971)	543265	67.1498	67.1	
	43 1,2,4-Trichlorobenzene	180	5.312	5.311	(0.988)	309831	36.6054	36.6	
*	45 Naphthalene-D8	136	5.374	5.373	(1.000)	1231963	40.0000		
	46 Naphthalene	128	5.394	5.394	(1.004)	1069202	36.2229	36.2	
	47 4-Chloroaniline	127	5.467	5.467	(1.017)	398659	32.3392	32.3	
	50 Hexachlorobutadiene	225	5.550	5.549	(1.033)	168841	33.9025	33.9	
	54 4-Chloro-3-Methylphenol	107	6.057	6.067	(1.127)	618152	71.5718	71.6	
	56 2-Methylnaphthalene	142	6.202	6.201	(1.154)	698314	38.1068	38.1	
	59 Hexachlorocyclopentadiene	237	6.409	6.408	(0.860)	122419	21.8917	21.9	
	61 2,4,6-Trichlorophenol	196	6.554	6.564	(0.879)	367805	64.5533	64.6	
	62 2,4,5-Trichlorophenol	196	6.605	6.605	(0.886)	394468	65.2036	65.2	
$	63 2-Fluorobiphenyl	172	6.647	6.657	(0.892)	704744	36.1495	36.1	
	66 2-Chloronaphthalene	162	6.781	6.781	(0.910)	557409	28.6946	28.7	
	69 2-Nitroaniline	65	6.926	6.926	(0.929)	219027	33.9783	34.0	
	72 Dimethyl Phthalate	163	7.164	7.174	(0.961)	852220	39.9674	40.0	
	75 Acenaphthylene	152	7.278	7.278	(0.976)	1051934	37.3678	37.4	
	74 2,6-Dinitrotoluene	165	7.226	7.226	(0.969)	207736	43.4884	43.5	
*	78 Acenaphthene-D10	164	7.454	7.454	(1.000)	671009	40.0000		
	77 3-Nitroaniline	138	7.433	7.443	(0.997)	201952	35.3647	35.4	
	79 Acenaphthene	153	7.496	7.495	(1.006)	656287	39.2321	39.2	
	80 2,4-Dinitrophenol	184	7.558	7.578	(1.014)	182946	67.7828	67.8	
	81 4-Nitrophenol	139	7.672	7.692	(1.029)	108666	28.8419	28.8(QH)	
	83 Dibenzofuran	168	7.703	7.702	(1.033)	859369	38.4131	38.4	
	84 2,4-Dinitrotoluene	165	7.723	7.733	(1.036)	274151	46.2365	46.2	
	89 Diethylphthalate	149	8.023	8.033	(1.076)	855426	41.9840	42.0	
	92 4-Chlorophenyl-phenylether	204	8.137	8.137	(1.092)	317160	40.7274	40.7	
	90 Fluorene	166	8.117	8.127	(1.089)	730553	40.0827	40.1	
	94 4-Nitroaniline	138	8.189	8.189	(1.099)	204076	44.3872	44.4	
	95 4,6-Dinitro-2-Methylphenol	198	8.230	8.230	(0.888)	284947	86.5394	86.5	
	96 N-Nitrosodiphenylamine	169	8.282	8.292	(0.894)	502816	31.8894	31.9(R)	
$	100 2,4,6-Tribromophenol	330	8.427	8.427	(1.131)	272918	77.2292	77.2	
	106 4-Bromophenyl-phenylether	248	8.727	8.727	(0.942)	231970	42.2514	42.2	
	107 Hexachlorobenzene	284	8.810	8.820	(0.951)	257502	40.1510	40.2	
	110 Pentachlorophenol	266	9.058	9.068	(0.978)	261898	70.3577	70.4	
*	114 Phenanthrene-D10	188	9.265	9.265	(1.000)	1046969	40.0000		
	115 Phenanthrene	178	9.296	9.296	(1.003)	1100161	48.2482	48.2	
	118 Anthracene	178	9.359	9.358	(1.010)	1112124	45.0460	45.0	
	119 Carbazole	167	9.566	9.565	(1.032)	968332	43.5805	43.6	
	121 Di-n-butylphthalate	149	10.031	10.031	(1.083)	1578121	47.7700	47.8	
	126 Fluoranthene	202	10.745	10.755	(1.160)	1037366	44.3912	44.4	
	128 Pyrene	202	11.025	11.025	(0.861)	1048130	43.0525	43.0	
$	129 Terphenyl-D14	244	11.242	11.242	(0.878)	682408	42.4271	42.4	
	136 Butylbenzylphthalate	149	11.946	11.946	(0.933)	553035	43.5824	43.6	
*	141 Chrysene-D12	240	12.805	12.805	(1.000)	676020	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.774	12.774	(0.998)	376915	79.5490	79.5	
	139 Benzo(a)anthracene	228	12.784	12.784	(0.998)	694403	42.0608	42.1	
	142 Chrysene	228	12.847	12.846	(1.003)	665496	41.5590	41.6	
	143 bis(2-Ethylhexyl)phthalate	149	12.950	12.960	(1.011)	762900	44.5829	44.6	
	144 Di-n-octylphthalate	149	14.285	14.295	(0.907)	1081963	39.5409	39.5	
	145 Benzo(b)fluoranthene	252	14.948	14.958	(0.949)	518412	40.2140	40.2	
	147 Benzo(k)fluoranthene	252	15.010	15.009	(0.953)	547075	42.3219	42.3(H)	
	149 Benzo(a)pyrene	252	15.620	15.630	(0.992)	435104	40.8914	40.9	
*	150 Perylene-D12	264	15.745	15.744	(1.000)	421595	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.494	17.504	(1.111)	360682	62.9619	63.0(R)	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9934.D
Report Date: 09-Apr-2015 15:53

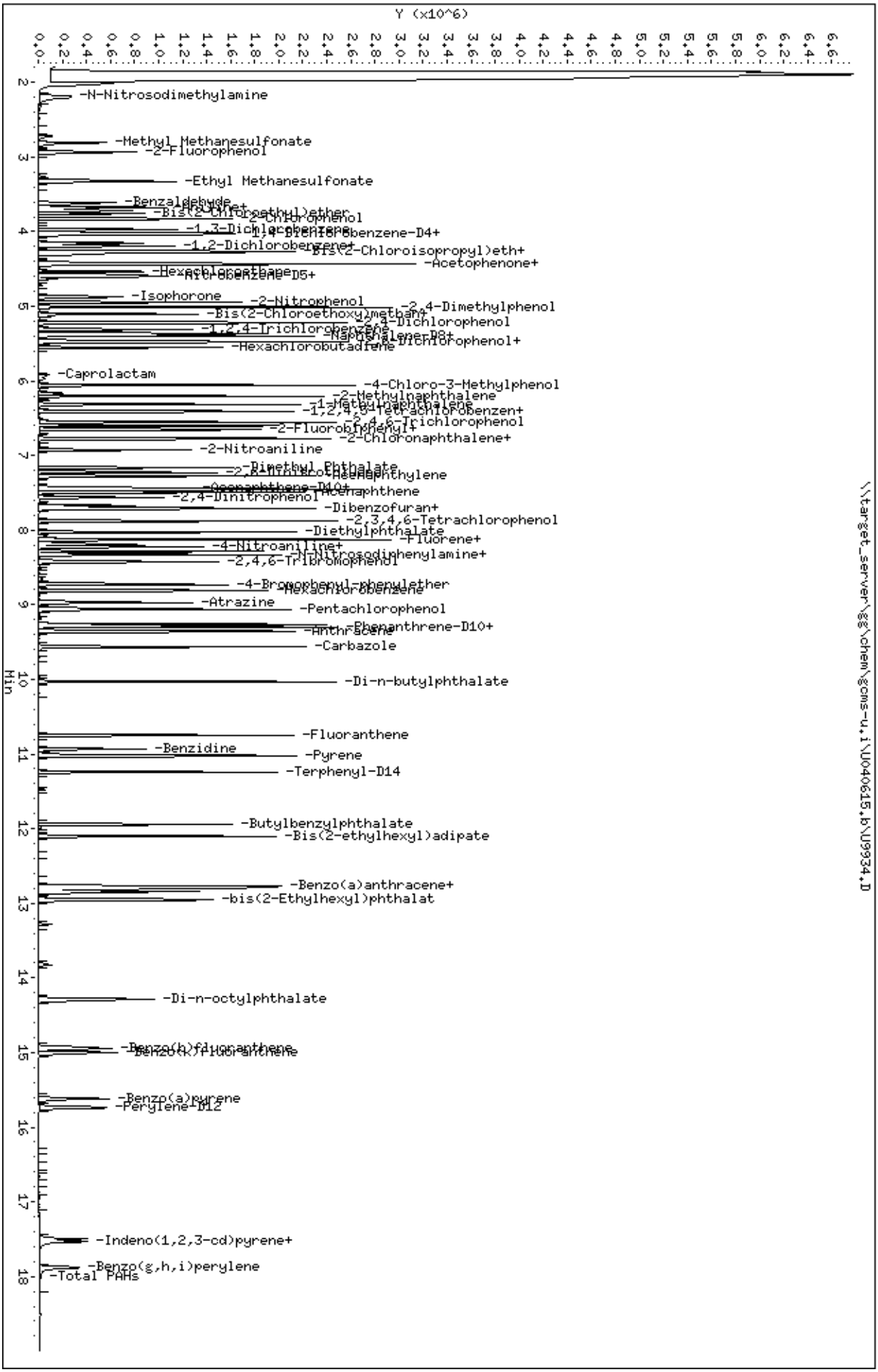
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.535	17.545	(1.114)	285931	49.9636	50.0	
155 Benzo(g,h,i)perylene	276	17.887	17.887	(1.136)	301104	47.1618	47.2	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u,i\U040615,b\U9934,D
Date : 06-APR-2015 16:05
Client ID: WG160777-LCS
Sample Info: WG160777-2,SI2069
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9935.D
Report Date: 09-Apr-2015 15:53

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040615.b\U9935.D
Lab Smp Id: WG160777-3 Client Smp ID: WG160777-LCSD
Inj Date : 06-APR-2015 16:31 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160777-3,SI2069
Misc Info : WG160781,WG160777,WG160080-4,SI2069-3
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040615.b\U8270C72.m
Meth Date : 06-Apr-2015 15:32 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 5 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.931	2.931	(0.730)	348143	29.1223	29.1	
$ 12 Phenol-D6	99	3.666	3.666	(0.912)	275408	19.8646	19.9	
13 Phenol	94	3.677	3.676	(0.915)	301405	20.8088	20.8	
16 Bis(2-Chloroethyl)ether	93	3.759	3.759	(0.936)	363507	36.2677	36.3	
17 2-Chlorophenol	128	3.821	3.831	(0.951)	601603	51.8536	51.8	
18 1,3-Dichlorobenzene	146	3.966	3.966	(0.987)	366351	30.7503	30.8	
* 19 1,4-Dichlorobenzene-D4	152	4.018	4.018	(1.000)	316118	40.0000		
20 1,4-Dichlorobenzene	146	4.039	4.038	(1.005)	355185	31.7978	31.8	
22 1,2-Dichlorobenzene	146	4.184	4.194	(1.041)	355991	32.3754	32.4	
23 2-Methylphenol	108	4.266	4.266	(1.062)	520476	48.7598	48.8	
25 2,2'-Oxybis(1-chloropropane)	45	4.287	4.287	(1.067)	353466	30.5212	30.5	
28 3&4-Methylphenol	108	4.432	4.442	(1.103)	458373	52.0900	52.1(Q)	
30 N-Nitroso-di-n-propylamine	70	4.432	4.442	(1.103)	198145	33.2139	33.2(Q)	
32 Hexachloroethane	117	4.536	4.535	(1.129)	152800	30.2925	30.3	
$ 33 Nitrobenzene-D5	82	4.577	4.587	(0.852)	356747	32.6609	32.7	
34 Nitrobenzene	77	4.598	4.608	(0.856)	334407	33.3951	33.4	
36 Isophorone	82	4.867	4.866	(0.906)	572717	27.3917	27.4	
37 2-Nitrophenol	139	4.950	4.949	(0.921)	345216	57.3890	57.4	
38 2,4-Dimethylphenol	107	5.012	5.011	(0.933)	648654	60.1078	60.1	
40 Bis(2-Chloroethoxy)methane	93	5.105	5.104	(0.950)	426783	29.1375	29.1	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9935.D
Report Date: 09-Apr-2015 15:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.219	5.229	(0.971)	465373	58.0515	58.0	
	43 1,2,4-Trichlorobenzene	180	5.312	5.311	(0.988)	271363	32.3556	32.4	
*	45 Naphthalene-D8	136	5.374	5.373	(1.000)	1220728	40.0000		
	46 Naphthalene	128	5.395	5.394	(1.004)	949525	31.7424	31.7	
	47 4-Chloroaniline	127	5.467	5.467	(1.017)	384841	31.5056	31.5	
	50 Hexachlorobutadiene	225	5.550	5.549	(1.033)	149218	29.5158	29.5	
	54 4-Chloro-3-Methylphenol	107	6.057	6.067	(1.127)	571297	66.7555	66.8	
	56 2-Methylnaphthalene	142	6.202	6.201	(1.154)	623261	34.3242	34.3	
	59 Hexachlorocyclopentadiene	237	6.409	6.408	(0.860)	108540	19.7057	19.7	
	61 2,4,6-Trichlorophenol	196	6.554	6.564	(0.879)	298585	53.2035	53.2	
	62 2,4,5-Trichlorophenol	196	6.595	6.605	(0.885)	338101	56.7385	56.7	
$	63 2-Fluorobiphenyl	172	6.647	6.657	(0.892)	632216	32.9237	32.9	
	66 2-Chloronaphthalene	162	6.782	6.781	(0.910)	559828	29.2585	29.2	
	69 2-Nitroaniline	65	6.926	6.926	(0.929)	205410	32.3517	32.4	
	72 Dimethyl Phthalate	163	7.165	7.174	(0.961)	811682	38.6466	38.6	
	75 Acenaphthylene	152	7.278	7.278	(0.976)	978399	35.2855	35.3	
	74 2,6-Dinitrotoluene	165	7.227	7.226	(0.969)	196728	41.8118	41.8	
*	78 Acenaphthene-D10	164	7.454	7.454	(1.000)	660932	40.0000		
	77 3-Nitroaniline	138	7.423	7.443	(0.996)	187002	33.2460	33.2	
	79 Acenaphthene	153	7.496	7.495	(1.006)	594981	36.1095	36.1	
	80 2,4-Dinitrophenol	184	7.558	7.578	(1.014)	137625	51.7685	51.8	
	81 4-Nitrophenol	139	7.672	7.692	(1.029)	87721	23.6377	23.6(aQH)	
	83 Dibenzofuran	168	7.703	7.702	(1.033)	826711	37.5167	37.5	
	84 2,4-Dinitrotoluene	165	7.723	7.733	(1.036)	248943	42.6252	42.6	
	89 Diethylphthalate	149	8.024	8.033	(1.076)	843796	42.0446	42.0	
	92 4-Chlorophenyl-phenylether	204	8.127	8.137	(1.090)	290087	36.4263	36.4	
	90 Fluorene	166	8.117	8.127	(1.089)	696832	38.3975	38.4	
	94 4-Nitroaniline	138	8.179	8.189	(1.097)	186673	41.2210	41.2	
	95 4,6-Dinitro-2-Methylphenol	198	8.220	8.230	(0.887)	208530	65.1548	65.2	
	96 N-Nitrosodiphenylamine	169	8.282	8.292	(0.894)	466392	30.4310	30.4(R)	
$	100 2,4,6-Tribromophenol	330	8.427	8.427	(1.131)	238285	68.4569	68.4	
	106 4-Bromophenyl-phenylether	248	8.727	8.727	(0.942)	215396	40.0008	40.0	
	107 Hexachlorobenzene	284	8.810	8.820	(0.951)	249589	40.0376	40.0	
	110 Pentachlorophenol	266	9.059	9.068	(0.978)	217818	60.2006	60.2	
*	114 Phenanthrene-D10	188	9.266	9.265	(1.000)	1017668	40.0000		
	115 Phenanthrene	178	9.297	9.296	(1.003)	1043440	46.5359	46.5	
	118 Anthracene	178	9.348	9.358	(1.009)	1030077	42.9240	42.9	
	119 Carbazole	167	9.566	9.565	(1.032)	935282	43.3050	43.3	
	121 Di-n-butylphthalate	149	10.031	10.031	(1.083)	1510562	47.0415	47.0	
	126 Fluoranthene	202	10.746	10.755	(1.160)	929196	40.0392	40.0	
	128 Pyrene	202	11.025	11.025	(0.861)	963055	44.3378	44.3	
$	129 Terphenyl-D14	244	11.242	11.242	(0.878)	621749	43.3266	43.3	
	136 Butylbenzylphthalate	149	11.946	11.946	(0.933)	477335	42.1621	42.2	
*	141 Chrysene-D12	240	12.805	12.805	(1.000)	603142	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.774	12.774	(0.998)	314988	74.5119	74.5	
	139 Benzo(a)anthracene	228	12.785	12.784	(0.998)	611075	41.4859	41.5	
	142 Chrysene	228	12.847	12.846	(1.003)	571589	40.0077	40.0	
	143 bis(2-Ethylhexyl)phthalate	149	12.950	12.960	(1.011)	649136	42.5183	42.5	
	144 Di-n-octylphthalate	149	14.285	14.295	(0.908)	899310	38.5832	38.6	
	145 Benzo(b)fluoranthene	252	14.937	14.958	(0.949)	416698	37.9470	37.9	
	147 Benzo(k)fluoranthene	252	15.000	15.009	(0.953)	420470	38.1863	38.2(H)	
	149 Benzo(a)pyrene	252	15.621	15.630	(0.993)	348170	38.4136	38.4	
*	150 Perylene-D12	264	15.734	15.744	(1.000)	359121	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.494	17.504	(1.112)	220122	45.1098	45.1	

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9935.D
Report Date: 09-Apr-2015 15:53

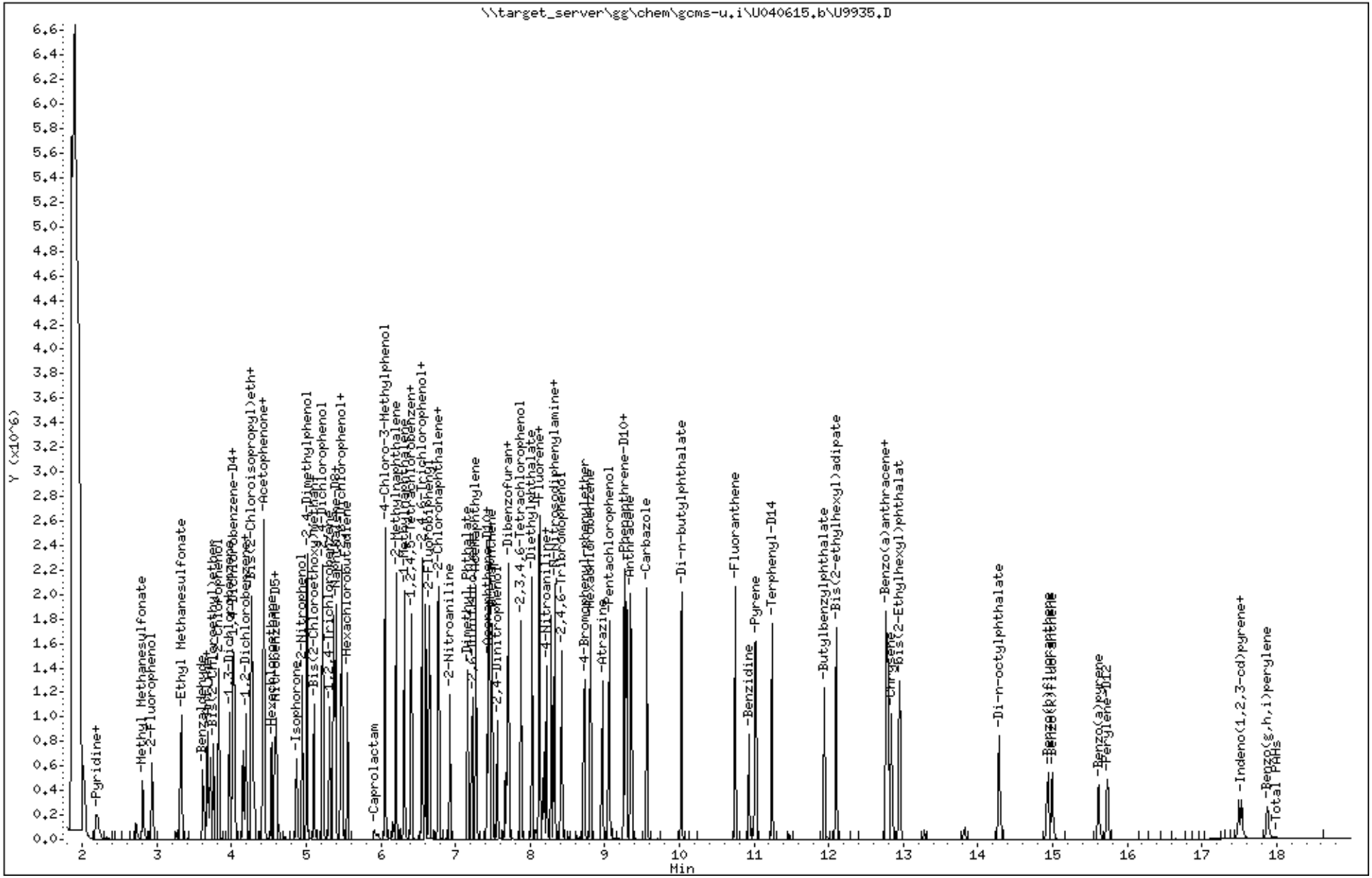
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.535	17.545	(1.114)	215074	44.1199	44.1	
155 Benzo(g,h,i)perylene	276	17.877	17.887	(1.136)	243411	44.7578	44.8	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u.i\U040615.b\U9935.D
Date : 06-APR-2015 16:31
Client ID: WG160777-LCSD
Sample Info: WG160777-3,SI2069
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u.i
Operator: JCG
Column diameter: 0.25



0000304

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160882-2
LCSD ID: WG160882-3
Project:
SDG: SI2069
Report Date: 09-APR-15
LCS File ID: U9984.D

Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882
LCSD File ID: U9985.D

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Phenol	100.	19.2	19.2	25.6	25.6	ug/L	28	30	0-115
Bis(2-Chloroethyl)Ether	50.0	34.9	69.8	38.6	77.2	ug/L	10	30	35-110
2-Chlorophenol	100.	53.2	53.2	62.3	62.3	ug/L	16	30	35-105
1,3-Dichlorobenzene	50.0	29.8	59.6	33.4	66.8	ug/L	11	30	30-100
1,4-Dichlorobenzene	50.0	31.3	62.6	35.3	70.6	ug/L	12	30	30-100
1,2-Dichlorobenzene	50.0	31.9	63.8	36.0	72.0	ug/L	12	30	35-100
2-Methylphenol	100.	44.8	44.8	54.3	54.3	ug/L	19	30	40-110
2,2'-Oxybis(1-Chloropropane)	50.0	29.4	58.8	33.1	66.2	ug/L	12	30	25-130
3&4-Methylphenol	100.	45.2	45.2	58.4	58.4	ug/L	25	30	30-110
N-Nitroso-Di-N-Propylamine	50.0	32.4	64.8	37.0	74.0	ug/L	13	30	35-130
Hexachloroethane	50.0	30.1	60.2	34.1	68.2	ug/L	12	30	30-100
Nitrobenzene	50.0	33.4	66.8	38.7	77.4	ug/L	15	30	45-110
Isophorone	50.0	26.6	53.2	31.1	62.2	ug/L	16	30	50-110
2-Nitrophenol	100.	59.2	59.2	73.6	73.6	ug/L	22	30	40-115
2,4-Dimethylphenol	100.	57.0	57.0	67.9	67.9	ug/L	17	30	30-110
Bis(2-Chloroethoxy)Methane	50.0	28.5	57.0	32.9	65.8	ug/L	14	30	45-105
2,4-Dichlorophenol	100.	58.3	58.3	71.2	71.2	ug/L	20	30	50-105
1,2,4-Trichlorobenzene	50.0	32.1	64.2	37.3	74.6	ug/L	15	30	35-105
Naphthalene	50.0	31.1	62.2	36.1	72.2	ug/L	15	30	40-100
4-Chloroaniline	50.0	28.5	57.0	33.3	66.6	ug/L	16	30	15-110
Hexachlorobutadiene	50.0	30.2	60.4	36.0	72.0	ug/L	18	30	25-105
4-Chloro-3-Methylphenol	100.	62.0	62.0	76.4	76.4	ug/L	21	30	45-110
2-Methylnaphthalene	50.0	33.3	66.6	39.7	79.4	ug/L	18	30	45-105
Hexachlorocyclopentadiene	50.0	20.1	40.2	24.8	49.6	ug/L	21	30	23-70
2,4,6-Trichlorophenol	100.	56.0	56.0	73.3	73.3	ug/L	27	30	50-115
2,4,5-Trichlorophenol	100.	60.5	60.5	72.2	72.2	ug/L	18	30	50-110
2-Chloronaphthalene	50.0	28.5	57.0	35.9	71.8	ug/L	23	30	50-105
2-Nitroaniline	50.0	32.2	64.4	33.8	67.6	ug/L	5	30	50-115
Dimethyl Phthalate	50.0	36.8	73.6	39.9	79.8	ug/L	8	30	25-125
Acenaphthylene	50.0	35.4	70.8	40.6	81.2	ug/L	14	30	50-105
2,6-Dinitrotoluene	50.0	39.5	79.0	41.0	82.0	ug/L	4	30	50-115
3-Nitroaniline	50.0	30.6	61.2	32.9	65.8	ug/L	7	30	20-125
Acenaphthene	50.0	35.6	71.2	40.6	81.2	ug/L	13	30	45-110
2,4-Dinitrophenol	100.	40.2	40.2	75.9	75.9	ug/L	61*	30	15-140

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160882-2
LCSD ID: WG160882-3
Project:
SDG: SI2069
Report Date: 09-APR-15
LCS File ID: U9984.D

Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882
LCSD File ID: U9985.D

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
4-Nitrophenol	100.	17.2	17.2	102.	102.	ug/L	142*	30	0-125
Dibenzofuran	50.0	36.6	73.2	44.2	88.4	ug/L	19	30	55-105
2,4-Dinitrotoluene	50.0	35.8	71.6	40.7	81.4	ug/L	13	30	50-120
Diethylphthalate	50.0	38.7	77.4	43.5	87.0	ug/L	12	30	40-120
4-Chlorophenyl-Phenylether	50.0	32.9	65.8	44.0	88.0	ug/L	29	30	50-110
Fluorene	50.0	34.8	69.6	42.9	85.8	ug/L	21	30	50-110
4-Nitroaniline	50.0	33.3	66.6	38.5	77.0	ug/L	14	30	35-120
4,6-Dinitro-2-Methylphenol	100.	64.3	64.3	92.3	92.3	ug/L	36*	30	40-130
N-Nitrosodiphenylamine	50.0	33.6	67.2	35.4	70.8	ug/L	5	30	50-110
4-Bromophenyl-Phenylether	50.0	42.4	84.8	45.6	91.2	ug/L	7	30	50-115
Hexachlorobenzene	50.0	42.4	84.8	42.9	85.8	ug/L	1	30	50-110
Pentachlorophenol	100.	63.5	63.5	82.8	82.8	ug/L	26	30	40-115
Phenanthrene	50.0	42.4	84.8	52.0	104.	ug/L	20	30	50-115
Anthracene	50.0	42.0	84.0	47.3	94.6	ug/L	12	30	55-110
Carbazole	50.0	42.4	84.8	43.6	87.2	ug/L	3	30	50-115
Di-N-Butylphthalate	50.0	41.4	82.8	46.6	93.2	ug/L	12	30	55-115
Fluoranthene	50.0	40.7	81.4	42.4	84.8	ug/L	4	30	55-115
Pyrene	50.0	37.7	75.4	44.0	88.0	ug/L	15	30	50-130
Butylbenzylphthalate	50.0	37.2	74.4	40.8	81.6	ug/L	9	30	45-115
3,3'-Dichlorobenzidine	100.	75.0	75.0	81.2	81.2	ug/L	8	30	20-110
Benzo(a)anthracene	50.0	39.4	78.8	43.6	87.2	ug/L	10	30	55-110
Chrysene	50.0	42.1	84.2	42.4	84.8	ug/L	1	30	55-110
Bis(2-Ethylhexyl)Phthalate	50.0	38.1	76.2	40.7	81.4	ug/L	6	30	40-125
Di-N-Octylphthalate	50.0	34.5	69.0	40.3	80.6	ug/L	16	30	35-135
Benzo(b)fluoranthene	50.0	38.7	77.4	41.2	82.4	ug/L	6	30	45-120
Benzo(k)fluoranthene	50.0	40.4	80.8	43.8	87.6	ug/L	8	30	45-125
Benzo(a)pyrene	50.0	40.0	80.0	42.6	85.2	ug/L	6	30	55-110
Indeno(1,2,3-cd)pyrene	50.0	41.8	83.6	41.0	82.0	ug/L	2	30	45-125
Dibenzo(a,h)anthracene	50.0	42.4	84.8	41.4	82.8	ug/L	2	30	40-125
Benzo(g,h,i)perylene	50.0	42.8	85.6	39.8	79.6	ug/L	7	30	40-125
2-Fluorophenol			27.3		39.0				20-110
Phenol-d6			16.8		24.9				10-115
Nitrobenzene-d5			64.1		75.1				40-110
2-Fluorobiphenyl			63.1		76.1				50-110

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG160882-2
LCSD ID: WG160882-3
Project:
SDG: SI2069
Report Date: 09-APR-15
LCS File ID: U9984.D

Received Date:
Extract Date: 08-APR-15
Extracted By: HG
Extraction Method: SW846 3510
Lab Prep Batch: WG160882
LCSD File ID: U9985.D

Analysis Date: 08-APR-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

2,4,6-Tribromophenol	64.9	78.9	40-125
Terphenyl-d14	77.3	87.8	50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9984.D
Report Date: 09-Apr-2015 15:55

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9984.D
Lab Smp Id: WG160882-2 Client Smp ID: WG160882-LCS
Inj Date : 08-APR-2015 14:29 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160882-2,SI2069
Misc Info : WG160877,WG160882,WG160080-4,SI2069-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.920	2.911	(0.729)	368926	27.3282	27.3	
$ 12 Phenol-D6	99	3.655	3.656	(0.912)	262615	16.7736	16.8	
13 Phenol	94	3.666	3.677	(0.915)	313861	19.1884	19.2	
16 Bis(2-Chloroethyl)ether	93	3.748	3.750	(0.935)	394844	34.8848	34.9	
17 2-Chlorophenol	128	3.821	3.822	(0.954)	696883	53.1903	53.2	
18 1,3-Dichlorobenzene	146	3.955	3.957	(0.987)	400718	29.7849	29.8	
* 19 1,4-Dichlorobenzene-D4	152	4.007	4.008	(1.000)	356981	40.0000		
20 1,4-Dichlorobenzene	146	4.028	4.029	(1.005)	394715	31.2918	31.3	
22 1,2-Dichlorobenzene	146	4.173	4.174	(1.041)	396358	31.9204	31.9	
23 2-Methylphenol	108	4.255	4.257	(1.062)	540437	44.8343	44.8	
25 2,2'-Oxybis(1-chloropropane)	45	4.276	4.277	(1.067)	385178	29.4523	29.4	
28 3&4-Methylphenol	108	4.421	4.433	(1.103)	449223	45.2066	45.2	
30 N-Nitroso-di-n-propylamine	70	4.431	4.433	(1.106)	217969	32.3546	32.4(Q)	
32 Hexachloroethane	117	4.514	4.515	(1.127)	171546	30.1160	30.1	
$ 33 Nitrobenzene-D5	82	4.566	4.578	(0.851)	384880	32.0365	32.0	
34 Nitrobenzene	77	4.587	4.598	(0.855)	368439	33.4522	33.4	
36 Isophorone	82	4.866	4.857	(0.907)	612302	26.6254	26.6	
37 2-Nitrophenol	139	4.939	4.940	(0.921)	391406	59.1586	59.2	
38 2,4-Dimethylphenol	107	5.001	5.002	(0.932)	676670	57.0094	57.0	
40 Bis(2-Chloroethoxy)methane	93	5.094	5.095	(0.950)	458785	28.4778	28.5	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9984.D
Report Date: 09-Apr-2015 15:55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.208	5.219	(0.971)	513994	58.2938	58.3	
	43 1,2,4-Trichlorobenzene	180	5.301	5.302	(0.988)	296205	32.1102	32.1	
*	45 Naphthalene-D8	136	5.363	5.364	(1.000)	1342662	40.0000		
	46 Naphthalene	128	5.384	5.385	(1.004)	1026639	31.1010	31.1	
	47 4-Chloroaniline	127	5.456	5.457	(1.017)	383193	28.5217	28.5	
	50 Hexachlorobutadiene	225	5.539	5.540	(1.033)	167228	30.1882	30.2	
	54 4-Chloro-3-Methylphenol	107	6.046	6.058	(1.127)	583557	61.9956	62.0	
	56 2-Methylnaphthalene	142	6.191	6.192	(1.154)	664668	33.2803	33.3	
	59 Hexachlorocyclopentadiene	237	6.398	6.399	(0.860)	117603	20.0639	20.1	
	61 2,4,6-Trichlorophenol	196	6.543	6.554	(0.879)	334567	56.0209	56.0	
	62 2,4,5-Trichlorophenol	196	6.595	6.596	(0.886)	383739	60.5149	60.5	
$	63 2-Fluorobiphenyl	172	6.636	6.637	(0.892)	644432	31.5366	31.5	
	66 2-Chloronaphthalene	162	6.771	6.772	(0.910)	581282	28.5483	28.5	
	69 2-Nitroaniline	65	6.915	6.917	(0.929)	217630	32.2099	32.2	
	72 Dimethyl Phthalate	163	7.154	7.165	(0.961)	821930	36.7752	36.8	
	75 Acenaphthylene	152	7.267	7.269	(0.976)	1043607	35.3681	35.4	
	74 2,6-Dinitrotoluene	165	7.216	7.217	(0.969)	197840	39.5132	39.5	
*	78 Acenaphthene-D10	164	7.443	7.445	(1.000)	703335	40.0000		
	77 3-Nitroaniline	138	7.412	7.424	(0.996)	183132	30.5951	30.6	
	79 Acenaphthene	153	7.474	7.486	(1.004)	623728	35.5720	35.6	
	80 2,4-Dinitrophenol	184	7.547	7.569	(1.014)	113687	40.1859	40.2	
	81 4-Nitrophenol	139	7.661	7.683	(1.029)	67935	17.2024	17.2(aQH)	
	83 Dibenzofuran	168	7.692	7.693	(1.033)	858340	36.6037	36.6	
	84 2,4-Dinitrotoluene	165	7.702	7.714	(1.035)	222262	35.7624	35.8	
	89 Diethylphthalate	149	8.013	8.014	(1.076)	826064	38.6795	38.7	
	92 4-Chlorophenyl-phenylether	204	8.116	8.117	(1.090)	288197	32.8986	32.9	
	90 Fluorene	166	8.106	8.107	(1.089)	687917	34.7705	34.8	
	94 4-Nitroaniline	138	8.168	8.179	(1.097)	160457	33.2959	33.3	
	95 4,6-Dinitro-2-Methylphenol	198	8.209	8.210	(0.888)	197043	64.3011	64.3	
	96 N-Nitrosodiphenylamine	169	8.271	8.273	(0.895)	492607	33.5696	33.6(R)	
$	100 2,4,6-Tribromophenol	330	8.406	8.417	(1.129)	240526	64.9348	64.9	
	106 4-Bromophenyl-phenylether	248	8.716	8.718	(0.943)	216688	42.4398	42.4	
	107 Hexachlorobenzene	284	8.799	8.800	(0.952)	253140	42.4115	42.4	
	110 Pentachlorophenol	266	9.048	9.059	(0.979)	220031	63.5141	63.5	
*	114 Phenanthrene-D10	188	9.244	9.256	(1.000)	974376	40.0000		
	115 Phenanthrene	178	9.275	9.287	(1.003)	937186	42.3919	42.4	
	118 Anthracene	178	9.337	9.349	(1.010)	965283	42.0112	42.0	
	119 Carbazole	167	9.555	9.556	(1.034)	876391	42.3811	42.4	
	121 Di-n-butylphthalate	149	10.010	10.011	(1.083)	1272688	41.3946	41.4	
	126 Fluoranthene	202	10.735	10.736	(1.161)	901661	40.7175	40.7	
	128 Pyrene	202	11.004	11.005	(0.861)	876530	37.6912	37.7	
$	129 Terphenyl-D14	244	11.221	11.222	(0.878)	593578	38.6338	38.6	
	136 Butylbenzylphthalate	149	11.925	11.926	(0.934)	451640	37.2599	37.2	
*	141 Chrysene-D12	240	12.774	12.775	(1.000)	645757	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.753	12.754	(0.998)	339290	74.9640	75.0	
	139 Benzo(a)anthracene	228	12.753	12.764	(0.998)	620623	39.3536	39.4	
	142 Chrysene	228	12.825	12.827	(1.004)	643909	42.0954	42.1	
	143 bis(2-Ethylhexyl)phthalate	149	12.929	12.930	(1.012)	622513	38.0837	38.1	
	144 Di-n-octylphthalate	149	14.254	14.265	(0.907)	887890	34.5089	34.5	
	145 Benzo(b)fluoranthene	252	14.906	14.928	(0.949)	469353	38.7203	38.7	
	147 Benzo(k)fluoranthene	252	14.968	14.979	(0.953)	491055	40.4004	40.4(H)	
	149 Benzo(a)pyrene	252	15.589	15.600	(0.992)	399733	39.9527	40.0	
*	150 Perylene-D12	264	15.713	15.714	(1.000)	396422	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.473	17.474	(1.112)	224947	41.7610	41.8	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9984.D
Report Date: 09-Apr-2015 15:55

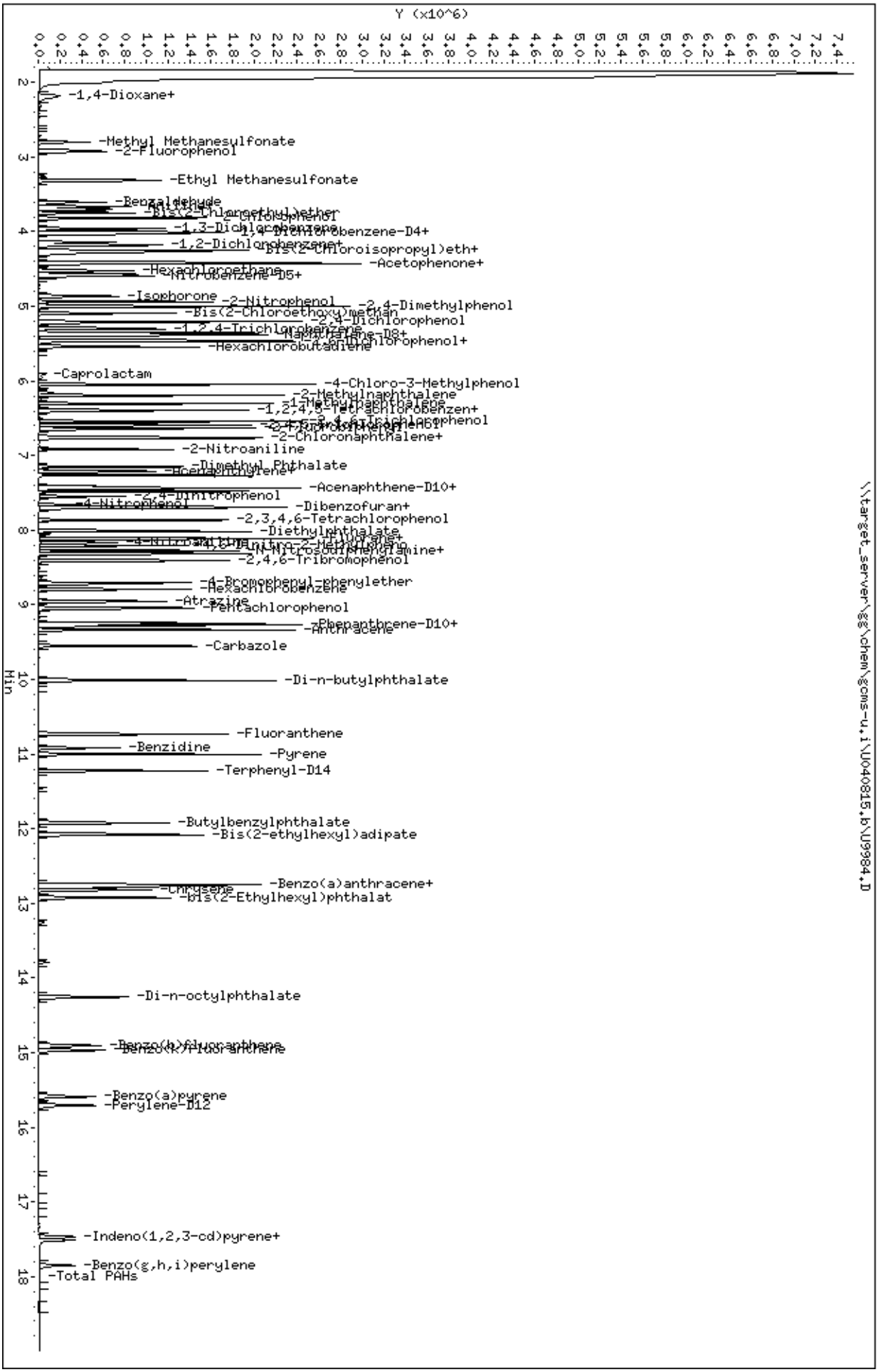
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.514	17.515	(1.115)	227907	42.3533	42.4	
155 Benzo(g,h,i)perylene	276	17.856	17.857	(1.136)	256880	42.7900	42.8	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9984,D
Date : 08-APR-2015 14:29
Client ID: WG160882-LCS
Sample Info: WG160882-2,SI2069
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9985.D
Report Date: 09-Apr-2015 15:55

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-u.i\U040815.b\U9985.D
Lab Smp Id: WG160882-3 Client Smp ID: WG160882-LCSD
Inj Date : 08-APR-2015 14:55 MS Autotune Date: 02-JAN-2015 09:23
Operator : JCG Inst ID: gcms-u.i
Smp Info : WG160882-3,SI2069
Misc Info : WG160877,WG160882,WG160080-4,SI2069-1
Comment :
Method : \\target_server\gg\chem\gcms-u.i\U040815.b\U8270C72.m
Meth Date : 08-Apr-2015 13:53 cgomez Quant Type: ISTD
Cal Date : 23-MAR-2015 17:23 Cal File: U9726.D
Als bottle: 5 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SW8270bnaDoD.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 8 2-Fluorophenol	112	2.914	2.911	(0.727)	500848	38.9876	39.0	
$ 12 Phenol-D6	99	3.659	3.656	(0.912)	370810	24.8890	24.9	
13 Phenol	94	3.669	3.677	(0.915)	399014	25.6352	25.6	
16 Bis(2-Chloroethyl)ether	93	3.752	3.750	(0.935)	416184	38.6407	38.6	
17 2-Chlorophenol	128	3.814	3.822	(0.951)	777001	62.3222	62.3	
18 1,3-Dichlorobenzene	146	3.959	3.957	(0.987)	427572	33.3975	33.4	
* 19 1,4-Dichlorobenzene-D4	152	4.011	4.008	(1.000)	339701	40.0000		
20 1,4-Dichlorobenzene	146	4.021	4.029	(1.003)	423851	35.3109	35.3	
22 1,2-Dichlorobenzene	146	4.177	4.174	(1.041)	425522	36.0123	36.0	
23 2-Methylphenol	108	4.259	4.257	(1.062)	622796	54.2949	54.3	
25 2,2'-Oxybis(1-chloropropane)	45	4.280	4.277	(1.067)	412529	33.1483	33.1	
28 3&4-Methylphenol	108	4.425	4.433	(1.103)	552712	58.4503	58.4	
30 N-Nitroso-di-n-propylamine	70	4.435	4.433	(1.106)	236968	36.9640	37.0(Q)	
32 Hexachloroethane	117	4.518	4.515	(1.126)	184659	34.0671	34.1	
$ 33 Nitrobenzene-D5	82	4.570	4.578	(0.853)	415670	37.5417	37.5	
34 Nitrobenzene	77	4.591	4.598	(0.857)	393225	38.7388	38.7	
36 Isophorone	82	4.870	4.857	(0.909)	658942	31.0902	31.1	
37 2-Nitrophenol	139	4.943	4.940	(0.923)	449001	73.6348	73.6	
38 2,4-Dimethylphenol	107	4.994	5.002	(0.932)	743072	67.9276	67.9	
40 Bis(2-Chloroethoxy)methane	93	5.087	5.095	(0.950)	488787	32.9202	32.9	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9985.D
Report Date: 09-Apr-2015 15:55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	42 2,4-Dichlorophenol	162	5.212	5.219	(0.973)	579030	71.2543	71.2	
	43 1,2,4-Trichlorobenzene	180	5.294	5.302	(0.988)	317283	37.3202	37.3	
*	45 Naphthalene-D8	136	5.357	5.364	(1.000)	1237431	40.0000		
	46 Naphthalene	128	5.377	5.385	(1.004)	1071131	36.1073	36.1	
	47 4-Chloroaniline	127	5.460	5.457	(1.019)	412889	33.3455	33.3	
	50 Hexachlorobutadiene	225	5.543	5.540	(1.035)	178186	36.0249	36.0	
	54 4-Chloro-3-Methylphenol	107	6.050	6.058	(1.129)	662893	76.4129	76.4	
	56 2-Methylnaphthalene	142	6.195	6.192	(1.156)	730331	39.6778	39.7	
	59 Hexachlorocyclopentadiene	237	6.392	6.399	(0.859)	131236	24.8354	24.8	
	61 2,4,6-Trichlorophenol	196	6.547	6.554	(0.880)	394508	73.2730	73.3	
	62 2,4,5-Trichlorophenol	196	6.588	6.596	(0.886)	413018	72.2465	72.2	
$	63 2-Fluorobiphenyl	172	6.640	6.637	(0.893)	700850	38.0438	38.0	
	66 2-Chloronaphthalene	162	6.775	6.772	(0.911)	658806	35.8899	35.9	
	69 2-Nitroaniline	65	6.909	6.917	(0.929)	205949	33.8105	33.8	
	72 Dimethyl Phthalate	163	7.147	7.165	(0.961)	804589	39.9315	39.9	
	75 Acenaphthylene	152	7.261	7.269	(0.976)	1079599	40.5844	40.6	
	74 2,6-Dinitrotoluene	165	7.209	7.217	(0.969)	184895	40.9614	41.0	
*	78 Acenaphthene-D10	164	7.437	7.445	(1.000)	634075	40.0000		
	77 3-Nitroaniline	138	7.416	7.424	(0.997)	177363	32.8680	32.9	
	79 Acenaphthene	153	7.478	7.486	(1.006)	641489	40.5811	40.6	
	80 2,4-Dinitrophenol	184	7.551	7.569	(1.015)	193576	75.8990	75.9	
	81 4-Nitrophenol	139	7.685	7.683	(1.033)	363426	102.078	102	
	83 Dibenzofuran	168	7.696	7.693	(1.035)	934251	44.1928	44.2	
	84 2,4-Dinitrotoluene	165	7.706	7.714	(1.036)	227938	40.6817	40.7	
	89 Diethylphthalate	149	8.006	8.014	(1.077)	837142	43.4799	43.5	
	92 4-Chlorophenyl-phenylether	204	8.120	8.117	(1.092)	315402	44.0292	44.0	
	90 Fluorene	166	8.110	8.107	(1.090)	726004	42.9000	42.9	
	94 4-Nitroaniline	138	8.172	8.179	(1.099)	167155	38.4745	38.5	
	95 4,6-Dinitro-2-Methylphenol	198	8.213	8.210	(0.888)	265387	92.3431	92.3	
	96 N-Nitrosodiphenylamine	169	8.275	8.273	(0.895)	487226	35.4032	35.4(R)	
$	100 2,4,6-Tribromophenol	330	8.410	8.417	(1.131)	263354	78.8636	78.9	
	106 4-Bromophenyl-phenylether	248	8.710	8.718	(0.942)	215589	45.5722	45.6	
	107 Hexachlorobenzene	284	8.793	8.800	(0.951)	240007	42.8760	42.9	
	110 Pentachlorophenol	266	9.041	9.059	(0.978)	269138	82.8379	82.8	
*	114 Phenanthrene-D10	188	9.248	9.256	(1.000)	913817	40.0000		
	115 Phenanthrene	178	9.279	9.287	(1.003)	1010720	52.0567	52.0	
	118 Anthracene	178	9.341	9.349	(1.010)	1019194	47.2971	47.3	
	119 Carbazole	167	9.548	9.556	(1.032)	845479	43.5958	43.6	
	121 Di-n-butylphthalate	149	10.014	10.011	(1.083)	1343488	46.5932	46.6	
	126 Fluoranthene	202	10.728	10.736	(1.160)	874032	42.4485	42.4	
	128 Pyrene	202	11.008	11.005	(0.861)	908093	44.0181	44.0	
$	129 Terphenyl-D14	244	11.225	11.222	(0.879)	598637	43.9219	43.9	
	136 Butylbenzylphthalate	149	11.919	11.926	(0.933)	438438	40.7741	40.8	
*	141 Chrysene-D12	240	12.778	12.775	(1.000)	572851	40.0000		
	140 3,3'-Dichlorobenzidine	252	12.747	12.754	(0.998)	326171	81.2371	81.2	
	139 Benzo(a)anthracene	228	12.757	12.764	(0.998)	609275	43.5509	43.6	
	142 Chrysene	228	12.819	12.827	(1.003)	575973	42.4463	42.4	
	143 bis(2-Ethylhexyl)phthalate	149	12.922	12.930	(1.011)	590434	40.7183	40.7	
	144 Di-n-octylphthalate	149	14.258	14.265	(0.908)	860904	40.2747	40.3	
	145 Benzo(b)fluoranthene	252	14.899	14.928	(0.949)	415181	41.2270	41.2	
	147 Benzo(k)fluoranthene	252	14.961	14.979	(0.953)	442364	43.8067	43.8(H)	
	149 Benzo(a)pyrene	252	15.582	15.600	(0.992)	354366	42.6318	42.6	
*	150 Perylene-D12	264	15.707	15.714	(1.000)	329346	40.0000		
	153 Indeno(1,2,3-cd)pyrene	276	17.466	17.474	(1.112)	183552	41.0162	41.0	

Data File: \\target_server\gg\chem\gcms-u.i\U040815.b\U9985.D
Report Date: 09-Apr-2015 15:55

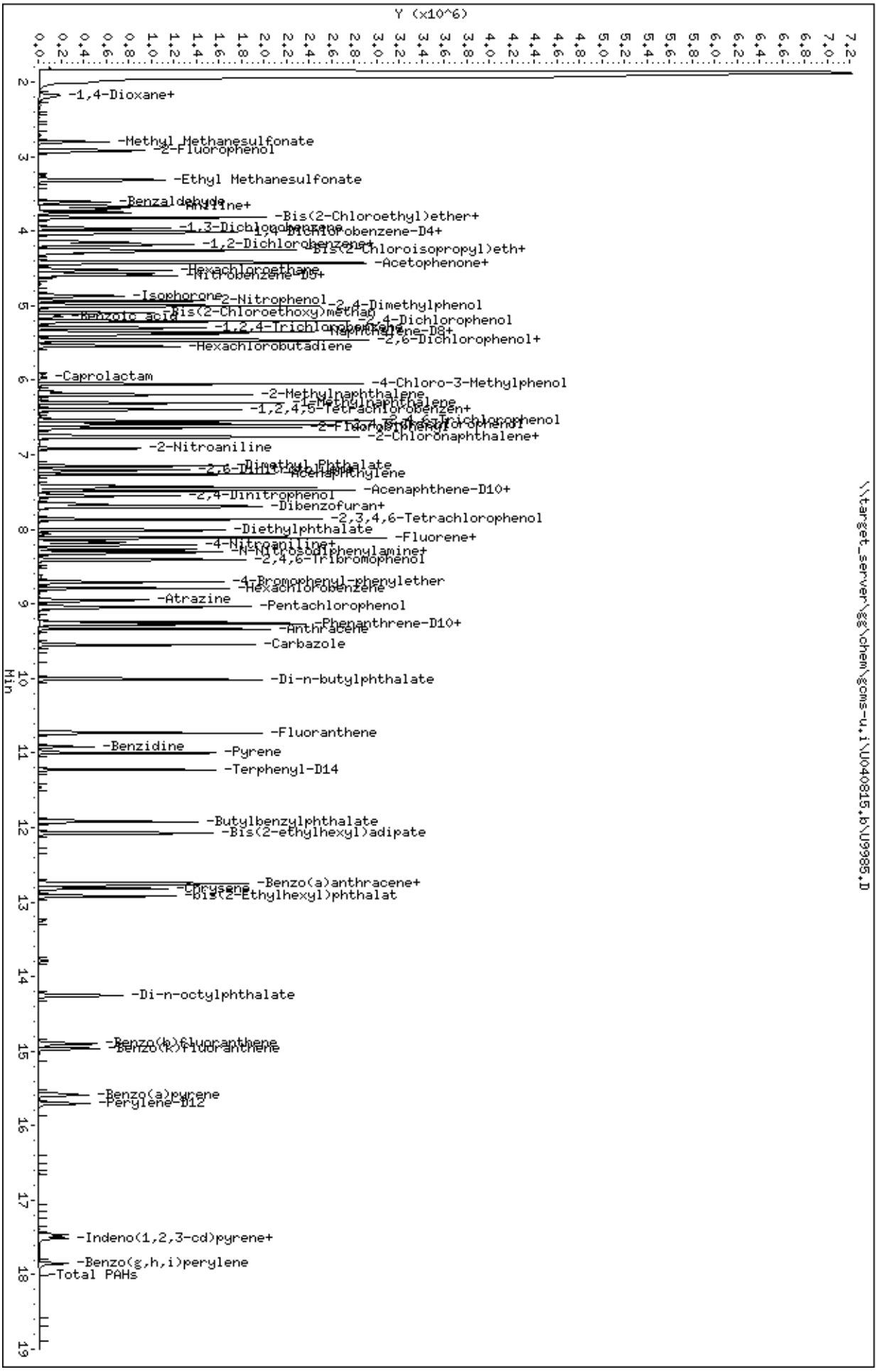
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
154 Dibenzo(a,h)anthracene	278	17.508	17.515	(1.115)	184861	41.3505	41.4	
155 Benzo(g,h,i)perylene	276	17.849	17.857	(1.136)	198613	39.8221	39.8	

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-u,i\U040815,b\U9985,D
Date : 08-APR-2015 14:55
Client ID: WG160882-LCSD
Sample Info: WG160882-3,SI2069
Volume Injected (uL): 1.0
Column phase: ZB5-MS

Instrument: gcms-u,i
Operator: JCG
Column diameter: 0.25



Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 032315

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG160080-1	50 ng DFTPP	UD340	1	1	DFTPP8270	2.0	JLM	OK
SSTD050U0323	WG160080-4	U9721		2	U8270C72	1.0		✓
-2	SSTD010U0323	22		3				✓
-3	025	23		4				✓
-5	075	24		5				✓
-6	100	25		6				✓
-7	125	26		7				✓
-8	150	27		8				OK
								JLM032415

STANDARD	CODE
DFTPP	52558 7 JLM
CAL. STD.	SKX3 SKY913
IS MIX	SKY941

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 040615

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG160789-1	50ng DFTPP	U0349	1	1	DFTPP390	2.0	JCK	OK
-2	SSTD050V0406	U9932		2	U8270C72	1.0		OK
3510	WG160777-1	33		3				OK
	-2	34		4				OK
	-3	35		5				OK
	SI1969-1RE	36		6				OK
	-2RE	37		7				SS5↓
	-3RE	38		8				OK
	SI1995-4REDL	39	2	9				OK 100/200
	-4RE	40	1	10				OK
	SI2008-1	41		11				SS1.5↓
	WG160777-4	42		12				SS1↓
	-5	43		13				OK
	SI2008-2	44		14				SS1↓
	-3	45		15				OK
	-4	46		16				OK
	-7	47		17				OK
	SI2069-2	48		18				SS1↓
	-3	49		19				OK
	-4	50		20				SS1.5↓
	-5	51		21				OK
	-1	52		22				SS1↓
3550	SI1976-1DL	53	4	23				1562↓ 100/400
	hold	54-59	1	24				

STANDARD	CODE
DFTPP	52585
CAL. STD.	52583 STK4913
IS MIX	STK4941

REVIEWED AND APPROVED BY: _____
DATE: _____

DATE OF DFTPP INJECTION: 040815

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG160877-1	50ng DFTPP	U0351	1	1	DFTPP83290	2.0	JLM	OK
-2	SSM0050U0408	U0982		2	U8270C72	1.0		OK
3560	WG160882-1	83		3				OK
	-2	84		4				OK
	-3	85		5				OK
	SI2008-1RE	86		6				OK
	-2RE	87		7				OK
	SI2069-2RE	88		8				OK
	-4RE	89		9				OK
	-1RE	90		10				156L
	MeCl2	91-94		11				

JLM 04/09/15

STANDARD	CODE
DFTPP	52585
CAL. STD.	52583 57K4913
IS MIX	57K4941

REVIEWED AND APPROVED BY: _____
DATE: _____

SV
sep

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP)		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270	EPA 625	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SU2709		Spike ID (1): SU2710		
	Surrogate ID (2):		Spike ID (2):		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM056		H_2SO_4 Lot # 71333		NaOH Lot # 2M101
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 2716500		
Nitrogen Water Bath Temperature 38°C			pH (1st Extraction) 52		pH (2nd Extraction) 211
Prep Start Time: ~~10:00 TMS~~ 11:30	Prep End Time: 14:00		CLLE Start Time: —		CLLE End Time: —

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV016	Initials	Comments
4-6-15	TMS	WG160777-1	1000	1mL	NL	✓		1mL	4-6-15	E2	KF	(WG160799) 625-R312823
		-2			1mL					E3		SV-R312822
		-3								E4		~~SV TMS~~
		-4	1060							E5		MS SI2008-1M
		-5	1060							E6		MSD -1M
										KF	4-6-15	

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
4-6-15	TMS	SI 1969-1K	1010	1mL	NL	✓		1mL	4-6-15	E7	KF	re emulsion, SS.
		-2h	1020							8		
		-3h	1030							9		
		SI1995-4 A	1000							E10		PT UP 0315 #81594 10mL-0
		SI 2008-1K	1060		NL					SV017 A1		MS/MD
		-2e	1010							A2		
		-3d	1060							A3		
		-4e	1000							A4		
		-7e	1020							A5		
		SI 2069-1f	1040							A6		
		-2f	1010							A7		
		-3f	1010							A8		
		-4e	1030							A9		
		-5f	1060							A10		
		~~SI 1946-8 TMS~~					~~4-6-15~~					
										KF	4-6-15	

Reviewed By_____ Date_____

SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓	SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓ / EPA 625	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV2709	Spike ID (1): SV2710		
	Surrogate ID (2): —	Spike ID (2): —		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM0826	H_2SO_4 Lot # 71333		NaOH Lot # 74101
Consumables	Filter Paper Lot # 9618151	$NaSO_4$ Lot # 27965001		
Nitrogen Water Bath Temperature 38°C		pH (1st Extraction) ≤2		pH (2nd Extraction) ≥11
Prep Start Time: 10:10	Prep End Time: 12:00	CLLE Start Time:		CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV5-17-15	Initials	Comments
4-8-15	KF	WG160882-1	1000	1.0	NR	✓		1.0	4-8-15	E10	KF	R313145
		-2	1000		1.0					A1		
↓	↓	↓ -3	1000	↓	↓	↓		↓	↓	A2	↓	

KF 4-8-15

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000014

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV5-17-15	Initials	Comments
4-8-15	KF	SI2008-1N	1060	1.0	NR	✓		1.0	4-8-15	~~KF~~ A3	KF	
		↓ -2D	1030							A4		
		SI2069-1E	1040							A5		
		-2E	1030							A6		
↓	↓	↓ -4F	1020	↓	↓	↓		↓	↓	A7	↓	

KF 4-8-15

Reviewed By____________________ Date__________

EX-007 – Revision 2 – 12/05/2013

QAEX284

METALS DATA

Sample Data Section

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SI2069 **SOW No.** SW846

Client Field ID	Lab Sample ID
MW-01-GW-040215	SI2069-005
MW-03-GW-040115	SI2069-002
MW-03-GW-040115	SI2069-002P
MW-03-GW-040115	SI2069-002S
MW-04-GW-040115	SI2069-004
MW-10-GW-040115	SI2069-003
MW-11-GW-040115	SI2069-001
MW-11-GW-040115	SI2069-001P
MW-11-GW-040115	SI2069-001S

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Edward A. Morgan Name: Edward A. Morgan

Date: April 13, 2015 Title: Senior Analyst

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-11-GW-040115

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-001

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	856			P	1	300	15.	100
7440-36-0	ANTIMONY, TOTAL	5.0	U		P	1	8.0	1.3	5.0
7440-38-2	ARSENIC, TOTAL	5.0	U		P	1	8.0	1.4	5.0
7440-39-3	BARIUM, TOTAL	24.9			P	1	5.0	0.23	3.0
7440-41-7	BERYLLIUM, TOTAL	0.50	U		P	1	5.0	0.10	0.50
7440-43-9	CADMIUM, TOTAL	0.10	J		P	1	5.0	0.049	3.0
7440-70-2	CALCIUM, TOTAL	20500			P	1	100	11.	80
7440-47-3	CHROMIUM, TOTAL	9.74	J		P	1	10	0.36	4.0
7440-48-4	COBALT, TOTAL	0.38	J		P	1	10	0.24	4.0
7440-50-8	COPPER, TOTAL	4.5	J		P	1	25	0.63	10
7439-89-6	IRON, TOTAL	610			P	1	100	5.4	80
7439-92-1	LEAD, TOTAL	1.3	J		P	1	5.0	1.1	4.0
7439-95-4	MAGNESIUM, TOTAL	1650			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	16.6			P	1	5.0	1.1	4.0
7439-97-6	MERCURY, TOTAL	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	0.58	J		P	1	10	0.28	4.0
7440-09-7	POTASSIUM, TOTAL	879	J		P	1	1000	41.	500
7782-49-2	SELENIUM, TOTAL	7.0	U		P	1	10	2.4	7.0
7440-22-4	SILVER, TOTAL	4.0	U		P	1	10	0.27	4.0
7440-23-5	SODIUM, TOTAL	20400			P	1	1000	24.	500
7440-28-0	THALLIUM, TOTAL	5.0	U		P	1	15	1.1	5.0
7440-62-2	VANADIUM, TOTAL	3.46	J		P	1	10	0.23	4.0
7440-66-6	ZINC, TOTAL	13.1	J		P	1	20	0.72	10

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-03-GW-040115

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	42	J		P	1	300	15.	100
7440-36-0	ANTIMONY, TOTAL	2.1	J		P	1	8.0	1.3	5.0
7440-38-2	ARSENIC, TOTAL	5.0	U		P	1	8.0	1.4	5.0
7440-39-3	BARIUM, TOTAL	38.9			P	1	5.0	0.23	3.0
7440-41-7	BERYLLIUM, TOTAL	0.50	U		P	1	5.0	0.10	0.50
7440-43-9	CADMIUM, TOTAL	3.0	U		P	1	5.0	0.049	3.0
7440-70-2	CALCIUM, TOTAL	34300			P	1	100	11.	80
7440-47-3	CHROMIUM, TOTAL	3.0	J		P	1	10	0.36	4.0
7440-48-4	COBALT, TOTAL	0.91	J		P	1	10	0.24	4.0
7440-50-8	COPPER, TOTAL	3.0	J		P	1	25	0.63	10
7439-89-6	IRON, TOTAL	499			P	1	100	5.4	80
7439-92-1	LEAD, TOTAL	4.0	U		P	1	5.0	1.1	4.0
7439-95-4	MAGNESIUM, TOTAL	5040			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	54.1			P	1	5.0	1.1	4.0
7439-97-6	MERCURY, TOTAL	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	0.58	J		P	1	10	0.28	4.0
7440-09-7	POTASSIUM, TOTAL	2480			P	1	1000	41.	500
7782-49-2	SELENIUM, TOTAL	7.0	U		P	1	10	2.4	7.0
7440-22-4	SILVER, TOTAL	4.0	U		P	1	10	0.27	4.0
7440-23-5	SODIUM, TOTAL	28300			P	1	1000	24.	500
7440-28-0	THALLIUM, TOTAL	5.0	U		P	1	15	1.1	5.0
7440-62-2	VANADIUM, TOTAL	0.58	J		P	1	10	0.23	4.0
7440-66-6	ZINC, TOTAL	16.2	J		P	1	20	0.72	10

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-10-GW-040115

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	812			P	1	300	15.	100
7440-36-0	ANTIMONY, TOTAL	5.0	U		P	1	8.0	1.3	5.0
7440-38-2	ARSENIC, TOTAL	2.0	J		P	1	8.0	1.4	5.0
7440-39-3	BARIUM, TOTAL	52.7			P	1	5.0	0.23	3.0
7440-41-7	BERYLLIUM, TOTAL	0.50	U		P	1	5.0	0.10	0.50
7440-43-9	CADMIUM, TOTAL	3.0	U		P	1	5.0	0.049	3.0
7440-70-2	CALCIUM, TOTAL	13000			P	1	100	11.	80
7440-47-3	CHROMIUM, TOTAL	27.9			P	1	10	0.36	4.0
7440-48-4	COBALT, TOTAL	4.0	U		P	1	10	0.24	4.0
7440-50-8	COPPER, TOTAL	1.8	J		P	1	25	0.63	10
7439-89-6	IRON, TOTAL	988			P	1	100	5.4	80
7439-92-1	LEAD, TOTAL	4.0	U		P	1	5.0	1.1	4.0
7439-95-4	MAGNESIUM, TOTAL	3370			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	5.8			P	1	5.0	1.1	4.0
7439-97-6	MERCURY, TOTAL	1.53			CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	0.29	J		P	1	10	0.28	4.0
7440-09-7	POTASSIUM, TOTAL	2460			P	1	1000	41.	500
7782-49-2	SELENIUM, TOTAL	7.0	U		P	1	10	2.4	7.0
7440-22-4	SILVER, TOTAL	4.0	U		P	1	10	0.27	4.0
7440-23-5	SODIUM, TOTAL	30400			P	1	1000	24.	500
7440-28-0	THALLIUM, TOTAL	5.0	U		P	1	15	1.1	5.0
7440-62-2	VANADIUM, TOTAL	1.3	J		P	1	10	0.23	4.0
7440-66-6	ZINC, TOTAL	15.8	J		P	1	20	0.72	10

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-04-GW-040115

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-004

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	77	J		P	1	300	15.	100
7440-36-0	ANTIMONY, TOTAL	5.0	U		P	1	8.0	1.3	5.0
7440-38-2	ARSENIC, TOTAL	5.0	U		P	1	8.0	1.4	5.0
7440-39-3	BARIUM, TOTAL	19.2			P	1	5.0	0.23	3.0
7440-41-7	BERYLLIUM, TOTAL	0.50	U		P	1	5.0	0.10	0.50
7440-43-9	CADMIUM, TOTAL	0.13	J		P	1	5.0	0.049	3.0
7440-70-2	CALCIUM, TOTAL	13600			P	1	100	11.	80
7440-47-3	CHROMIUM, TOTAL	4.0	U		P	1	10	0.36	4.0
7440-48-4	COBALT, TOTAL	0.66	J		P	1	10	0.24	4.0
7440-50-8	COPPER, TOTAL	1.5	J		P	1	25	0.63	10
7439-89-6	IRON, TOTAL	126			P	1	100	5.4	80
7439-92-1	LEAD, TOTAL	4.0	U		P	1	5.0	1.1	4.0
7439-95-4	MAGNESIUM, TOTAL	2130			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	28.7			P	1	5.0	1.1	4.0
7439-97-6	MERCURY, TOTAL	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	4.0	U		P	1	10	0.28	4.0
7440-09-7	POTASSIUM, TOTAL	890	J		P	1	1000	41.	500
7782-49-2	SELENIUM, TOTAL	7.0	U		P	1	10	2.4	7.0
7440-22-4	SILVER, TOTAL	4.0	U		P	1	10	0.27	4.0
7440-23-5	SODIUM, TOTAL	6840			P	1	1000	24.	500
7440-28-0	THALLIUM, TOTAL	5.0	U		P	1	15	1.1	5.0
7440-62-2	VANADIUM, TOTAL	4.0	U		P	1	10	0.23	4.0
7440-66-6	ZINC, TOTAL	3.8	J		P	1	20	0.72	10

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-01-GW-040215

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-005

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	233	J		P	1	300	15.	100
7440-36-0	ANTIMONY, TOTAL	5.0	U		P	1	8.0	1.3	5.0
7440-38-2	ARSENIC, TOTAL	5.9	J		P	1	8.0	1.4	5.0
7440-39-3	BARIUM, TOTAL	68.8			P	1	5.0	0.23	3.0
7440-41-7	BERYLLIUM, TOTAL	0.50	U		P	1	5.0	0.10	0.50
7440-43-9	CADMIUM, TOTAL	3.0	U		P	1	5.0	0.049	3.0
7440-70-2	CALCIUM, TOTAL	38300			P	1	100	11.	80
7440-47-3	CHROMIUM, TOTAL	0.63	J		P	1	10	0.36	4.0
7440-48-4	COBALT, TOTAL	1.7	J		P	1	10	0.24	4.0
7440-50-8	COPPER, TOTAL	2.4	J		P	1	25	0.63	10
7439-89-6	IRON, TOTAL	13900			P	1	100	5.4	80
7439-92-1	LEAD, TOTAL	4.0	U		P	1	5.0	1.1	4.0
7439-95-4	MAGNESIUM, TOTAL	4000			P	1	100	7.8	80
7439-96-5	MANGANESE, TOTAL	412			P	1	5.0	1.1	4.0
7439-97-6	MERCURY, TOTAL	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	1.5	J		P	1	10	0.28	4.0
7440-09-7	POTASSIUM, TOTAL	3760			P	1	1000	41.	500
7782-49-2	SELENIUM, TOTAL	7.0	U		P	1	10	2.4	7.0
7440-22-4	SILVER, TOTAL	4.0	U		P	1	10	0.27	4.0
7440-23-5	SODIUM, TOTAL	16600			P	1	1000	24.	500
7440-28-0	THALLIUM, TOTAL	5.0	U		P	1	15	1.1	5.0
7440-62-2	VANADIUM, TOTAL	3.23	J		P	1	10	0.23	4.0
7440-66-6	ZINC, TOTAL	10.8	J		P	1	20	0.72	10

Comments:

QC Summary Section

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: ICV

File: HID07A Apr 07, 2015 11:02

Analyte	True	Found	%R (1)
MERCURY	6.0	6.25	104.2

SAMPLE: CCV

File: HID07A Apr 07, 2015 11:08

Analyte	True	Found	%R (1)
MERCURY	5.0	5.15	103.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCV

File: HID07A Apr 07, 2015 11:32

Analyte	True	Found	%R (1)
MERCURY	5.0	5.19	103.8

SAMPLE: CCV

File: HID07A Apr 07, 2015 11:51

Analyte	True	Found	%R (1)
MERCURY	5.0	5.10	102.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: ICV

File: HID09A Apr 09, 2015 11:03

Analyte	True	Found	%R (1)
MERCURY	6.0	5.92	98.7

SAMPLE: CCV

File: HID09A Apr 09, 2015 11:10

Analyte	True	Found	%R (1)
MERCURY	5.0	5.05	101.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCV

File: HID09A Apr 09, 2015 11:33

Analyte	True	Found	%R (1)
MERCURY	5.0	5.14	102.8

SAMPLE: CCV

File: HID09A Apr 09, 2015 11:46

Analyte	True	Found	%R (1)
MERCURY	5.0	4.61	92.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: ICV

File: IID06A Apr 06, 2015 12:40

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10250.00	102.5
ANTIMONY	400.0	402.80	100.7
ARSENIC	400.0	396.10	99.0
BARIUM	400.0	403.50	100.9
BERYLLIUM	400.0	405.10	101.3
CADMIUM	400.0	409.20	102.3
CALCIUM	10000.0	10290.00	102.9
CHROMIUM	400.0	413.80	103.5
COBALT	400.0	413.40	103.3
COPPER	400.0	408.90	102.2
IRON	10000.0	10250.00	102.5
LEAD	400.0	414.50	103.6
MAGNESIUM	10000.0	10470.00	104.7
MANGANESE	400.0	400.80	100.2
NICKEL	400.0	412.60	103.2
POTASSIUM	13600.0	13720.00	100.9
SELENIUM	400.0	401.40	100.3
SILVER	400.0	401.30	100.3
SODIUM	10000.0	10300.00	103.0
THALLIUM	400.0	420.80	105.2
VANADIUM	400.0	408.80	102.2
ZINC	400.0	410.80	102.7

SAMPLE: CCV

File: IID06A Apr 06, 2015 13:20

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12220.00	97.8
ANTIMONY	500.0	493.70	98.7
ARSENIC	500.0	489.10	97.8
BARIUM	500.0	487.40	97.5
BERYLLIUM	500.0	483.90	96.8
CADMIUM	500.0	492.10	98.4
CALCIUM	12500.0	12230.00	97.8
CHROMIUM	500.0	494.90	99.0
COBALT	500.0	499.90	100.0
COPPER	500.0	494.20	98.8
IRON	12500.0	12220.00	97.8
LEAD	500.0	497.70	99.5
MAGNESIUM	12500.0	12640.00	101.1
MANGANESE	500.0	482.20	96.4
NICKEL	500.0	501.10	100.2
POTASSIUM	12500.0	12110.00	96.9
SELENIUM	500.0	487.10	97.4
SILVER	500.0	493.30	98.7
SODIUM	12500.0	12070.00	96.6
THALLIUM	500.0	500.30	100.1
VANADIUM	500.0	496.50	99.3
ZINC	500.0	493.60	98.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCV

File: IID06A Apr 06, 2015 14:16

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12190.00	97.5
ANTIMONY	500.0	496.30	99.3
ARSENIC	500.0	491.40	98.3
BARIUM	500.0	483.50	96.7
BERYLLIUM	500.0	485.80	97.2
CADMIUM	500.0	492.80	98.6
CALCIUM	12500.0	12010.00	96.1
CHROMIUM	500.0	494.30	98.9
COBALT	500.0	502.70	100.5
COPPER	500.0	501.00	100.2
IRON	12500.0	12150.00	97.2
LEAD	500.0	498.40	99.7
MAGNESIUM	12500.0	12700.00	101.6
MANGANESE	500.0	484.60	96.9
NICKEL	500.0	502.70	100.5
POTASSIUM	12500.0	11990.00	95.9
SELENIUM	500.0	494.70	98.9
SILVER	500.0	498.60	99.7
SODIUM	12500.0	11980.00	95.8
THALLIUM	500.0	503.60	100.7
VANADIUM	500.0	502.20	100.4
ZINC	500.0	492.20	98.4

SAMPLE: CCV

File: IID06A Apr 06, 2015 15:14

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12310.00	98.5
ANTIMONY	500.0	512.20	102.4
ARSENIC	500.0	503.30	100.7
BARIUM	500.0	497.00	99.4
BERYLLIUM	500.0	485.90	97.2
CADMIUM	500.0	501.70	100.3
CALCIUM	12500.0	12230.00	97.8
CHROMIUM	500.0	493.20	98.6
COBALT	500.0	512.40	102.5
COPPER	500.0	501.70	100.3
IRON	12500.0	12210.00	97.7
LEAD	500.0	508.60	101.7
MAGNESIUM	12500.0	13170.00	105.4
MANGANESE	500.0	488.00	97.6
NICKEL	500.0	518.40	103.7
POTASSIUM	12500.0	12220.00	97.8
SELENIUM	500.0	504.20	100.8
SILVER	500.0	494.90	99.0
SODIUM	12500.0	12100.00	96.8
THALLIUM	500.0	511.90	102.4
VANADIUM	500.0	492.30	98.5
ZINC	500.0	503.90	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCV

File: IID06A Apr 06, 2015 16:11

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12180.00	97.4
ANTIMONY	500.0	493.00	98.6
ARSENIC	500.0	489.50	97.9
BARIUM	500.0	494.30	98.9
BERYLLIUM	500.0	478.80	95.8
CADMIUM	500.0	485.90	97.2
CALCIUM	12500.0	12110.00	96.9
CHROMIUM	500.0	489.20	97.8
COBALT	500.0	497.80	99.6
COPPER	500.0	492.20	98.4
IRON	12500.0	11960.00	95.7
LEAD	500.0	493.20	98.6
MAGNESIUM	12500.0	12780.00	102.2
MANGANESE	500.0	486.00	97.2
NICKEL	500.0	501.70	100.3
POTASSIUM	12500.0	12100.00	96.8
SELENIUM	500.0	488.00	97.6
SILVER	500.0	494.30	98.9
SODIUM	12500.0	11960.00	95.7
THALLIUM	500.0	496.70	99.3
VANADIUM	500.0	496.00	99.2
ZINC	500.0	487.30	97.5

SAMPLE: CCV

File: IID06A Apr 06, 2015 17:08

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12790.00	102.3
ANTIMONY	500.0	495.50	99.1
ARSENIC	500.0	488.40	97.7
BARIUM	500.0	519.90	104.0
BERYLLIUM	500.0	502.10	100.4
CADMIUM	500.0	485.60	97.1
CALCIUM	12500.0	12680.00	101.4
CHROMIUM	500.0	489.20	97.8
COBALT	500.0	498.10	99.6
COPPER	500.0	492.80	98.6
IRON	12500.0	12530.00	100.2
LEAD	500.0	492.90	98.6
MAGNESIUM	12500.0	12800.00	102.4
MANGANESE	500.0	506.60	101.3
NICKEL	500.0	502.50	100.5
POTASSIUM	12500.0	12650.00	101.2
SELENIUM	500.0	487.60	97.5
SILVER	500.0	496.40	99.3
SODIUM	12500.0	12640.00	101.1
THALLIUM	500.0	496.50	99.3
VANADIUM	500.0	497.40	99.5
ZINC	500.0	487.90	97.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCV

File: IID06A Apr 06, 2015 18:05

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12130.00	97.0
ANTIMONY	500.0	496.60	99.3
ARSENIC	500.0	489.50	97.9
BARIUM	500.0	492.00	98.4
BERYLLIUM	500.0	472.50	94.5
CADMIUM	500.0	485.70	97.1
CALCIUM	12500.0	12120.00	97.0
CHROMIUM	500.0	494.70	98.9
COBALT	500.0	497.70	99.5
COPPER	500.0	499.90	100.0
IRON	12500.0	11820.00	94.6
LEAD	500.0	493.40	98.7
MAGNESIUM	12500.0	12760.00	102.1
MANGANESE	500.0	478.10	95.6
NICKEL	500.0	502.80	100.6
POTASSIUM	12500.0	12060.00	96.5
SELENIUM	500.0	485.70	97.1
SILVER	500.0	502.30	100.5
SODIUM	12500.0	12050.00	96.4
THALLIUM	500.0	496.40	99.3
VANADIUM	500.0	499.20	99.8
ZINC	500.0	488.60	97.7

SAMPLE: CCV

File: IID06A Apr 06, 2015 19:02

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11740.00	93.9
ANTIMONY	500.0	484.20	96.8
ARSENIC	500.0	476.90	95.4
BARIUM	500.0	488.50	97.7
BERYLLIUM	500.0	459.90	92.0
CADMIUM	500.0	458.10	91.6
CALCIUM	12500.0	12490.00	99.9
CHROMIUM	500.0	481.40	96.3
COBALT	500.0	479.70	95.9
COPPER	500.0	479.00	95.8
IRON	12500.0	11270.00	90.2
LEAD	500.0	465.10	93.0
MAGNESIUM	12500.0	13050.00	104.4
MANGANESE	500.0	494.60	98.9
NICKEL	500.0	511.00	102.2
POTASSIUM	12500.0	11680.00	93.4
SELENIUM	500.0	458.30	91.7
SILVER	500.0	504.90	101.0
SODIUM	12500.0	12110.00	96.9
THALLIUM	500.0	474.70	94.9
VANADIUM	500.0	489.80	98.0
ZINC	500.0	481.60	96.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCV

File: IID06A Apr 06, 2015 19:59

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11700.00	93.6
ANTIMONY	500.0	479.80	96.0
ARSENIC	500.0	472.80	94.6
BARIUM	500.0	489.00	97.8
BERYLLIUM	500.0	456.10	91.2
CADMIUM	500.0	443.80	88.8•
CALCIUM	12500.0	12660.00	101.3
CHROMIUM	500.0	478.10	95.6
COBALT	500.0	472.40	94.5
COPPER	500.0	475.60	95.1
IRON	12500.0	11090.00	88.7•
LEAD	500.0	454.50	90.9
MAGNESIUM	12500.0	13120.00	105.0
MANGANESE	500.0	498.40	99.7
NICKEL	500.0	512.40	102.5
POTASSIUM	12500.0	11610.00	92.9
SELENIUM	500.0	444.40	88.9•
SILVER	500.0	512.90	102.6
SODIUM	12500.0	12180.00	97.4
THALLIUM	500.0	465.30	93.1
VANADIUM	500.0	494.70	98.9
ZINC	500.0	475.50	95.1

SAMPLE: CCV

File: IID06A Apr 06, 2015 20:55

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11780.00	94.2
ANTIMONY	500.0	484.40	96.9
ARSENIC	500.0	477.70	95.5
BARIUM	500.0	494.20	98.8
BERYLLIUM	500.0	458.10	91.6
CADMIUM	500.0	452.20	90.4
CALCIUM	12500.0	12620.00	101.0
CHROMIUM	500.0	476.40	95.3
COBALT	500.0	476.70	95.3
COPPER	500.0	474.60	94.9
IRON	12500.0	11180.00	89.4•
LEAD	500.0	461.30	92.3
MAGNESIUM	12500.0	13120.00	105.0
MANGANESE	500.0	496.30	99.3
NICKEL	500.0	513.40	102.7
POTASSIUM	12500.0	11730.00	93.8
SELENIUM	500.0	454.70	90.9
SILVER	500.0	507.20	101.4
SODIUM	12500.0	12280.00	98.2
THALLIUM	500.0	471.30	94.3
VANADIUM	500.0	490.70	98.1
ZINC	500.0	480.40	96.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCV

File: IID06A Apr 06, 2015 21:52

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11730.00	93.8
ANTIMONY	500.0	486.10	97.2
ARSENIC	500.0	475.70	95.1
BARIUM	500.0	492.60	98.5
BERYLLIUM	500.0	456.50	91.3
CADMIUM	500.0	451.10	90.2
CALCIUM	12500.0	12620.00	101.0
CHROMIUM	500.0	477.40	95.5
COBALT	500.0	476.10	95.2
COPPER	500.0	474.90	95.0
IRON	12500.0	11150.00	89.2•
LEAD	500.0	461.40	92.3
MAGNESIUM	12500.0	13120.00	105.0
MANGANESE	500.0	494.70	98.9
NICKEL	500.0	512.90	102.6
POTASSIUM	12500.0	11740.00	93.9
SELENIUM	500.0	449.10	89.8
SILVER	500.0	507.10	101.4
SODIUM	12500.0	12310.00	98.5
THALLIUM	500.0	471.60	94.3
VANADIUM	500.0	489.20	97.8
ZINC	500.0	480.40	96.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: ICV

File: IID08A Apr 08, 2015 10:49

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10270.00	102.7
CADMIUM	400.0	409.20	102.3
CALCIUM	10000.0	10350.00	103.5
IRON	10000.0	10190.00	101.9
MAGNESIUM	10000.0	10460.00	104.6
SELENIUM	400.0	402.30	100.6

SAMPLE: CCV

File: IID08A Apr 08, 2015 11:28

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12560.00	100.5
CADMIUM	500.0	496.50	99.3
CALCIUM	12500.0	12520.00	100.2
IRON	12500.0	12540.00	100.3
MAGNESIUM	12500.0	12510.00	100.1
SELENIUM	500.0	489.60	97.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCV

File: IID08A Apr 08, 2015 12:25

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12440.00	99.5
CADMIUM	500.0	493.10	98.6
CALCIUM	12500.0	12440.00	99.5
IRON	12500.0	12420.00	99.4
MAGNESIUM	12500.0	12490.00	99.9
SELENIUM	500.0	490.80	98.2

SAMPLE: CCV

File: IID08A Apr 08, 2015 13:22

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12700.00	101.6
CADMIUM	500.0	491.40	98.3
CALCIUM	12500.0	12510.00	100.1
IRON	12500.0	12580.00	100.6
MAGNESIUM	12500.0	12500.00	100.0
SELENIUM	500.0	495.20	99.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCV

File: IID08A Apr 08, 2015 14:19

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13520.00	108.2
CADMIUM	500.0	488.70	97.7
CALCIUM	12500.0	13380.00	107.0
IRON	12500.0	13310.00	106.5
MAGNESIUM	12500.0	12550.00	100.4
SELENIUM	500.0	487.00	97.4

SAMPLE: CCV

File: IID08A Apr 08, 2015 15:15

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12840.00	102.7
CADMIUM	500.0	489.50	97.9
CALCIUM	12500.0	12750.00	102.0
IRON	12500.0	12740.00	101.9
MAGNESIUM	12500.0	12610.00	100.9
SELENIUM	500.0	485.90	97.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: PQL

File: HID07A Apr 07, 2015 11:06

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.18	90.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: PQL

File: HID09A Apr 09, 2015 11:08

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.19	95.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: PQL

File: IID06A Apr 06, 2015 12:50

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	285.50	95.2
ANTIMONY	8.0	7.81	97.6
ARSENIC	8.0	7.19	89.9
BARIUM	5.0	5.36	107.2
BERYLLIUM	5.0	4.92	98.4
CADMIUM	5.0	5.11	102.2
CALCIUM	100.0	85.50	85.5
CHROMIUM	10.0	10.31	103.1
COBALT	10.0	10.61	106.1
COPPER	25.0	25.34	101.4
IRON	100.0	94.82	94.8
LEAD	5.0	4.72	94.4
MAGNESIUM	100.0	86.45	86.5
MANGANESE	5.0	5.95	119.0
NICKEL	10.0	10.43	104.3
POTASSIUM	1000.0	1023.00	102.3
SELENIUM	10.0	11.35	113.5
SILVER	10.0	10.78	107.8
SODIUM	1000.0	1020.00	102.0
THALLIUM	15.0	15.39	102.6
VANADIUM	10.0	10.35	103.5
ZINC	20.0	20.85	104.3

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: PQL

File: IID08A Apr 08, 2015 10:58

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	316.10	105.4
CADMIUM	5.0	5.13	102.6
CALCIUM	100.0	113.90	113.9
IRON	100.0	108.60	108.6
MAGNESIUM	100.0	101.40	101.4
SELENIUM	10.0	9.78	97.8

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: ICB

File: HID07A Apr 07, 2015 11:04

Analyte	Result	C
MERCURY	0.033	U

SAMPLE: CCB

File: HID07A Apr 07, 2015 11:10

Analyte	Result	C
MERCURY	0.033	U

SAMPLE: CCB

File: HID07A Apr 07, 2015 11:34

Analyte	Result	C
MERCURY	0.033	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCB

File: HID07A Apr 07, 2015 11:53

Analyte	Result	C
MERCURY	-0.041	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: ICB

File: HID09A Apr 09, 2015 11:05

Analyte	Result	C
MERCURY	0.033	U

SAMPLE: CCB

File: HID09A Apr 09, 2015 11:12

Analyte	Result	C
MERCURY	0.033	U

SAMPLE: CCB

File: HID09A Apr 09, 2015 11:35

Analyte	Result	C
MERCURY	0.033	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCB

File: HID09A Apr 09, 2015 11:48

Analyte	Result	C
MERCURY	0.033	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: ICB

File: IID06A Apr 06, 2015 12:45

Analyte	Result	C
ALUMINUM	-17.300	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.310	U
BERYLLIUM	0.095	U
CADMIUM	0.074	U
CALCIUM	-19.770	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	-5.362	U
LEAD	1.000	U
MAGNESIUM	-24.670	U
MANGANESE	0.560	U
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SILVER	0.540	U
SODIUM	33.000	U
THALLIUM	1.100	U
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB

File: IID06A Apr 06, 2015 13:24

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.482	J
BERYLLIUM	0.167	J
CADMIUM	0.187	J
CALCIUM	-16.470	U
CHROMIUM	0.438	J
COBALT	0.367	J
COPPER	0.800	U
IRON	4.000	U
LEAD	1.000	U
MAGNESIUM	-12.110	U
MANGANESE	0.560	U
NICKEL	0.600	U
POTASSIUM	81.690	J
SELENIUM	4.376	J
SILVER	0.540	U
SODIUM	33.430	J
THALLIUM	1.106	J
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB

File: IID06A Apr 06, 2015 14:21

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.403	J
BERYLLIUM	0.185	J
CADMIUM	0.123	J
CALCIUM	-15.970	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	4.000	U
LEAD	1.000	U
MAGNESIUM	-18.310	U
MANGANESE	0.820	J
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SILVER	0.540	U
SODIUM	42.270	J
THALLIUM	1.100	U
VANADIUM	0.479	J
ZINC	0.450	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCB
File: IID06A Apr 06, 2015 15:18

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.337	J
BERYLLIUM	0.206	J
CADMIUM	0.127	J
CALCIUM	8.700	U
CHROMIUM	0.458	J
COBALT	0.330	U
COPPER	0.800	U
IRON	14.290	J
LEAD	1.000	U
MAGNESIUM	-16.300	U
MANGANESE	0.571	J
NICKEL	0.600	U
POTASSIUM	135.800	J
SELENIUM	4.542	J
SILVER	0.540	U
SODIUM	158.000	J
THALLIUM	1.100	U
VANADIUM	0.410	U
ZINC	0.455	J

SAMPLE: CCB
File: IID06A Apr 06, 2015 16:16

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.634	J
ARSENIC	1.500	U
BARIUM	0.443	J
BERYLLIUM	0.150	J
CADMIUM	0.166	J
CALCIUM	-12.110	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	4.000	U
LEAD	1.000	U
MAGNESIUM	-17.570	U
MANGANESE	0.560	U
NICKEL	0.600	U
POTASSIUM	112.000	J
SELENIUM	2.850	J
SILVER	0.540	U
SODIUM	126.500	J
THALLIUM	1.100	U
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB
File: IID06A Apr 06, 2015 17:13

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.523	J
BERYLLIUM	0.172	J
CADMIUM	0.168	J
CALCIUM	-12.660	U
CHROMIUM	0.423	J
COBALT	0.330	U
COPPER	0.800	U
IRON	4.000	U
LEAD	1.000	U
MAGNESIUM	-14.800	U
MANGANESE	0.664	J
NICKEL	0.600	U
POTASSIUM	77.110	J
SELENIUM	2.600	U
SILVER	0.540	U
SODIUM	53.010	J
THALLIUM	1.100	U
VANADIUM	0.410	U
ZINC	0.524	J

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCB

File: IID06A Apr 06, 2015 18:09

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.713	J
ARSENIC	1.500	U
BARIUM	0.416	J
BERYLLIUM	0.199	J
CADMIUM	0.207	J
CALCIUM	8.700	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.800	U
IRON	4.000	U
LEAD	1.000	U
MAGNESIUM	-15.520	U
MANGANESE	0.622	J
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SILVER	0.540	U
SODIUM	44.760	J
THALLIUM	1.100	U
VANADIUM	0.410	U
ZINC	0.450	U

SAMPLE: CCB

File: IID06A Apr 06, 2015 19:06

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	2.200	J
ARSENIC	1.500	U
BARIUM	0.924	J
BERYLLIUM	0.348	J
CADMIUM	0.182	J
CALCIUM	8.700	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	1.001	J
IRON	4.000	U
LEAD	1.000	U
MAGNESIUM	-17.150	U
MANGANESE	0.630	J
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SILVER	0.540	U
SODIUM	59.580	J
THALLIUM	1.100	U
VANADIUM	0.589	J
ZINC	0.450	U

SAMPLE: CCB

File: IID06A Apr 06, 2015 20:03

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.662	J
BERYLLIUM	0.196	J
CADMIUM	0.195	J
CALCIUM	8.700	U
CHROMIUM	0.410	U
COBALT	0.358	J
COPPER	1.350	J
IRON	4.000	U
LEAD	1.000	U
MAGNESIUM	-13.620	U
MANGANESE	0.689	J
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SILVER	0.540	U
SODIUM	92.460	J
THALLIUM	1.100	U
VANADIUM	0.410	U
ZINC	0.450	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCB

File: IID06A Apr 06, 2015 21:00

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.680	J
ARSENIC	1.500	U
BARIUM	0.541	J
BERYLLIUM	0.236	J
CADMIUM	0.207	J
CALCIUM	8.700	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	0.973	J
IRON	4.000	U
LEAD	1.000	U
MAGNESIUM	-19.860	U
MANGANESE	1.020	J
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SILVER	0.540	U
SODIUM	62.470	J
THALLIUM	1.100	U
VANADIUM	0.475	J
ZINC	0.450	U

SAMPLE: CCB

File: IID06A Apr 06, 2015 21:57

Analyte	Result	C
ALUMINUM	17.000	U
ANTIMONY	1.600	U
ARSENIC	1.500	U
BARIUM	0.945	J
BERYLLIUM	0.396	J
CADMIUM	0.201	J
CALCIUM	8.700	U
CHROMIUM	0.410	U
COBALT	0.330	U
COPPER	1.381	J
IRON	6.706	J
LEAD	1.000	U
MAGNESIUM	-14.570	U
MANGANESE	0.923	J
NICKEL	0.600	U
POTASSIUM	64.000	U
SELENIUM	2.600	U
SILVER	0.540	U
SODIUM	90.300	J
THALLIUM	1.100	U
VANADIUM	0.558	J
ZINC	0.450	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: ICB

File: IID08A Apr 08, 2015 10:54

Analyte	Result	C
ALUMINUM	17.000	U
CADMIUM	0.074	U
CALCIUM	8.700	U
IRON	4.000	U
MAGNESIUM	7.700	U
SELENIUM	2.948	J

SAMPLE: CCB

File: IID08A Apr 08, 2015 11:33

Analyte	Result	C
ALUMINUM	17.000	U
CADMIUM	0.074	U
CALCIUM	8.700	U
IRON	5.747	J
MAGNESIUM	7.700	U
SELENIUM	3.243	J

SAMPLE: CCB

File: IID08A Apr 08, 2015 12:29

Analyte	Result	C
ALUMINUM	17.000	U
CADMIUM	0.074	U
CALCIUM	8.700	U
IRON	4.000	U
MAGNESIUM	7.700	U
SELENIUM	2.868	J

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: CCB

File: IID08A Apr 08, 2015 13:26

Analyte	Result	C
ALUMINUM	17.000	U
CADMIUM	0.074	U
CALCIUM	8.700	U
IRON	4.000	U
MAGNESIUM	7.700	U
SELENIUM	4.732	J

SAMPLE: CCB

File: IID08A Apr 08, 2015 14:23

Analyte	Result	C
ALUMINUM	17.000	U
CADMIUM	0.074	U
CALCIUM	8.700	U
IRON	5.427	J
MAGNESIUM	7.700	U
SELENIUM	2.938	J

SAMPLE: CCB

File: IID08A Apr 08, 2015 15:20

Analyte	Result	C
ALUMINUM	17.000	U
CADMIUM	0.156	J
CALCIUM	8.700	U
IRON	6.788	J
MAGNESIUM	7.700	U
SELENIUM	2.948	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWID06HGW2

Matrix: WATER **SDG Name:** SI2069

QC Batch ID: ID06HGW2

Concentration Units : ug/L

Analyte	RESULT	C
MERCURY	0.10	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWID06ICW2

Matrix: WATER **SDG Name:** SI2069

QC Batch ID: ID06ICW2

Concentration Units : ug/L

Analyte	RESULT	C
ALUMINUM	100	U
ANTIMONY	1.7	J
ARSENIC	5.0	U
BARIUM	0.83	J
BERYLLIUM	0.50	U
CADMIUM	3.0	U
CALCIUM	80	U
CHROMIUM	4.0	U
COBALT	4.0	U
COPPER	1.1	J
IRON	80	U
LEAD	4.0	U
MAGNESIUM	80	U
MANGANESE	1.4	J
NICKEL	4.0	U
POTASSIUM	500	U
SELENIUM	4.1	J
SILVER	4.0	U
SODIUM	75	J
THALLIUM	5.0	U
VANADIUM	4.0	U
ZINC	10	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: ICSA

File: IID06A Apr 06, 2015 13:10

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	503500	100.7
ANTIMONY	0	0	
ARSENIC	0	0	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	-2	
CALCIUM	500000	450300	90.1
CHROMIUM	0	-1	
COBALT	0	0	
COPPER	0	-3	
IRON	200000	187900	94.0
LEAD	0	0	
MAGNESIUM	500000	481000	96.2
MANGANESE	0	-1	
NICKEL	0	0	
POTASSIUM	0	368	
SELENIUM	0	-4	
SILVER	0	0	
SODIUM	0	183	
THALLIUM	0	0	
VANADIUM	0	-1	
ZINC	0	0	

SAMPLE: ICSAB

File: IID06A Apr 06, 2015 13:15

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	472600	94.5
ANTIMONY	600	581	96.8
ARSENIC	100	90	90.0
BARIUM	500	482	96.4
BERYLLIUM	500	475	95.0
CADMIUM	1000	895	89.5
CALCIUM	500000	432400	86.5
CHROMIUM	500	462	92.4
COBALT	500	450	90.0
COPPER	500	493	98.6
IRON	200000	177700	88.8
LEAD	50	43	86.0
MAGNESIUM	500000	457500	91.5
MANGANESE	500	452	90.4
NICKEL	1000	883	88.3
POTASSIUM	20000	20600	103.0
SELENIUM	50	41	82.0
SILVER	200	206	103.0
SODIUM	20000	20660	103.3
THALLIUM	100	87	87.0
VANADIUM	500	476	95.2
ZINC	1000	885	88.5

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Concentration Units: ug/L

SAMPLE: ICSA

File: IID08A Apr 08, 2015 11:19

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	492500	98.5
CADMIUM	0	0	
CALCIUM	500000	467100	93.4
IRON	200000	186400	93.2
MAGNESIUM	500000	460300	92.1
SELENIUM	0	-3	

SAMPLE: ICSAB

File: IID08A Apr 08, 2015 11:23

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	474500	94.9
CADMIUM	1000	900	90.0
CALCIUM	500000	447400	89.5
IRON	200000	181100	90.5
MAGNESIUM	500000	446500	89.3
SELENIUM	50	45	90.0

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-11-GW-040115S

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-001P

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, TOTAL	2830		856		2000	98.6		80	120	P
ANTIMONY, TOTAL	100		5.0	U	100	100.2		80	120	P
ARSENIC, TOTAL	98.1		5.0	U	100	98.1		80	120	P
BARIUM, TOTAL	1940		24.9		2000	95.7		80	120	P
BERYLLIUM, TOTAL	46.1		0.50	U	50	92.3		80	120	P
CADMIUM, TOTAL	245		0.10	J	250	98.0		80	120	P
CALCIUM, TOTAL	23000		20500		2500	98.0		80	120	P
CHROMIUM, TOTAL	206		9.74	J	200	98.1		80	120	P
COBALT, TOTAL	488		0.38	J	500	97.6		80	120	P
COPPER, TOTAL	248		4.5	J	250	97.2		80	120	P
IRON, TOTAL	1630		610		1000	102.0		80	120	P
LEAD, TOTAL	92.4		1.3	J	100	91.1		80	120	P
MAGNESIUM, TOTAL	6780		1650		5000	102.7		80	120	P
MANGANESE, TOTAL	500		16.6		500	96.7		80	120	P
NICKEL, TOTAL	524		0.58	J	500	104.7		80	120	P
POTASSIUM, TOTAL	9880		879	J	10000	90.0		80	120	P
SELENIUM, TOTAL	101		7.0	U	100	100.9		80	120	P
SILVER, TOTAL	50.7		4.0	U	50	101.4		80	120	P
SODIUM, TOTAL	27500		20400		7500	94.8		80	120	P
THALLIUM, TOTAL	95.5		5.0	U	100	95.5		80	120	P
VANADIUM, TOTAL	511		3.46	J	500	101.5		80	120	P
ZINC, TOTAL	502		13.1	J	500	97.9		80	120	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-11-GW-040115S

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-001S

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, TOTAL	2880		856		2000	101.0		80	120	P
ANTIMONY, TOTAL	101		5.0	U	100	101.1		80	120	P
ARSENIC, TOTAL	101		5.0	U	100	100.7		80	120	P
BARIUM, TOTAL	1970		24.9		2000	97.3		80	120	P
BERYLLIUM, TOTAL	46.7		0.50	U	50	93.4		80	120	P
CADMIUM, TOTAL	249		0.10	J	250	99.6		80	120	P
CALCIUM, TOTAL	23400		20500		2500	115.6		80	120	P
CHROMIUM, TOTAL	209		9.74	J	200	99.6		80	120	P
COBALT, TOTAL	494		0.38	J	500	98.8		80	120	P
COPPER, TOTAL	252		4.5	J	250	99.0		80	120	P
IRON, TOTAL	1650		610		1000	104.4		80	120	P
LEAD, TOTAL	93.1		1.3	J	100	91.8		80	120	P
MAGNESIUM, TOTAL	6870		1650		5000	104.3		80	120	P
MANGANESE, TOTAL	507		16.6		500	98.1		80	120	P
NICKEL, TOTAL	529		0.58	J	500	105.7		80	120	P
POTASSIUM, TOTAL	10100		879	J	10000	91.9		80	120	P
SELENIUM, TOTAL	96.4		7.0	U	100	96.5		80	120	P
SILVER, TOTAL	51.6		4.0	U	50	103.1		80	120	P
SODIUM, TOTAL	28000		20400		7500	102.0		80	120	P
THALLIUM, TOTAL	99.5		5.0	U	100	99.5		80	120	P
VANADIUM, TOTAL	518		3.46	J	500	102.9		80	120	P
ZINC, TOTAL	510		13.1	J	500	99.3		80	120	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-03-GW-040115S

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-002P

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
MERCURY, TOTAL	0.951		0.10	U	1	95.1		80	120	CV

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-03-GW-040115S

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-002S

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
MERCURY, TOTAL	1.05		0.10	U	1	104.6		80	120	CV

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-11-GW-040115S

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-001A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, TOTAL	11400		856		10500	100.0		75	125	P
ANTIMONY, TOTAL	544		1.3	U	500	108.8		75	125	P
ARSENIC, TOTAL	521		1.4	U	500	104.3		75	125	P
BARIUM, TOTAL	540		24.9		500	103.0		75	125	P
BERYLLIUM, TOTAL	505		0.10	U	500	100.9		75	125	P
CADMIUM, TOTAL	563		0.10	J	500	112.6		75	125	P
CALCIUM, TOTAL	25600		20500		5500	91.8		75	125	P
CHROMIUM, TOTAL	539		9.74	J	500	105.9		75	125	P
COBALT, TOTAL	538		0.38	J	500	107.6		75	125	P
COPPER, TOTAL	536		4.5	J	500	106.3		75	125	P
IRON, TOTAL	6290		610		5500	103.2		75	125	P
LEAD, TOTAL	502		1.3	J	500	100.2		75	125	P
MAGNESIUM, TOTAL	7610		1650		5500	108.4		75	125	P
MANGANESE, TOTAL	555		16.6		500	107.7		75	125	P
NICKEL, TOTAL	578		0.58	J	500	115.5		75	125	P
POTASSIUM, TOTAL	10800		879	J	10000	99.1		75	125	P
SELENIUM, TOTAL	556		2.4	U	500	111.2		75	125	P
SILVER, TOTAL	543		0.27	U	500	108.6		75	125	P
SODIUM, TOTAL	25700		20400		5500	96.2		75	125	P
THALLIUM, TOTAL	536		1.1	U	500	107.2		75	125	P
VANADIUM, TOTAL	565		3.46	J	500	112.4		75	125	P
ZINC, TOTAL	580		13.1	J	500	113.4		75	125	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-03-GW-040115S

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-002A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
MERCURY, TOTAL	1.07		0.013	U	1	106.9		75	125	CV

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-11-GW-040115

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-001

Concentration Units : ug/L

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ALUMINUM, TOTAL		2880		2830		1.6		P
ANTIMONY, TOTAL		101		100		0.9		P
ARSENIC, TOTAL		101		98.1		2.6		P
BARIUM, TOTAL		1970		1940		1.6		P
BERYLLIUM, TOTAL		46.7		46.1		1.2		P
CADMIUM, TOTAL		249		245		1.5		P
CALCIUM, TOTAL		23400		23000		1.9		P
CHROMIUM, TOTAL		209		206		1.4		P
COBALT, TOTAL		494		488		1.2		P
COPPER, TOTAL		252		248		1.8		P
IRON, TOTAL		1650		1630		1.5		P
LEAD, TOTAL		93.1		92.4		0.7		P
MAGNESIUM, TOTAL		6870		6780		1.2		P
MANGANESE, TOTAL		507		500		1.4		P
NICKEL, TOTAL		529		524		0.9		P
POTASSIUM, TOTAL		10100		9880		1.9		P
SELENIUM, TOTAL		96.4		101		4.5		P
SILVER, TOTAL		51.6		50.7		1.7		P
SODIUM, TOTAL		28000		27500		1.9		P
THALLIUM, TOTAL		99.5		95.5		4.1		P
VANADIUM, TOTAL		518		511		1.4		P
ZINC, TOTAL		510		502		1.4		P

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-03-GW-040115

Matrix: WATER **SDG Name:** SI2069

Percent Solids: 0.00 **Lab Sample ID:** SI2069-002

Concentration Units : ug/L

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
MERCURY, TOTAL		1.05		0.951		9.5		CV

Comments:

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWID06HGW2

Matrix: WATER **SDG Name:** SI2069

QC Batch ID: ID06HGW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.00	5.61	112.2	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWID06ICW2

Matrix: WATER **SDG Name:** SI2069

QC Batch ID: ID06ICW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	2000	1930	96.5	80	120
ANTIMONY	100	100	100.3	80	120
ARSENIC	100	97.5	97.5	80	120
BARIUM	2000	1970	98.7	80	120
BERYLLIUM	50.0	47.0	94.0	80	120
CADMIUM	250	248	99.0	80	120
CALCIUM	2500	2480	99.2	80	120
CHROMIUM	200	195	97.7	80	120
COBALT	500	498	99.6	80	120
COPPER	250	244	97.6	80	120
IRON	1000	1020	101.8	80	120
LEAD	100	93.5	93.5	80	120
MAGNESIUM	5000	5310	106.1	80	120
MANGANESE	500	505	101.1	80	120
NICKEL	500	535	107.0	80	120
POTASSIUM	10000	9200	92.0	80	120
SELENIUM	100	101	101.1	80	120
SILVER	50.0	51.1	102.1	80	120
SODIUM	7500	7290	97.2	80	120
THALLIUM	100	99.8	99.8	80	120
VANADIUM	500	508	101.6	80	120
ZINC	500	495	98.9	80	120

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** MW-11-GW-040115L

Matrix: WATER **SDG Name:** SI2069

Lab Sample ID: SI2069-001L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ALUMINUM, TOTAL	856		1090	J	27.3		P
ANTIMONY, TOTAL	1.3	U	7.4	J			P
ARSENIC, TOTAL	1.4	U	7.0	U			P
BARIUM, TOTAL	24.9		32.4		30.1		P
BERYLLIUM, TOTAL	0.10	U	0.50	U			P
CADMIUM, TOTAL	0.10	J	0.25	U	100.0		P
CALCIUM, TOTAL	20500		21200		3.4		P
CHROMIUM, TOTAL	9.74	J	14	J	43.7		P
COBALT, TOTAL	0.38	J	1.2	U	100.0		P
COPPER, TOTAL	4.5	J	9.8	J	117.8		P
IRON, TOTAL	610		661		8.4		P
LEAD, TOTAL	1.3	J	5.5	U	100.0		P
MAGNESIUM, TOTAL	1650		1860		12.7		P
MANGANESE, TOTAL	16.6		23	J	38.6		P
NICKEL, TOTAL	0.58	J	1.4	U	100.0		P
POTASSIUM, TOTAL	879	J	1200	J	36.5		P
SELENIUM, TOTAL	2.4	U	17	J			P
SILVER, TOTAL	0.27	U	1.4	U			P
SODIUM, TOTAL	20400		25400		24.5		P
THALLIUM, TOTAL	1.1	U	5.5	U			P
VANADIUM, TOTAL	3.46	J	4.4	J	27.2		P
ZINC, TOTAL	13.1	J	15	J	14.5		P

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services

Matrix: WATER

Client Field ID: MW-03-GW-040115L

SDG Name: SI2069

Lab Sample ID: SI2069-002L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
MERCURY, TOTAL	0.013	U	0.065	U			CV

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 1/30/2013

Concentration Units: ug/L

Analyte	CRDL	IDL	M
MERCURY	0.20	0.033	CV

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 5/21/2012

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	17.	P
ANTIMONY	8.0	1.6	P
ARSENIC	8.0	1.5	P
BARIUM	5.0	0.31	P
BERYLLIUM	5.0	0.095	P
CADMIUM	5.0	0.074	P
CALCIUM	100	8.7	P
CHROMIUM	10	0.41	P
COBALT	10	0.33	P
COPPER	25	0.80	P
IRON	100	4.0	P
LEAD	5.0	1.0	P
MAGNESIUM	100	7.7	P
MANGANESE	5.0	0.56	P
NICKEL	10	0.60	P
POTASSIUM	1000	64.	P
SELENIUM	10	2.6	P
SILVER	10	0.54	P
SODIUM	1000	33.	P
THALLIUM	15	1.1	P
VANADIUM	10	0.41	P
ZINC	20	0.45	P

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 2/9/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
MERCURY	0.10	ug/L	CV	SW846 7470A / SW846 7470A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/19/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ALUMINUM	100.	ug/L	P	SW846 3010A / SW846 6010C
ANTIMONY	5.0	ug/L	P	SW846 3010A / SW846 6010C
ARSENIC	5.0	ug/L	P	SW846 3010A / SW846 6010C
BARIUM	3.0	ug/L	P	SW846 3010A / SW846 6010C
BERYLLIUM	0.50	ug/L	P	SW846 3010A / SW846 6010C
CADMIUM	3.0	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	80.	ug/L	P	SW846 3010A / SW846 6010C
CHROMIUM	4.0	ug/L	P	SW846 3010A / SW846 6010C
COBALT	4.0	ug/L	P	SW846 3010A / SW846 6010C
COPPER	10.	ug/L	P	SW846 3010A / SW846 6010C
IRON	80.	ug/L	P	SW846 3010A / SW846 6010C
LEAD	4.0	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	80.	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	4.0	ug/L	P	SW846 3010A / SW846 6010C
NICKEL	4.0	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	500.	ug/L	P	SW846 3010A / SW846 6010C
SELENIUM	7.0	ug/L	P	SW846 3010A / SW846 6010C
SILVER	4.0	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	500.	ug/L	P	SW846 3010A / SW846 6010C
THALLIUM	5.0	ug/L	P	SW846 3010A / SW846 6010C
VANADIUM	4.0	ug/L	P	SW846 3010A / SW846 6010C
ZINC	10.	ug/L	P	SW846 3010A / SW846 6010C

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 2/9/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
MERCURY	0.013	ug/L	CV	SW846 7470A / SW846 7470A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/19/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ALUMINUM	15.	ug/L	P	SW846 3010A / SW846 6010C
ANTIMONY	1.3	ug/L	P	SW846 3010A / SW846 6010C
ARSENIC	1.4	ug/L	P	SW846 3010A / SW846 6010C
BARIUM	0.23	ug/L	P	SW846 3010A / SW846 6010C
BERYLLIUM	0.10	ug/L	P	SW846 3010A / SW846 6010C
CADMIUM	0.049	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	11.	ug/L	P	SW846 3010A / SW846 6010C
CHROMIUM	0.36	ug/L	P	SW846 3010A / SW846 6010C
COBALT	0.24	ug/L	P	SW846 3010A / SW846 6010C
COPPER	0.63	ug/L	P	SW846 3010A / SW846 6010C
IRON	5.4	ug/L	P	SW846 3010A / SW846 6010C
LEAD	1.1	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	7.8	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	1.1	ug/L	P	SW846 3010A / SW846 6010C
NICKEL	0.28	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	41.	ug/L	P	SW846 3010A / SW846 6010C
SELENIUM	2.4	ug/L	P	SW846 3010A / SW846 6010C
SILVER	0.27	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	24.	ug/L	P	SW846 3010A / SW846 6010C
THALLIUM	1.1	ug/L	P	SW846 3010A / SW846 6010C
VANADIUM	0.23	ug/L	P	SW846 3010A / SW846 6010C
ZINC	0.72	ug/L	P	SW846 3010A / SW846 6010C

ICP INTERELEMENT CORRECTION FACTORS

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument Name: THERMO ICAP 6500 **Instrument ID:** I **Date:** 1/8/2015

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As	Cr	Co	Cu	Mn	Mo	Ni	Ti	V
ALUMINUM	396.15	0.0	0.0003680	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0300000	0.0	0.0	0.0
ANTIMONY	206.83	0.0000250	0.0	0.0000520	0.0	-0.0001350	0.0078600	0.0	0.0	0.0	-0.0018800	-0.0009470	0.0	-0.0017400
ARSENIC	189.04	0.0000120	0.0	-0.0001310	0.0	0.0	0.0006100	0.0	0.0	0.0	0.0020700	0.0	0.0	0.0
BARIUM	455.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BERYLLIUM	313.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0007160	0.0000820
BORON	208.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0296000	0.0	0.0	0.0
CADMIUM	226.50	0.0	0.0	0.0000630	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0000800	0.0000260	0.0
CALCIUM	315.89	0.0	0.0	0.0	0.0	0.0	0.0008850	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHROMIUM	267.72	0.0	0.0	0.0000070	0.0	0.0	0.0	0.0	0.0	0.0001110	0.0	0.0	0.0	0.0000720
COBALT	228.62	0.0	0.0	0.0	0.0	0.0	-0.0000420	0.0	0.0	0.0	0.0	0.0000640	0.0027000	0.0
COPPER	327.40	0.0000110	0.0	-0.0000060	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0005550	0.0003110
GOLD	242.79	0.0	0.0	0.0001410	0.0	0.0	0.0	0.0	0.0	-0.0019000	0.0	0.0	0.0	0.0
IRON	259.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAD	220.35	-0.0001240	0.0	0.0000190	0.0	0.0	-0.0005800	0.0000540	0.0001360	0.0	-0.0005810	0.0002080	0.0000970	0.0
LITHIUM	670.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAGNESIUM	202.58	0.0	0.0	0.0000370	0.0	0.0	0.0	0.2003000	0.0	0.0	0.0277000	0.0	0.0002000	0.0
MANGANESE	257.61	-0.0000010	0.0	0.0000150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOLYBDENUM	202.03	0.0	0.0	0.0	0.0	0.0	0.0001080	0.0	0.0	0.0000070	0.0	0.0	0.0	-0.0001920
NICKEL	231.60	0.0	0.0	-0.0000380	0.0	0.0	0.0	0.0001270	0.0	0.0	0.0008690	0.0	0.0	0.0
POTASSIUM	766.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SELENIUM	196.09	0.0000230	0.0	-0.0000020	0.0	-0.0000500	0.0	0.0000900	0.0	0.0004850	0.0	0.0	0.0	-0.0002080
SILICON	251.61	0.0	0.0	-0.0000080	0.0	0.0	0.0	0.0	0.0	0.0	0.0097100	0.0	0.0009940	0.0
SILVER	328.07	0.0	0.0	-0.0002370	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0002840	0.0
SODIUM	589.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRONTIUM	421.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THALLIUM	190.86	-0.0000020	0.0	0.0000020	0.0	0.0	0.0	0.0018400	0.0000120	-0.0021900	-0.0000380	0.0	-0.0010500	-0.0093600
TIN	189.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TITANIUM	334.90	0.0	0.0	0.0	0.0	0.0	0.0001290	0.0	0.0	0.0	0.0010500	0.0	0.0	0.0
VANADIUM	292.40	0.0	0.0	0.0000210	0.0	0.0	-0.0041100	0.0	0.0	-0.0003220	-0.0062800	0.0	0.0010900	0.0
ZINC	206.20	0.0	0.0	0.0	0.0	0.0	-0.0011400	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FORM XI - IN

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 10/28/2014

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	500000	P
ANTIMONY	45.00	20000	P
ARSENIC	45.00	20000	P
BARIUM	5.00	20000	P
BERYLLIUM	5.00	20000	P
CADMIUM	45.00	20000	P
CALCIUM	5.00	500000	P
CHROMIUM	10.00	20000	P
COBALT	45.00	20000	P
COPPER	10.00	20000	P
IRON	5.00	250000	P
LEAD	45.00	20000	P
MAGNESIUM	45.00	200000	P
MANGANESE	5.00	20000	P
NICKEL	10.00	20000	P
POTASSIUM	5.00	300000	P
SELENIUM	45.00	20000	P
SILVER	10.00	2000	P
SODIUM	5.00	200000	P
THALLIUM	45.00	20000	P
VANADIUM	10.00	20000	P
ZINC	45.00	20000	P

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** ID06HGW2

Matrix: WATER **SDG Name:** SI2069

Method: CV **Prep Date:** 04/06/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWID06HGW2	LCSWID06HGW2	0.025	0.025	
PBWID06HGW2	PBWID06HGW2	0.025	0.025	
MW-11-GW-040115	SI2069-001	0.025	0.025	A
MW-03-GW-040115	SI2069-002	0.025	0.025	A
MW-03-GW-040115P	SI2069-002P	0.025	0.025	A
MW-03-GW-040115S	SI2069-002S	0.025	0.025	A
MW-10-GW-040115	SI2069-003	0.025	0.025	A
MW-04-GW-040115	SI2069-004	0.025	0.025	A
MW-01-GW-040215	SI2069-005	0.025	0.025	A

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** ID06ICW2

Matrix: WATER **SDG Name:** SI2069

Method: P **Prep Date:** 04/06/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWID06ICW2	LCSWID06ICW2	0.05	0.05	
PBWID06ICW2	PBWID06ICW2	0.05	0.05	
MW-11-GW-040115	SI2069-001	0.05	0.05	D
MW-11-GW-040115P	SI2069-001P	0.05	0.05	D
MW-11-GW-040115S	SI2069-001S	0.05	0.05	D
MW-03-GW-040115	SI2069-002	0.05	0.05	D
MW-10-GW-040115	SI2069-003	0.05	0.05	D
MW-04-GW-040115	SI2069-004	0.05	0.05	D
MW-01-GW-040215	SI2069-005	0.05	0.05	D

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: CETAC M6100 **File Name:** HID07A

Date: 4/7/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	10:49	Hg
Standard #1 (0.2 ppb		1	10:51	Hg
Standard #2 (0.5 ppb		1	10:54	Hg
Standard #3 (1.0 ppb		1	10:56	Hg
Standard #4 (5.0 ppb		1	10:58	Hg
Standard #5 (10.0 pp		1	11:00	Hg
ICV		1	11:02	HG
ICB		1	11:04	HG
PQL		1	11:06	HG
CCV		1	11:08	HG
CCB		1	11:10	HG
ZZZZZZ		1	11:13	
ZZZZZZ		1	11:15	
ZZZZZZ		1	11:17	
ZZZZZZ		1	11:19	
ZZZZZZ		1	11:21	
LCSWID06HGW2		1	11:23	HG
PBWID06HGW2		1	11:25	HG
SI2069-001	MW-11-GW-040115	1	11:27	HG
SI2069-002	MW-03-GW-040115	1	11:30	HG
CCV		1	11:32	HG
CCB		1	11:34	HG
SI2069-002A	MW-03-GW-040115A	1	11:36	HG
SI2069-002L	MW-03-GW-040115L	5	11:38	HG
ZZZZZZ		1	11:40	
SI2069-002S	MW-03-GW-040115S	1	11:42	HG
SI2069-003	MW-10-GW-040115	1	11:44	HG

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: CETAC M6100 **File Name:** HID07A

Date: 4/7/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
SI2069-004	MW-04-GW-040115	1	11:46	HG
SI2069-005	MW-01-GW-040215	1	11:49	HG
CCV		1	11:51	HG
CCB		1	11:53	HG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: CETAC M6100 **File Name:** HID09A

Date: 4/9/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	10:51	Hg
Standard #1 (0.2 ppb		1	10:53	Hg
Standard #2 (0.5 ppb		1	10:55	Hg
Standard #3 (1.0 ppb		1	10:57	Hg
Standard #4 (5.0 ppb		1	10:59	Hg
Standard #5 (10.0 pp		1	11:01	Hg
ICV		1	11:03	HG
ICB		1	11:05	HG
PQL		1	11:08	HG
CCV		1	11:10	HG
CCB		1	11:12	HG
ZZZZZZ		1	11:14	
ZZZZZZ		1	11:16	
ZZZZZZ		1	11:18	
ZZZZZZ		1	11:20	
ZZZZZZ		1	11:22	
ZZZZZZ		1	11:24	
ZZZZZZ		1	11:27	
ZZZZZZ		5	11:29	
ZZZZZZ		1	11:31	
CCV		1	11:33	HG
CCB		1	11:35	HG
ZZZZZZ		1	11:37	
SI2069-002P	MW-03-GW-040115P	1	11:39	HG
ZZZZZZ		1	11:41	
ZZZZZZ		1	11:44	
CCV		1	11:46	HG

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: CETAC M6100 **File Name:** HID09A

Date: 4/9/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
CCB		1	11:48	HG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: THERMO ICAP 6500 **File Name:** IID06A

Date: 4/6/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
Blank		1	12:31	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
Std 1		1	12:36	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
ICV		1	12:40	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
ICB		1	12:45	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
PQL		1	12:50	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
ZZZZZZ		1	12:56	
ZZZZZZ		1	13:02	
ICSA		1	13:10	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
ICSAB		1	13:15	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
CCV		1	13:20	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
CCB		1	13:24	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
ZZZZZZ		1	13:29	
ZZZZZZ		1	13:34	
ZZZZZZ		1	13:38	
ZZZZZZ		1	13:43	
ZZZZZZ		1	13:48	
ZZZZZZ		1	13:53	
ZZZZZZ		1	13:57	
ZZZZZZ		1	14:02	
ZZZZZZ		1	14:07	
ZZZZZZ		1	14:11	
CCV		1	14:16	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
CCB		1	14:21	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
ZZZZZZ		1	14:26	
ZZZZZZ		1	14:30	
ZZZZZZ		1	14:35	
ZZZZZZ		1	14:40	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: THERMO ICAP 6500 **File Name:** IID06A

Date: 4/6/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	14:45	
ZZZZZZ		1	14:49	
ZZZZZZ		1	14:54	
ZZZZZZ		1	14:59	
ZZZZZZ		1	15:04	
ZZZZZZ		1	15:09	
CCV		1	15:14	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
CCB		1	15:18	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
ZZZZZZ		1	15:23	
ZZZZZZ		1	15:28	
ZZZZZZ		1	15:33	
ZZZZZZ		1	15:38	
ZZZZZZ		1	15:43	
ZZZZZZ		1	15:47	
ZZZZZZ		1	15:52	
ZZZZZZ		1	15:57	
ZZZZZZ		1	16:02	
ZZZZZZ		1	16:07	
CCV		1	16:11	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
CCB		1	16:16	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
ZZZZZZ		1	16:21	
ZZZZZZ		1	16:25	
ZZZZZZ		1	16:30	
ZZZZZZ		1	16:35	
ZZZZZZ		1	16:40	
ZZZZZZ		1	16:45	
ZZZZZZ		1	16:49	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: THERMO ICAP 6500 **File Name:** IID06A

Date: 4/6/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		1	16:54	
ZZZZZZ		1	16:59	
ZZZZZZ		5	17:03	
CCV		1	17:08	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
CCB		1	17:13	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
ZZZZZZ		1	17:17	
ZZZZZZ		1	17:22	
ZZZZZZ		2	17:27	
ZZZZZZ		1	17:31	
ZZZZZZ		1	17:36	
ZZZZZZ		5	17:41	
ZZZZZZ		1	17:46	
ZZZZZZ		1	17:50	
ZZZZZZ		2	17:55	
ZZZZZZ		1	18:00	
CCV		1	18:05	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
CCB		1	18:09	AL SB AS BA BE CD CA CR CO CU FE PB MG MN NI K SE AG NA TL V ZN
ZZZZZZ		1	18:14	
ZZZZZZ		1	18:19	
ZZZZZZ		1	18:23	
ZZZZZZ		1	18:28	
ZZZZZZ		1	18:33	
ZZZZZZ		5	18:38	
ZZZZZZ		1	18:43	
ZZZZZZ		1	18:47	
ZZZZZZ		1	18:52	
ZZZZZZ		1	18:57	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: THERMO ICAP 6500 **File Name:** IID06A

Date: 4/6/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																															
CCV		1	19:02	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
CCB		1	19:06	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
ZZZZZZ		1	19:11																						
ZZZZZZ		1	19:16																						
ZZZZZZ		5	19:20																						
ZZZZZZ		1	19:25																						
ZZZZZZ		1	19:30																						
ZZZZZZ		1	19:35																						
ZZZZZZ		1	19:39																						
ZZZZZZ		1	19:44																						
ZZZZZZ		5	19:49																						
ZZZZZZ		1	19:54																						
CCV		1	19:59	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
CCB		1	20:03	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
ZZZZZZ		1	20:08																						
ZZZZZZ		5	20:13																						
ZZZZZZ		1	20:17																						
ZZZZZZ		1	20:22																						
LCSWID06ICW2		1	20:27	AL	SB	AS	BA	BE			CR	CO	CU		PB	MG	MN	NI	K		AG	NA	TL	V	ZN
PBWID06ICW2		1	20:31	AL	SB	AS	BA	BE			CR	CO	CU		PB	MG	MN	NI	K		AG	NA	TL	V	ZN
SI2069-001	MW-11-GW-040115	1	20:36	AL	SB	AS	BA	BE			CR	CO	CU		PB	MG	MN	NI	K		AG	NA	TL	V	ZN
SI2069-001A	MW-11-GW-040115A	1	20:41	AL	SB	AS	BA	BE			CR	CO	CU		PB	MG	MN	NI	K		AG	NA	TL	V	ZN
SI2069-001L	MW-11-GW-040115L	5	20:46	AL	SB	AS	BA	BE			CR	CO	CU		PB	MG	MN	NI	K		AG	NA	TL	V	ZN
SI2069-001P	MW-11-GW-040115P	1	20:50	AL	SB	AS	BA	BE			CR	CO	CU		PB	MG	MN	NI	K		AG	NA	TL	V	ZN
CCV		1	20:55	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
CCB		1	21:00	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN
SI2069-001S	MW-11-GW-040115S	1	21:04	AL	SB	AS	BA	BE			CR	CO	CU		PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: THERMO ICAP 6500 **File Name:** IID06A

Date: 4/6/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																						
SI2069-002	MW-03-GW-040115	1	21:09	AL	SB	AS	BA	BE			CR	CO	CU		PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
SI2069-003	MW-10-GW-040115	1	21:14	AL	SB	AS	BA	BE			CR	CO	CU		PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
SI2069-004	MW-04-GW-040115	1	21:19	AL	SB	AS	BA	BE		CD	CR	CO	CU		PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
SI2069-005	MW-01-GW-040215	1	21:23	AL	SB	AS	BA	BE		CD	CR	CO	CU		PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ZZZZZZ		1	21:28																							
ZZZZZZ		1	21:33																							
ZZZZZZ		2	21:38																							
ZZZZZZ		1	21:43																							
ZZZZZZ		1	21:47																							
CCV		1	21:52	AL	SB	AS	BA	BE		CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
CCB		1	21:57	AL	SB	AS	BA	BE		CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: THERMO ICAP 6500 **File Name:** IID08A

Date: 4/8/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
Blank		1	10:40	AL	CD CA	FE	MG	SE
Std 1		1	10:45	AL	CD CA	FE	MG	SE
ICV		1	10:49	AL	CD CA	FE	MG	SE
ICB		1	10:54	AL	CD CA	FE	MG	SE
PQL		1	10:58	AL	CD CA	FE	MG	SE
ZZZZZZ		1	11:05					
ZZZZZZ		1	11:10					
ICSA		1	11:19	AL	CD CA	FE	MG	SE
ICSAB		1	11:23	AL	CD CA	FE	MG	SE
CCV		1	11:28	AL	CD CA	FE	MG	SE
CCB		1	11:33	AL	CD CA	FE	MG	SE
ZZZZZZ		2	11:37					
ZZZZZZ		1	11:42					
ZZZZZZ		1	11:47					
ZZZZZZ		5	11:52					
ZZZZZZ		1	11:56					
ZZZZZZ		1	12:01					
ZZZZZZ		1	12:06					
ZZZZZZ		1	12:11					
ZZZZZZ		1	12:15					
ZZZZZZ		3	12:20					
CCV		1	12:25	AL	CD CA	FE	MG	SE
CCB		1	12:29	AL	CD CA	FE	MG	SE
ZZZZZZ		1	12:34					
ZZZZZZ		1	12:39					
ZZZZZZ		1	12:44					
ZZZZZZ		1	12:48					

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: THERMO ICAP 6500 **File Name:** IID08A

Date: 4/8/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
ZZZZZZ		2	12:53					
ZZZZZZ		1	12:58					
ZZZZZZ		5	13:03					
ZZZZZZ		1	13:07					
ZZZZZZ		5	13:12					
ZZZZZZ		1	13:17					
CCV		1	13:22	AL	CD CA	FE	MG	SE
CCB		1	13:26	AL	CD CA	FE	MG	SE
ZZZZZZ		1	13:31					
ZZZZZZ		1	13:36					
ZZZZZZ		1	13:40					
ZZZZZZ		1	13:46					
LCSWID06ICW2		1	13:50		CD CA	FE		SE
PBWID06ICW2		1	13:55		CD CA	FE		SE
SI2069-001	MW-11-GW-040115	1	14:00		CD CA	FE		SE
SI2069-001A	MW-11-GW-040115A	1	14:05		CD CA	FE		SE
SI2069-001L	MW-11-GW-040115L	5	14:09		CD CA	FE		SE
SI2069-001P	MW-11-GW-040115P	1	14:14		CD CA	FE		SE
CCV		1	14:19	AL	CD CA	FE	MG	SE
CCB		1	14:23	AL	CD CA	FE	MG	SE
SI2069-001S	MW-11-GW-040115S	1	14:28		CD CA	FE		
SI2069-002	MW-03-GW-040115	1	14:33		CD CA	FE		
SI2069-003	MW-10-GW-040115	1	14:38		CD CA	FE		
SI2069-004	MW-04-GW-040115	1	14:42		CA	FE		
SI2069-005	MW-01-GW-040215	1	14:47		CA	FE		
ZZZZZZ		1	14:52					
ZZZZZZ		1	14:57					

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI2069

Instrument ID: THERMO ICAP 6500 **File Name:** IID08A

Date: 4/8/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
ZZZZZZ		1	15:01					
ZZZZZZ		1	15:06					
ZZZZZZ		1	15:11					
CCV		1	15:15	AL	CD CA	FE	MG	SE
CCB		1	15:20	AL	CD CA	FE	MG	SE

Raw Data Section

KATAHDIN ANALYTICAL SERVICES, INC.
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: Cetac M6100 (H) **ANALYST:** GEJ **DATE:** 04.07.15

FILE NAME: H1D07A **METHOD:** CVAA

245.1

747 0

CLP

Other (List): _____

REVIEWED

GEJ 04-08-15

KATAHDIN ANALYTICAL METALS SECTION

Analyte : Mercury

SnCl2 : MR1466

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
CalBlank/ICB/CCB	NA	04.06.15	04.13.15	0.00 ug/L
Standard #1 / PQL				0.20 ug/L
Standard #2				0.50 ug/L
Standard #3				1.00 ug/L
Standard #4 / CCV				5.00 ug/L
Standard #5				10.00 ug/L
ICV			04.31.15	6.00 ug/L

Additional Comments and Notes:

GEJ 04.08.15

INSTRUMENT RUNLOG

Instrument: CETAC M6100

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Calibration Blank	1.0000	HID07A	4/7/2015	10:49	GEJ
Standard #1 (0.2 ppb)	1.0000	HID07A	4/7/2015	10:51	GEJ
Standard #2 (0.5 ppb)	1.0000	HID07A	4/7/2015	10:54	GEJ
Standard #3 (1.0 ppb)	1.0000	HID07A	4/7/2015	10:56	GEJ
Standard #4 (5.0 ppb)	1.0000	HID07A	4/7/2015	10:58	GEJ
Standard #5 (10.0 ppb)	1.0000	HID07A	4/7/2015	11:00	GEJ
ICV	1.0000	HID07A	4/7/2015	11:02	GEJ
ICB	1.0000	HID07A	4/7/2015	11:04	GEJ
PQL	1.0000	HID07A	4/7/2015	11:06	GEJ
CCV	1.0000	HID07A	4/7/2015	11:08	GEJ
CCB	1.0000	HID07A	4/7/2015	11:10	GEJ
LCSWID06HGW1	1.0000	HID07A	4/7/2015	11:13	GEJ
PBWID06HGW1	1.0000	HID07A	4/7/2015	11:15	GEJ
SI2045-001	1.0000	HID07A	4/7/2015	11:17	GEJ
SI2053-002	1.0000	HID07A	4/7/2015	11:19	GEJ
SI2054-001	1.0000	HID07A	4/7/2015	11:21	GEJ
LCSWID06HGW2	1.0000	HID07A	4/7/2015	11:23	GEJ
PBWID06HGW2	1.0000	HID07A	4/7/2015	11:25	GEJ
SI2069-001	1.0000	HID07A	4/7/2015	11:27	GEJ
SI2069-002	1.0000	HID07A	4/7/2015	11:30	GEJ
CCV	1.0000	HID07A	4/7/2015	11:32	GEJ
CCB	1.0000	HID07A	4/7/2015	11:34	GEJ
SI2069-002A	1.0000	HID07A	4/7/2015	11:36	GEJ
SI2069-002L	5.0000	HID07A	4/7/2015	11:38	GEJ
SI2069-002P	1.0000	HID07A	4/7/2015	11:40	GEJ
SI2069-002S	1.0000	HID07A	4/7/2015	11:42	GEJ
SI2069-003	1.0000	HID07A	4/7/2015	11:44	GEJ
SI2069-004	1.0000	HID07A	4/7/2015	11:46	GEJ
SI2069-005	1.0000	HID07A	4/7/2015	11:49	GEJ
CCV	1.0000	HID07A	4/7/2015	11:51	GEJ
CCB	1.0000	HID07A	4/7/2015	11:53	GEJ

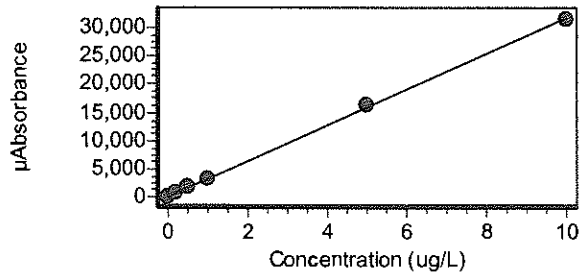
Report Generated By CETAC QuickTrace
Analyst: metals
Worksheet file: C:\Program Files\QuickTrace\Worksheets\HID07A.wsz
Date Started: 4/7/2015 10:22:20 AM
Comment:

Results

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
Calibration Blank					STD	04/07/15 10:49:49 am	0.000	38	68.00		1.00
Replicates	64.7	13.6	18.1	53.7							
Standard #1 (0.2 ppb)					STD	04/07/15 10:51:54 am	0.200	633	5.12		1.00
Replicates	674.0	629.1	594.8	633.3							
Standard #2 (0.5 ppb)					STD	04/07/15 10:54:01 am	0.500	1649	1.48		1.00
Replicates	1621.0	1655.0	1678.9	1640.7							
Standard #3 (1.0 ppb)					STD	04/07/15 10:56:08 am	1.000	3293	1.05		1.00
Replicates	3307.0	3241.5	3314.5	3309.5							
Standard #4 (5.0 ppb)					STD	04/07/15 10:58:15 am	5.000	16396	0.17		1.00
Replicates	16419.9	16419.9	16374.2	16369.5							
Standard #5 (10.0 ppb)					STD	04/07/15 11:00:23 am	10.000	31579	0.29		1.00
Replicates	31679.0	31577.7	31601.0	31459.4							

Calibration

Equation: A = 112.547 + 3168.395C
R2: 0.99967
SEE: 256.3655
Flags:



ICV					ICV	04/07/15 11:02:31 am	6.253	19923	0.23		1.00
Replicates	19920.6	19971.8	19938.3	19862.6							
% Recovery	104.21										
ICB					ICB	04/07/15 11:04:37 am	-0.028	25	155.82		1.00
Replicates	32.9	41.5	54.8	-31.2							

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
PQL					CRDL	04/07/15 11:06:43 am	0.179	680	3.20		1.00
	Replicates	694.4	695.4	683.4	648.9						
	% Recovery	89.63									
CCV					IPR	04/07/15 11:08:50 am	5.146	16417	0.28		1.00
	Replicates	16432.5	16467.0	16412.5	16357.9						
	% Recovery	102.92									
CCB					CCB	04/07/15 11:10:56 am	-0.030	18	88.58		1.00
	Replicates	6.5	40.6	20.4	5.9						
LCSWID06HGW1					LCS	04/07/15 11:13:02 am	5.603	17864	0.64		1.00
	Replicates	17779.4	17765.5	17899.8	18010.5						
	% Recovery	112.05									
PBWID06HGW1					PBK	04/07/15 11:15:09 am	-0.032	12	232.80		1.00
	Replicates	-3.0	37.4	34.2	-20.1						
SI2045-001					UNK	04/07/15 11:17:16 am	0.015	159	10.05		1.00
	Replicates	179.1	163.3	145.3	146.8						
SI2053-002					UNK	04/07/15 11:19:23 am	-0.014	68	36.16		1.00
	Replicates	41.9	53.2	94.9	81.7						
SI2054-001					UNK	04/07/15 11:21:31 am	-0.034	4	901.91		1.00
	Replicates	52.5	-9.6	13.1	-38.9						
LCSWID06HGW2					LCS	04/07/15 11:23:37 am	5.609	17884	0.47		1.00
	Replicates	17785.1	17842.5	17939.0	17967.8						
	% Recovery	112.18									
PBWID06HGW2					PBK	04/07/15 11:25:44 am	-0.037	-6	536.55		1.00
	Replicates	39.6	-20.4	-14.7	-27.4						
SI2069-001					UNK	04/07/15 11:27:52 am	-0.042	-22	74.80		1.00
	Replicates	-14.7	-10.6	-15.8	-46.0						
SI2069-002					UNK	04/07/15 11:30:00 am	-0.031	16	152.42		1.00
	Replicates	30.2	-5.9	-3.4	42.3						

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
CCV					CCV	04/07/15 11:32:07 am	5.190	16558	0.20		1.00
	Replicates	16578.4	16514.6	16587.1	16549.8						
	% Recovery	103.81									
CCB					CCB	04/07/15 11:34:13 am	-0.023	39	104.07		1.00
	Replicates	95.3	15.9	2.7	43.7						
SI2069-002A					UNK	04/07/15 11:36:21 am	1.069	3499	0.99		1.00
	Replicates	3539.2	3484.4	3459.6	3512.4						
SI2069-002L					UNK	04/07/15 11:38:28 am	-0.236	-37	33.35		5.00
	Replicates	-25.9	-31.0	-54.1	-36.6						
SI2069-002P					UNK	04/07/15 11:40:35 am	-0.033	9	196.16		1.00
	Replicates	16.5	24.4	14.2	-17.5						
SI2069-002S					UNK	04/07/15 11:42:42 am	1.046	3425	0.55		1.00
	Replicates	3415.4	3438.5	3443.7	3403.9						
SI2069-003					UNK	04/07/15 11:44:50 am	1.528	4954	0.48		1.00
	Replicates	4976.2	4920.0	4959.2	4959.3						
SI2069-004					UNK	04/07/15 11:46:58 am	-0.047	-36	21.84		1.00
	Replicates	-37.1	-31.8	-28.0	-46.0						
SI2069-005					UNK	04/07/15 11:49:06 am	-0.033	7	308.10		1.00
	Replicates	-4.3	39.0	-14.0	9.2						
CCV					CCV	04/07/15 11:51:14 am	5.100	16272	0.26		1.00
	Replicates	16321.3	16289.2	16251.6	16224.7						
	% Recovery	102.00									
CCB					CCB	04/07/15 11:53:20 am	-0.041	-16	159.97		1.00
	Replicates	5.2	-31.8	-45.1	6.4						

KATAHDIN ANALYTICAL SERVICES, INC.
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: Cetac M6100 (H) **ANALYST:** GET **DATE:** 04.09.15

FILE NAME: HI D09A **METHOD:** CVAA

245.1

747 0

CLP

Other (List): _____

REVIEWED
[illegible] 04-10-15
KATAHDIN ANALYTICAL
METALS SECTION

Analyte : Mercury

SnCl2: MR1446

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
CalBlank/ICB/CCB	N/A	04.09.15	04.30.15	0.00 ug/L
Standard #1 / PQL				0.20 ug/L
Standard #2				0.50 ug/L
Standard #3				1.00 ug/L
Standard #4 / CCV				5.00 ug/L
Standard #5				10.00 ug/L
ICV			04.13.15	6.00 ug/L

Additional Comments and Notes:

GET 04.10.15

INSTRUMENT RUNLOG

Instrument: CETAC M6100

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Calibration Blank	1.0000	HID09A	4/9/2015	10:51	GEJ
Standard #1 (0.2 ppb)	1.0000	HID09A	4/9/2015	10:53	GEJ
Standard #2 (0.5 ppb)	1.0000	HID09A	4/9/2015	10:55	GEJ
Standard #3 (1.0 ppb)	1.0000	HID09A	4/9/2015	10:57	GEJ
Standard #4 (5.0 ppb)	1.0000	HID09A	4/9/2015	10:59	GEJ
Standard #5 (10.0 ppb)	1.0000	HID09A	4/9/2015	11:01	GEJ
ICV	1.0000	HID09A	4/9/2015	11:03	GEJ
ICB	1.0000	HID09A	4/9/2015	11:05	GEJ
PQL	1.0000	HID09A	4/9/2015	11:08	GEJ
CCV	1.0000	HID09A	4/9/2015	11:10	GEJ
CCB	1.0000	HID09A	4/9/2015	11:12	GEJ
LCSWID08HGW1	1.0000	HID09A	4/9/2015	11:14	GEJ
PBWID08HGW1	1.0000	HID09A	4/9/2015	11:16	GEJ
SI1930-003	1.0000	HID09A	4/9/2015	11:18	GEJ
LCSWID08HGW2	1.0000	HID09A	4/9/2015	11:20	GEJ
PBWID08HGW2	1.0000	HID09A	4/9/2015	11:22	GEJ
SI2083-001	1.0000	HID09A	4/9/2015	11:24	GEJ
SI2083-001A	1.0000	HID09A	4/9/2015	11:27	GEJ
SI2083-001L	5.0000	HID09A	4/9/2015	11:29	GEJ
SI2083-001P	1.0000	HID09A	4/9/2015	11:31	GEJ
CCV	1.0000	HID09A	4/9/2015	11:33	GEJ
CCB	1.0000	HID09A	4/9/2015	11:35	GEJ
SI2083-001S	1.0000	HID09A	4/9/2015	11:37	GEJ
SI2069-002P	1.0000	HID09A	4/9/2015	11:39	GEJ
SI2133-002	1.0000	HID09A	4/9/2015	11:41	GEJ
SI2132-002	1.0000	HID09A	4/9/2015	11:44	GEJ
CCV	1.0000	HID09A	4/9/2015	11:46	GEJ
CCB	1.0000	HID09A	4/9/2015	11:48	GEJ

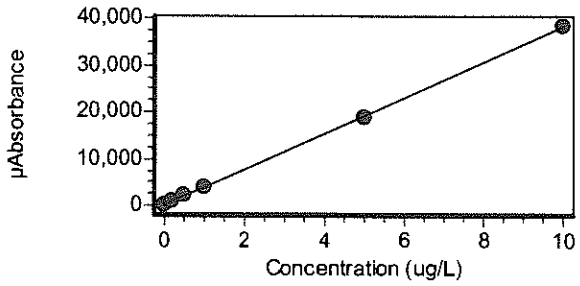
Report Generated By CETAC QuickTrace
Analyst: metals
Worksheet file: C:\Program Files\QuickTrace\Worksheets\HID09A.wsz
Date Started: 4/9/2015 10:48:38 AM
Comment:

Results

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
Calibration Blank					STD	04/09/15 10:51:10 am	0.000	18	333.91		1.00
Replicates	58.8	70.4	-56.8	-1.9							
Standard #1 (0.2 ppb)					STD	04/09/15 10:53:16 am	0.200	804	3.51		1.00
Replicates	827.9	829.1	783.1	776.5							
Standard #2 (0.5 ppb)					STD	04/09/15 10:55:22 am	0.500	1996	1.70		1.00
Replicates	1945.0	2013.5	2008.2	2016.2							
Standard #3 (1.0 ppb)					STD	04/09/15 10:57:29 am	1.000	3908	3.09		1.00
Replicates	3783.0	3827.6	3995.4	4026.8							
Standard #4 (5.0 ppb)					STD	04/09/15 10:59:37 am	5.000	19022	2.18		1.00
Replicates	18537.5	18857.7	19193.2	19498.2							
Standard #5 (10.0 ppb)					STD	04/09/15 11:01:44 am	10.000	38471	1.52		1.00
Replicates	37675.2	38406.7	38817.4	38984.6							

Calibration

Equation: A = 26.222 + 3835.991C
R2: 0.99996
SEE: 107.4665
Flags:



ICV					ICV	04/09/15 11:03:53 am	5.925	22756	0.18		1.00
Replicates	22695.9	22791.5	22762.3	22775.3							
% Recovery	98.76										
ICB					ICB	04/09/15 11:05:58 am	-0.010	-14	294.18		1.00
Replicates	-61.0	-36.1	21.9	19.2							

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
PQL					CRDL	04/09/15 11:08:04 am	0.193	766	4.50		1.00
	Replicates	757.2	721.0	793.9	792.2						
	% Recovery	96.44									
CCV					IPR	04/09/15 11:10:12 am	5.047	19386	0.95		1.00
	Replicates	19156.3	19330.8	19483.8	19574.0						
	% Recovery	100.94									
CCB					CCB	04/09/15 11:12:17 am	-0.002	18	148.37		1.00
	Replicates	9.7	16.6	56.1	-8.8						
LCSWID08HGW1					LCS	04/09/15 11:14:23 am	5.126	19691	0.49		1.00
	Replicates	19596.5	19627.4	19733.9	19804.8						
	% Recovery	102.53									
PBWID08HGW1					PBK	04/09/15 11:16:30 am	-0.006	3	181.31		1.00
	Replicates	39.2	15.9	-1.5	-42.0						
SI1930-003					UNK	04/09/15 11:18:37 am	-0.003	15	232.94		1.00
	Replicates	44.1	-24.5	43.6	-3.9						
LCSWID08HGW2					LCS	04/09/15 11:20:44 am	5.111	19632	0.37		1.00
	Replicates	19563.1	19577.6	19707.6	19678.9						
	% Recovery	102.22									
PBWID08HGW2					PBK	04/09/15 11:22:52 am	-0.002	18	116.97		1.00
	Replicates	29.5	40.6	8.1	-6.2						
SI2083-001					UNK	04/09/15 11:24:59 am	-0.006	1	657.10		1.00
	Replicates	1.3	29.6	-0.6	-24.9						
SI2083-001A					UNK	04/09/15 11:27:06 am	1.147	4426	1.59		1.00
	Replicates	4369.0	4364.3	4465.5	4504.7						
SI2083-001L					UNK	04/09/15 11:29:13 am	-0.030	4	312.83		5.00
	Replicates	-1.5	-0.7	20.1	-3.7						
SI2083-001P					UNK	04/09/15 11:31:21 am	1.191	4594	0.93		1.00
	Replicates	4559.5	4575.7	4583.5	4655.5						

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Flags	DF
CCV					CCV	04/09/15 11:33:29 am	5.142	19752	1.69		1.00
	Replicates	19386.7	19605.4	19850.4	20163.9						
	% Recovery	102.84									
CCB					CCB	04/09/15 11:35:34 am	-0.014	-26	224.26		1.00
	Replicates	19.7	-82.5	-69.8	28.7						
SI2083-001S					UNK	04/09/15 11:37:42 am	1.118	4316	1.59		1.00
	Replicates	4222.1	4312.8	4350.3	4380.1						
SI2069-002P					UNK	04/09/15 11:39:49 am	0.951	3672	1.29		1.00
	Replicates	3610.5	3671.3	3683.1	3724.8						
SI2133-002					UNK	04/09/15 11:41:57 am	-0.016	-34	121.33		1.00
	Replicates	-27.3	-91.1	-26.7	8.4						
SI2132-002					UNK	04/09/15 11:44:05 am	0.009	61	57.63		1.00
	Replicates	63.0	84.6	84.5	10.5						
CCV					CCV	04/09/15 11:46:12 am	4.607	17697	1.66		1.00
	Replicates	17375.5	17560.2	17803.7	18050.2						
	% Recovery	92.13									
CCB					CCB	04/09/15 11:48:18 am	-0.002	17	293.89		1.00
	Replicates	40.9	-51.7	13.2	67.0						

KATAHDIN ANALYTICAL SERVICES
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST:** GEJ **ANALYSIS DATE:** 04.06.15

FILE NAME: IID06A

METHOD: ICP

- ☑ 200.7
- ☐ 6010C
- ☑ DoD
- ☐ _____

REVIEWED
EJ 04-09-15
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initals) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep. Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW15408	03.25.15	03.25.16	0 ug/L
Standard 1	MW15403	03.23.15	06.23.15	Varies by Element
ICV	MW15401	03.23.15	04.30.15	Varies by Element
PQL	MW15374	03.06.15	05.01.15	Varies by Element
LRS1	~~MW15420~~ MW15314 ~~04.07.15~~ 03.17.15		05.26.15	Varies by Element
LRS2	MW15409	03.25.15	06.25.15	Varies by Element
ICSA	MW15422	04.01.15	07.01.15	Varies by Element
ICSAB	MW15368	03.05.15	05.01.15	Varies by Element
CCV	MW15423	04.01.15	07.01.15	Varies by Element
Internal Standard	MW15416	03.30.15	06.30.15	5.0 mg/L Yttrium

Additional Comments and Notes:

Additional CCV was not located in run parameters causing run to end prematurely. No Closing QC was performed. GEJ 04.08.15

GEJ 04.08.15

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IID06A	4/6/2015	12:31	GEJ
Std 1	1.000	IID06A	4/6/2015	12:36	GEJ
ICV	1.000	IID06A	4/6/2015	12:40	GEJ
ICB	1.000	IID06A	4/6/2015	12:45	GEJ
PQL	1.000	IID06A	4/6/2015	12:50	GEJ
LRS1	1.000	IID06A	4/6/2015	12:56	GEJ
LRS2	1.000	IID06A	4/6/2015	13:02	GEJ
ICSA	1.000	IID06A	4/6/2015	13:10	GEJ
ICSAB	1.000	IID06A	4/6/2015	13:15	GEJ
CCV	1.000	IID06A	4/6/2015	13:20	GEJ
CCB	1.000	IID06A	4/6/2015	13:24	GEJ
SI1950-001	1.000	IID06A	4/6/2015	13:29	GEJ
SI1950-003	1.000	IID06A	4/6/2015	13:34	GEJ
LCSWID03ICW2	1.000	IID06A	4/6/2015	13:38	GEJ
PBT1236A	1.000	IID06A	4/6/2015	13:43	GEJ
PBWID03ICW2	1.000	IID06A	4/6/2015	13:48	GEJ
SI2070-001	1.000	IID06A	4/6/2015	13:53	GEJ
SI2070-002	1.000	IID06A	4/6/2015	13:57	GEJ
LCSOID02ICS2	1.000	IID06A	4/6/2015	14:02	GEJ
LCS2ID02ICS2	1.000	IID06A	4/6/2015	14:07	GEJ
PBSID02ICS2	1.000	IID06A	4/6/2015	14:11	GEJ
CCV	1.000	IID06A	4/6/2015	14:16	GEJ
CCB	1.000	IID06A	4/6/2015	14:21	GEJ
SI1906-002	1.000	IID06A	4/6/2015	14:26	GEJ
SI1906-004	1.000	IID06A	4/6/2015	14:30	GEJ
SI1906-006	1.000	IID06A	4/6/2015	14:35	GEJ
SI1906-006A	1.000	IID06A	4/6/2015	14:40	GEJ
SI1906-006L	5.000	IID06A	4/6/2015	14:45	GEJ
SI1906-006P	1.000	IID06A	4/6/2015	14:49	GEJ
SI1906-006S	1.000	IID06A	4/6/2015	14:54	GEJ
SI1906-008	1.000	IID06A	4/6/2015	14:59	GEJ
SI1906-010	1.000	IID06A	4/6/2015	15:04	GEJ
SI1906-012	1.000	IID06A	4/6/2015	15:09	GEJ
CCV	1.000	IID06A	4/6/2015	15:14	GEJ
CCB	1.000	IID06A	4/6/2015	15:18	GEJ
SI1906-014	1.000	IID06A	4/6/2015	15:23	GEJ
SI1906-016	1.000	IID06A	4/6/2015	15:28	GEJ
SI1906-018	1.000	IID06A	4/6/2015	15:33	GEJ
SI1906-020	1.000	IID06A	4/6/2015	15:38	GEJ
SI1906-022	1.000	IID06A	4/6/2015	15:43	GEJ
SI1906-024	1.000	IID06A	4/6/2015	15:47	GEJ
SI1906-026	1.000	IID06A	4/6/2015	15:52	GEJ
SI1906-028	1.000	IID06A	4/6/2015	15:57	GEJ
SI1906-030	1.000	IID06A	4/6/2015	16:02	GEJ

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
LCSOIC25ICS1	1.000	IID06A	4/6/2015	16:07	GEJ
CCV	1.000	IID06A	4/6/2015	16:11	GEJ
CCB	1.000	IID06A	4/6/2015	16:16	GEJ
PBSIC25ICS1	1.000	IID06A	4/6/2015	16:21	GEJ
SI1804-001	1.000	IID06A	4/6/2015	16:25	GEJ
SI1804-002	1.000	IID06A	4/6/2015	16:30	GEJ
SI1804-003	1.000	IID06A	4/6/2015	16:35	GEJ
SI1804-004	1.000	IID06A	4/6/2015	16:40	GEJ
SI1804-005	1.000	IID06A	4/6/2015	16:45	GEJ
SI1804-006	1.000	IID06A	4/6/2015	16:49	GEJ
SI1804-007	1.000	IID06A	4/6/2015	16:54	GEJ
SI1804-007A	1.000	IID06A	4/6/2015	16:59	GEJ
SI1804-007L	5.000	IID06A	4/6/2015	17:03	GEJ
CCV	1.000	IID06A	4/6/2015	17:08	GEJ
CCB	1.000	IID06A	4/6/2015	17:13	GEJ
SI1804-007P	1.000	IID06A	4/6/2015	17:17	GEJ
SI1804-007S	1.000	IID06A	4/6/2015	17:22	GEJ
SI1804-007S	2.000	IID06A	4/6/2015	17:27	GEJ
SI1804-008	1.000	IID06A	4/6/2015	17:31	GEJ
SI1804-008A	1.000	IID06A	4/6/2015	17:36	GEJ
SI1804-008L	5.000	IID06A	4/6/2015	17:41	GEJ
SI1804-008P	1.000	IID06A	4/6/2015	17:46	GEJ
SI1804-008S	1.000	IID06A	4/6/2015	17:50	GEJ
SI1847-004	2.000	IID06A	4/6/2015	17:55	GEJ
SI1968-009	1.000	IID06A	4/6/2015	18:00	GEJ
CCV	1.000	IID06A	4/6/2015	18:05	GEJ
CCB	1.000	IID06A	4/6/2015	18:09	GEJ
SI1994-001	1.000	IID06A	4/6/2015	18:14	GEJ
LCSWID02ICWI	1.000	IID06A	4/6/2015	18:19	GEJ
PBWID02ICW1	1.000	IID06A	4/6/2015	18:23	GEJ
SI2011-001	1.000	IID06A	4/6/2015	18:28	GEJ
SI2011-00IA	1.000	IID06A	4/6/2015	18:33	GEJ
SI2011-001L	5.000	IID06A	4/6/2015	18:38	GEJ
SI2011-001P	1.000	IID06A	4/6/2015	18:43	GEJ
SI2011-001S	1.000	IID06A	4/6/2015	18:47	GEJ
LCSOIC31ICS1	1.000	IID06A	4/6/2015	18:52	GEJ
PBSIC31ICSI	1.000	IID06A	4/6/2015	18:57	GEJ
CCV	1.000	IID06A	4/6/2015	19:02	GEJ
CCB	1.000	IID06A	4/6/2015	19:06	GEJ
SI1693-001	1.000	IID06A	4/6/2015	19:11	GEJ
SI1693-001A	1.000	IID06A	4/6/2015	19:16	GEJ
SI1693-001L	5.000	IID06A	4/6/2015	19:20	GEJ
SI1693-00IP	1.000	IID06A	4/6/2015	19:25	GEJ
SI1693-001S	1.000	IID06A	4/6/2015	19:30	GEJ
SI1978-001	1.000	IID06A	4/6/2015	19:35	GEJ
SI1979-001	1.000	IID06A	4/6/2015	19:39	GEJ
SI1695-006A	1.000	IID06A	4/6/2015	19:44	GEJ

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SI1695-006L	5.000	IID06A	4/6/2015	19:49	GEJ
SI1847-001R	1.000	IID06A	4/6/2015	19:54	GEJ
CCV	1.000	IID06A	4/6/2015	19:59	GEJ
CCB	1.000	IID06A	4/6/2015	20:03	GEJ
SI1847-001RA	1.000	IID06A	4/6/2015	20:08	GEJ
SI1847-001RL	5.000	IID06A	4/6/2015	20:13	GEJ
SI1847-001P	1.000	IID06A	4/6/2015	20:17	GEJ
SI1847-001S	1.000	IID06A	4/6/2015	20:22	GEJ
LCSWID06ICW2	1.000	IID06A	4/6/2015	20:27	GEJ
PBWID06ICW2	1.000	IID06A	4/6/2015	20:31	GEJ
SI2069-001	1.000	IID06A	4/6/2015	20:36	GEJ
SI2069-001A	1.000	IID06A	4/6/2015	20:41	GEJ
SI2069-001L	5.000	IID06A	4/6/2015	20:46	GEJ
SI2069-001P	1.000	IID06A	4/6/2015	20:50	GEJ
CCV	1.000	IID06A	4/6/2015	20:55	GEJ
CCB	1.000	IID06A	4/6/2015	21:00	GEJ
SI2069-001S	1.000	IID06A	4/6/2015	21:04	GEJ
SI2069-002	1.000	IID06A	4/6/2015	21:09	GEJ
SI2069-003	1.000	IID06A	4/6/2015	21:14	GEJ
SI2069-004	1.000	IID06A	4/6/2015	21:19	GEJ
SI2069-005	1.000	IID06A	4/6/2015	21:23	GEJ
SI2086-001	1.000	IID06A	4/6/2015	21:28	GEJ
SI2086-002	1.000	IID06A	4/6/2015	21:33	GEJ
LCSWID06ICW1	2.000	IID06A	4/6/2015	21:38	GEJ
PBWID06ICW1	1.000	IID06A	4/6/2015	21:43	GEJ
SI0285-001	1.000	IID06A	4/6/2015	21:47	GEJ
CCV	1.000	IID06A	4/6/2015	21:52	GEJ
CCB	1.000	IID06A	4/6/2015	21:57	GEJ
SI2085-002	10.00	IID06A	4/6/2015	22:02	GEJ
SI2085-002	1.000	IID06A	4/6/2015	22:07	GEJ
RINSE	1.000	IID06A	4/6/2015	22:12	GEJ

Intensity Report

Author:

Published: 4/7/2015 11:29:20AM

Notes:

Blank

Method Name: K6010-2011 Method Revision: 1,728

Analyst Name: GEJ

Acquire Date: 4/6/2015 12:31:37PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.00004600	Cts/S	0.00001100	23.68	18.96
Al3961_R		0.0001570	Cts/S	0.00007800	49.87	4.100
As1891_A		-0.00005900	Cts/S	0.000009000	15.15	-0.5985
Au2427_A		0.0002760	Cts/S	0.0002520	91.30	2.825
B_2089_A		0.0001590	Cts/S	0.00002500	15.79	1.630
Ba4554_R		0.001398	Cts/S	0.00008400	5.977	37.20
Be3130_R		-0.00008000	Cts/S	0.00001300	15.72	-2.127
Ca3158_R		0.0001900	Cts/S	0.0004660	244.9	4.698
Cd2265_A		0.00005500	Cts/S	0.00002000	36.47	0.5656
Co2286_A		0.0003350	Cts/S	0.00001200	3.451	3.423
Cr2677_A		0.00001500	Cts/S	0.000006000	40.05	6.265
Cu3273_A		0.00006600	Cts/S	0.00002500	37.88	26.98
Fe2599_R		0.0008410	Cts/S	0.0002000	23.79	22.18
K_7664_R		-0.001522	Cts/S	0.00005100	3.360	-40.37
Li6707_R		0.0009930	Cts/S	0.0002130	21.46	26.53
Mg2025_A		0.00007600	Cts/S	0.00005000	65.32	0.7810
Mn2576_R		-0.0001040	Cts/S	0.000006000	5.352	-2.772
Mo2020_A		0.0002150	Cts/S	0.00002600	12.08	2.199
Na5895_R		0.01017	Cts/S	0.00008100	0.8005	270.0
Ni2316_A		-0.00006900	Cts/S	0.00004700	68.80	-0.7032
Pb2203_A		-0.0001450	Cts/S	0.0000	0.01355	-1.487
Sb2068_A		-0.00005100	Cts/S	0.00003100	61.94	-0.5186
Se1960_A		0.00007200	Cts/S	0.00004600	64.08	0.7410
Si2516_R		0.0004830	Cts/S	0.00006000	12.43	12.86
Sn1899_A		0.0001430	Cts/S	0.00001700	11.66	1.458
Sr4215_R		-0.0007940	Cts/S	0.0003350	42.25	-21.34
Ti3349_A		-0.00004500	Cts/S	0.0000	0.7624	-18.59
Tl1908_A		0.00001900	Cts/S	0.00006800	361.6	0.1932
V_2924_A		-0.00003200	Cts/S	0.00001000	32.10	-13.33
Zn2062_A		-0.00003200	Cts/S	0.000002000	4.938	-0.3317
Y_3600_R		26,555	Cts/S	1,537.0	5.7881	26,555
Y_2243_A		10,224	Cts/S	9.8432	0.096279	10,224
Y_3600_A		411,620	Cts/S	1,180.9	0.28690	411,620

Std 1

Method Name: K6010-2011 Method Revision: 1,728

Analyst Name: GEJ

Acquire Date: 4/6/2015 12:36:22PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.09779	Cts/S	0.0005570	0.5697	38,450
Al3961_R		0.9317	Cts/S	0.01133	1.216	25,400
As1891_A		0.03071	Cts/S	0.00004200	0.1361	304.4
Au2427_A		0.4484	Cts/S	0.02260	5.040	4,445
B_2089_A		0.1028	Cts/S	0.0002500	0.2427	1,019
Ba4554_R		2.583	Cts/S	0.03309	1.281	70,430
Be3130_R		4.484	Cts/S	0.04850	1.082	122,300
Ca3158_R		1.448	Cts/S	0.01375	0.9499	39,480
Cd2265_A		1.680	Cts/S	0.001828	0.1089	16,650
Co2286_A		0.4596	Cts/S	0.0003570	0.07771	4,557
Cr2677_A		0.05304	Cts/S	0.0001390	0.2613	20,850
Cu3273_A		0.05938	Cts/S	0.0002970	0.4995	23,350
Fe2599_R		1.341	Cts/S	0.01462	1.090	36,580

Std 1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 12:36:22PM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
K_7664_R		0.8334	Cts/S	0.006429	0.7714	22,730
Li6707_R		0.5980	Cts/S	0.007471	1.249	16,310
Mg2025_A		0.4322	Cts/S	0.001083	0.2506	4,285
Mn2576_R		0.2784	Cts/S	0.002791	1.003	7,590
Mo2020_A		0.1755	Cts/S	0.001390	0.7919	1,740
Na5895_R		2.509	Cts/S	0.02521	1.005	68,420
Ni2316_A		0.2737	Cts/S	0.0004440	0.1622	2,713
Pb2203_A		0.1165	Cts/S	0.000002000	0.001753	1,155
Sb2068_A		0.03801	Cts/S	0.00008800	0.2313	376.8
Se1960_A		0.01875	Cts/S	0.0001910	1.019	185.9
Si2516_R		0.3393	Cts/S	0.001220	0.3596	9,254
Sn1899_A		0.04096	Cts/S	0.00001000	0.02336	406.0
Sr4215_R		3.258	Cts/S	0.04210	1.292	88,830
Ti3349_A		0.1310	Cts/S	0.0002110	0.1614	51,510
Tl1908_A		0.04031	Cts/S	0.0003100	0.7687	399.6
V_2924_A		0.06562	Cts/S	0.0002820	0.4304	25,800
Zn2062_A		0.2939	Cts/S	0.0002690	0.09144	2,914
Y_3600_R		27,272	Cts/S	536.26	1.9663	27,272
Y_2243_A		9,913.8	Cts/S	15.741	0.15878	9,913.8
Y_3600_A		393,210	Cts/S	1,869.7	0.47549	393,210

ICV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 12:40:55PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		401.3	ug/L	2.485	0.6193	15,800
Al3961_R		10,250	ug/L	32.99	0.3219	10,630
As1891_A		396.1	ug/L	0.5276	0.1332	122.5
Au2427_A		403.7	ug/L	20.93	5.185	1,830
B_2089_A		409.6	ug/L	1.208	0.2950	426.6
Ba4554_R		403.5	ug/L	0.2968	0.07355	29,020
Be3130_R		405.1	ug/L	1.691	0.4175	50,520
Ca3158_R		10,290	ug/L	23.26	0.2261	16,580
Cd2265_A		409.2	ug/L	0.3063	0.07484	6,945
Co2286_A		413.4	ug/L	0.02743	0.006635	1,921
Cr2677_A		413.8	ug/L	3.101	0.7494	8,834
Cu3273_A		408.9	ug/L	3.569	0.8730	9,783
Fe2599_R		10,250	ug/L	14.45	0.1410	15,310
K_7664_R		13,720	ug/L	82.26	0.5995	12,710
Li6707_R		398.2	ug/L	0.7443	0.1869	6,640
Mg2025_A		10,470	ug/L	6.415	0.06126	1,830
Mn2576_R		400.8	ug/L	1.357	0.3386	3,101
Mo2020_A		412.8	ug/L	0.5665	0.1372	733.1
Na5895_R		10,300	ug/L	32.68	0.3174	28,920
Ni2316_A		412.6	ug/L	0.2893	0.07012	1,141
Pb2203_A		414.5	ug/L	0.004405	0.001063	486.8
Sb2068_A		402.8	ug/L	0.5492	0.1364	154.4
Se1960_A		401.4	ug/L	0.5458	0.1360	76.48
Si2516_R		9,902	ug/L	29.78	0.3008	3,747
Sn1899_A		412.8	ug/L	0.1109	0.02686	171.6
Sr4215_R		403.8	ug/L	1.667	0.4129	36,580
Ti3349_A		398.1	ug/L	1.717	0.4314	20,970
Tl1908_A		420.8	ug/L	2.295	0.5454	171.6
V_2924_A		408.8	ug/L	2.061	0.5041	10,780
Zn2062_A		410.8	ug/L	0.5714	0.1391	1,220
Y_3600_R		27,816	Cts/S	88.860	0.31945	27,816

ICV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 12:40:55PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Y_2243_A		10,104	Cts/S	1.6889	0.016715	10,104
Y_3600_A		402,330	Cts/S	2,077.6	0.51639	402,330

ICB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 12:45:31PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1836	ug/L	0.05409	29.46	26.40
Al3961_R		-17.30	ug/L	4.979	28.78	-13.65
As1891_A		-0.4776	ug/L	0.2180	45.64	-0.7485
Au2427_A		2.980	ug/L	1.279	42.93	16.48
B_2089_A		0.4428	ug/L	0.04094	9.246	2.144
Ba4554_R		0.09034	ug/L	0.1065	117.9	46.02
Be3130_R		0.08815	ug/L	0.08613	97.71	8.884
Ca3158_R		-19.77	ug/L	8.372	42.35	-26.84
Cd2265_A		0.009609	ug/L	0.01500	156.1	0.7265
Co2286_A		0.05524	ug/L	0.05834	105.6	3.693
Cr2677_A		0.2711	ug/L	0.02099	7.740	12.15
Cu3273_A		-0.1219	ug/L	0.4561	374.3	24.01
Fe2599_R		-5.362	ug/L	1.269	23.67	15.61
K_7664_R		11.43	ug/L	9.986	87.37	-32.09
Li6707_R		-0.4261	ug/L	1.502	352.6	20.72
Mg2025_A		-24.67	ug/L	7.772	31.50	-3.532
Mn2576_R		0.5054	ug/L	0.03797	7.512	1.028
Mo2020_A		1.949	ug/L	0.2675	13.72	5.700
Na5895_R		11.35	ug/L	3.793	33.42	318.5
Ni2316_A		-0.02626	ug/L	0.06614	251.8	-0.7726
Pb2203_A		-0.7357	ug/L	0.2251	30.60	-2.369
Sb2068_A		1.239	ug/L	2.202	177.7	-0.03419
Se1960_A		1.868	ug/L	0.06216	3.327	1.098
Si2516_R		-3.224	ug/L	2.070	64.19	12.38
Sn1899_A		-0.1158	ug/L	1.157	999.5	1.412
Sr4215_R		-0.05148	ug/L	0.05390	104.7	-27.13
Ti3349_A		0.4634	ug/L	0.1454	31.37	6.525
Tl1908_A		-0.06777	ug/L	0.3597	530.7	0.1643
V_2924_A		0.1469	ug/L	0.2485	169.2	-9.615
Zn2062_A		0.08582	ug/L	0.02040	23.77	-0.07452
Y_3600_R		28,184	Cts/S	227.58	0.80749	28,184
Y_2243_A		10,239	Cts/S	4.4252	0.043221	10,239
Y_3600_A		410,410	Cts/S	5,755.4	1.4024	410,410

PQL

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 12:50:17PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.78	ug/L	0.2094	1.942	454.1
Al3961_R		285.5	ug/L	11.45	4.010	302.5
As1891_A		7.185	ug/L	0.3061	4.260	1.673
Au2427_A		98.98	ug/L	4.046	4.088	457.3
B_2089_A		51.86	ug/L	0.4558	0.8789	55.00
Ba4554_R		5.361	ug/L	0.1963	3.661	427.3
Be3130_R		4.917	ug/L	0.004333	0.08811	615.1
Ca3158_R		85.50	ug/L	9.191	10.75	144.1
Cd2265_A		5.113	ug/L	0.01112	0.2175	88.64
Co2286_A		10.61	ug/L	0.4021	3.789	53.51

PQL

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 12:50:17PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Cr2677_A		10.31	ug/L	0.1737	1.685	230.5
Cu3273_A		25.34	ug/L	0.5962	2.353	643.7
Fe2599_R		94.82	ug/L	0.7296	0.7695	166.1
K_7664_R		1,023	ug/L	9.525	0.9312	915.1
Li6707_R		96.65	ug/L	1.020	1.055	1,646
Mg2025_A		86.45	ug/L	2.030	2.348	16.41
Mn2576_R		5.954	ug/L	0.8011	13.45	43.58
Mo2020_A		10.15	ug/L	0.05918	0.5834	20.45
Na5895_R		1,020	ug/L	22.20	2.176	3,145
Ni2316_A		10.43	ug/L	0.05664	0.5430	28.62
Pb2203_A		4.716	ug/L	0.6158	13.06	4.117
Sb2068_A		7.809	ug/L	0.4601	5.892	2.183
Se1960_A		11.35	ug/L	0.01406	0.1238	2.918
Si2516_R		197.9	ug/L	4.050	2.046	88.75
Sn1899_A		104.2	ug/L	0.2076	0.1992	45.10
Sr4215_R		10.53	ug/L	0.2759	2.620	940.2
Ti3349_A		15.08	ug/L	0.3005	1.993	792.1
Tl1908_A		15.39	ug/L	0.6846	4.447	6.582
V_2924_A		10.35	ug/L	0.1075	1.038	265.8
Zn2062_A		20.85	ug/L	0.03559	0.1706	62.61
Y_3600_R		28,037	Cts/S	262.75	0.93715	28,037
Y_2243_A		10,261	Cts/S	38.723	0.37739	10,261
Y_3600_A		410,420	Cts/S	1,341.3	0.32680	410,420

LRS1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 12:56:40PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2,115	ug/L	20.95	0.9903	81,140
Al3961_R		54.60	ug/L	14.08	25.78	230.1
As1891_A		21,510	ug/L	22.67	0.1054	6,259
Au2427_A	F	23,760	ug/L	63.46	0.2671	100,200
B_2089_A		20,990	ug/L	12.87	0.06131	19,910
Ba4554_R		18,940	ug/L	80.67	0.4259	1,381,000
Be3130_R		19,100	ug/L	182.9	0.9573	2,418,000
Ca3158_R		-34.42	ug/L	3.032	8.809	-22.32
Cd2265_A		19,590	ug/L	106.8	0.5453	310,200
Co2286_A		21,140	ug/L	21.72	0.1027	91,670
Cr2677_A		19,760	ug/L	238.3	1.206	408,100
Cu3273_A		19,930	ug/L	84.14	0.4222	460,400
Fe2599_R		-15.44	ug/L	3.375	21.87	0.3518
K_7664_R		18.59	ug/L	5.165	27.78	-25.41
Li6707_R		19,150	ug/L	51.21	0.2674	322,800
Mg2025_A		-3,280	ug/L	10.06	0.3068	187.3
Mn2576_R		20,030	ug/L	158.3	0.7902	157,400
Mo2020_A		5,347	ug/L	8.139	0.1522	8,847
Na5895_R		36.70	ug/L	0.5014	1.366	390.6
Ni2316_A		20,850	ug/L	18.78	0.09007	53,920
Pb2203_A		21,530	ug/L	9.005	0.04183	23,750
Sb2068_A		21,160	ug/L	19.35	0.09145	7,606
Se1960_A		21,630	ug/L	33.93	0.1569	3,809
Si2516_R		138.9	ug/L	6.492	4.673	94.09
Sn1899_A		20,590	ug/L	35.77	0.1737	7,935
Sr4215_R		19,750	ug/L	47.53	0.2406	1,817,000
Ti3349_A		19,640	ug/L	395.7	2.014	1,002,000
Tl1908_A		21,130	ug/L	32.75	0.1550	8,043

LRS1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 12:56:40PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
V_2924_A		20,100	ug/L	184.5	0.9180	516,300
Zn2062_A		20,010	ug/L	56.47	0.2823	55,520
Y_3600_R		28,229	Cts/S	229.68	0.81362	28,229
Y_2243_A		9,440.4	Cts/S	4.0872	0.043295	9,440.4
Y_3600_A		389,600	Cts/S	4,192.3	1.0761	389,600

LRS2

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:02:07PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.332	ug/L	4.042	303.5	-3,014
Al3961_R		487,100	ug/L	30,940	6.352	498,100
As1891_A		3.191	ug/L	0.1380	4.325	-8.772
Au2427_A		21.15	ug/L	3.038	14.37	208.0
B_2089_A		16.96	ug/L	2.398	14.14	16.88
Ba4554_R		8.063	ug/L	1.259	15.62	611.9
Be3130_R		6.911	ug/L	0.9920	14.35	850.0
Ca3158_R		452,500	ug/L	24,270	5.363	720,100
Cd2265_A		-0.4858	ug/L	1.130	232.6	181.9
Co2286_A		1.900	ug/L	0.5824	30.65	9.083
Cr2677_A		0.2932	ug/L	0.5546	189.1	41.91
Cu3273_A		1.572	ug/L	1.158	73.67	136.0
Fe2599_R		226,400	ug/L	10,150	4.484	333,700
K_7664_R		297,200	ug/L	6,458	2.173	272,800
Li6707_R		24.18	ug/L	1.277	5.281	424.1
Mg2025_A		191,000	ug/L	16.13	0.008447	29,350
Mn2576_R		15.06	ug/L	1.234	8.190	126.0
Mo2020_A		10.48	ug/L	2.297	21.93	18.41
Na5895_R		192,800	ug/L	6,193	3.212	530,000
Ni2316_A		2.430	ug/L	0.01270	0.5228	-19.15
Pb2203_A		-0.4066	ug/L	1.686	414.6	-60.01
Sb2068_A		0.4506	ug/L	0.9946	220.7	2.968
Se1960_A		1.696	ug/L	6.243	368.0	4.505
Si2516_R		48,250	ug/L	1,026	2.125	17,970
Sn1899_A		8.093	ug/L	1.025	12.66	4.244
Sr4215_R		13.60	ug/L	1.178	8.659	1,198
Ti3349_A		22.97	ug/L	1.435	6.248	1,043
Tl1908_A		4.012	ug/L	1.144	28.52	2.964
V_2924_A		2.867	ug/L	1.003	34.97	134.1
Zn2062_A		4.659	ug/L	0.7793	16.73	12.01
Y_3600_R		27,498	Cts/S	639.73	2.3265	27,498
Y_2243_A		8,974.0	Cts/S	9.4364	0.10515	8,974.0
Y_3600_A		351,900	Cts/S	219.77	0.062454	351,900

ICSA

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:10:29PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1195	ug/L	1.436	1,201	-2,456
Al3961_R		503,500	ug/L	23,770	4.721	513,400
As1891_A		-0.06457	ug/L	1.576	2,441	-8.080
Au2427_A		-1.247	ug/L	1.939	155.5	97.50
B_2089_A		7.686	ug/L	0.2726	3.546	8.242
Ba4554_R		0.3447	ug/L	0.06593	19.12	62.68
Be3130_R		0.1114	ug/L	0.02567	23.05	11.11

ICSA

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:10:29PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ca3158_R		450,300	ug/L	17,700	3.930	714,400
Cd2265_A		-1.778	ug/L	0.3645	20.49	129.6
Co2286_A		0.2019	ug/L	0.05865	29.04	2.217
Cr2677_A		-1.012	ug/L	0.07317	7.233	12.21
Cu3273_A		-2.749	ug/L	0.09629	3.503	54.73
Fe2599_R		187,900	ug/L	4,834	2.573	276,100
K_7664_R		367.6	ug/L	10.45	2.842	294.7
Li6707_R		12.33	ug/L	0.08516	0.6904	229.0
Mg2025_A		481,000	ug/L	511.8	0.1064	73,530
Mn2576_R		-0.6420	ug/L	0.09354	14.57	3.619
Mo2020_A		-0.8257	ug/L	0.4392	53.20	0.6284
Na5895_R		182.6	ug/L	5.615	3.074	779.2
Ni2316_A		-0.004741	ug/L	0.02604	549.2	-20.87
Pb2203_A		-0.02285	ug/L	4.706	20,590	-64.23
Sb2068_A		-0.0006250	ug/L	0.6450	103,200	2.551
Se1960_A		-3.825	ug/L	4.040	105.6	3.435
Si2516_R		29.45	ug/L	0.4494	1.526	10.67
Sn1899_A		3.996	ug/L	0.06647	1.663	2.728
Sr4215_R	W	4.948	ug/L	0.08689	1.756	420.2
Ti3349_A		3.887	ug/L	0.1178	3.030	162.6
Tl1908_A		-0.0004580	ug/L	0.7133	155,800	1.526
V_2924_A		-1.090	ug/L	0.1933	17.74	29.56
Zn2062_A		0.4741	ug/L	0.009830	2.073	0.9586
Y_3600_R		27,407	Cts/S	439.38	1.6032	27,407
Y_2243_A		8,924.7	Cts/S	6.1098	0.068459	8,924.7
Y_3600_A		350,820	Cts/S	757.56	0.21594	350,820

ICSAB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:15:22PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		205.7	ug/L	0.4143	0.2014	4,845
Al3961_R		472,600	ug/L	24,200	5.121	477,200
As1891_A		89.79	ug/L	0.3339	0.3719	17.45
Au2427_A		530.9	ug/L	6.492	1.223	2,224
B_2089_A		486.0	ug/L	0.05279	0.01086	448.4
Ba4554_R		482.3	ug/L	10.10	2.095	33,820
Be3130_R		474.6	ug/L	12.22	2.575	57,730
Ca3158_R		432,400	ug/L	14,570	3.370	679,200
Cd2265_A		894.6	ug/L	2.293	0.2563	13,600
Co2286_A		449.6	ug/L	0.2250	0.05005	1,853
Cr2677_A		461.6	ug/L	6.052	1.311	8,695
Cu3273_A		492.6	ug/L	7.767	1.577	10,450
Fe2599_R		177,700	ug/L	4,688	2.638	258,600
K_7664_R		20,600	ug/L	328.5	1.594	18,630
Li6707_R		543.2	ug/L	11.65	2.144	8,824
Mg2025_A		457,500	ug/L	482.0	0.1054	70,260
Mn2576_R		452.2	ug/L	14.33	3.168	3,423
Mo2020_A		472.9	ug/L	2.854	0.6035	745.1
Na5895_R		20,660	ug/L	383.9	1.858	56,300
Ni2316_A		882.6	ug/L	0.6870	0.07784	2,148
Pb2203_A		42.78	ug/L	4.770	11.15	-15.92
Sb2068_A		580.5	ug/L	0.07774	0.01339	200.4
Se1960_A		40.79	ug/L	4.133	10.13	10.73
Si2516_R	F	208.4	ug/L	7.344	3.525	78.92
Sn1899_A		458.7	ug/L	0.3895	0.08493	169.1

ICSAB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:15:22PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Sr4215_R		498.3	ug/L	11.72	2.352	44,030
Ti3349_A		478.4	ug/L	8.642	1.806	22,180
Tl1908_A		87.38	ug/L	1.015	1.161	31.47
V_2924_A		476.3	ug/L	7.574	1.590	11,120
Zn2062_A		885.2	ug/L	0.9973	0.1127	2,334
Y_3600_R		27,132	Cts/S	155.71	0.57390	27,132
Y_2243_A		8,965.4	Cts/S	3.2953	0.036755	8,965.4
Y_3600_A		354,130	Cts/S	6,180.9	1.7454	354,130

CCV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:20:09PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		493.3	ug/L	2.093	0.4243	19,450
Al3961_R		12,220	ug/L	151.3	1.238	12,960
As1891_A		489.1	ug/L	1.623	0.3318	151.6
Au2427_A		498.2	ug/L	20.93	4.201	2,260
B_2089_A		495.5	ug/L	0.9751	0.1968	516.2
Ba4554_R		487.4	ug/L	6.717	1.378	35,850
Be3130_R		483.9	ug/L	6.727	1.390	61,750
Ca3158_R		12,230	ug/L	212.8	1.740	20,160
Cd2265_A		492.1	ug/L	0.7918	0.1609	8,359
Co2286_A		499.9	ug/L	0.2741	0.05484	2,325
Cr2677_A		494.9	ug/L	1.637	0.3308	10,580
Cu3273_A		494.2	ug/L	2.836	0.5739	11,840
Fe2599_R		12,220	ug/L	197.1	1.613	18,680
K_7664_R		12,110	ug/L	148.8	1.229	11,460
Li6707_R		482.9	ug/L	9.128	1.890	8,232
Mg2025_A		12,640	ug/L	4.039	0.03196	2,209
Mn2576_R		482.2	ug/L	12.93	2.682	3,818
Mo2020_A		498.6	ug/L	0.6370	0.1278	885.8
Na5895_R		12,070	ug/L	185.3	1.535	34,610
Ni2316_A		501.1	ug/L	0.1838	0.03668	1,387
Pb2203_A		497.7	ug/L	0.2814	0.05654	585.4
Sb2068_A		493.7	ug/L	2.263	0.4583	189.5
Se1960_A		487.1	ug/L	3.118	0.6401	92.73
Si2516_R		12,050	ug/L	294.9	2.446	4,663
Sn1899_A		500.1	ug/L	0.5059	0.1012	207.8
Sr4215_R		485.4	ug/L	7.310	1.506	44,990
Ti3349_A		496.0	ug/L	1.115	0.2248	26,170
Tl1908_A		500.3	ug/L	0.5015	0.1002	204.1
V_2924_A		496.5	ug/L	1.454	0.2927	13,120
Zn2062_A		493.6	ug/L	1.051	0.2130	1,467
Y_3600_R		28,460	Cts/S	229.27	0.80561	28,460
Y_2243_A		10,112	Cts/S	5.3211	0.052621	10,112
Y_3600_A		402,970	Cts/S	1,827.4	0.45348	402,970

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:24:43PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2976	ug/L	0.2620	88.03	31.43
Al3961_R		-11.14	ug/L	8.598	77.20	-7.348
As1891_A		0.6802	ug/L	1.047	154.0	-0.3837
Au2427_A		3.829	ug/L	0.2784	7.270	20.39

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:24:43PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
B_2089_A		3.268	ug/L	0.5861	17.93	5.037
Ba4554_R		0.4818	ug/L	0.01284	2.666	75.23
Be3130_R		0.1670	ug/L	0.002243	1.343	18.99
Ca3158_R		-16.47	ug/L	1.943	11.80	-21.76
Cd2265_A		0.1871	ug/L	0.07356	39.32	3.782
Co2286_A		0.3667	ug/L	0.1123	30.61	5.162
Cr2677_A		0.4381	ug/L	0.08392	19.15	16.02
Cu3273_A		-0.2129	ug/L	0.1810	85.02	22.04
Fe2599_R		-1.761	ug/L	0.06465	3.672	21.26
K_7664_R		81.69	ug/L	15.18	18.58	34.24
Li6707_R		2.193	ug/L	0.5929	27.04	65.48
Mg2025_A		-12.11	ug/L	3.004	24.81	-1.319
Mn2576_R		0.3778	ug/L	0.3671	97.16	0.004618
Mo2020_A		2.058	ug/L	0.7117	34.58	5.903
Na5895_R		33.43	ug/L	9.442	28.25	384.5
Ni2316_A		0.1012	ug/L	0.1508	149.1	-0.4161
Pb2203_A		-0.4461	ug/L	0.2966	66.49	-2.025
Sb2068_A		0.4941	ug/L	0.8331	168.6	-0.3237
Se1960_A		4.376	ug/L	2.295	52.44	1.579
Si2516_R		-7.223	ug/L	1.770	24.51	10.97
Sn1899_A		-0.8745	ug/L	0.4744	54.25	1.096
Sr4215_R		0.1940	ug/L	0.02791	14.39	-4.592
Ti3349_A		0.6845	ug/L	0.05886	8.599	18.64
Tl1908_A		1.106	ug/L	0.8809	79.68	0.6546
V_2924_A		0.1614	ug/L	0.3171	196.5	-9.423
Zn2062_A		0.3620	ug/L	0.2454	67.79	0.7583
Y_3600_R		28,475	Cts/S	432.31	1.5182	28,475
Y_2243_A		10,249	Cts/S	12.468	0.12164	10,249
Y_3600_A		416,590	Cts/S	1,260.2	0.30250	416,590

SI1950-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:29:30PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2896	ug/L	0.3160	109.1	-334.8
Al3961_R		11,810	ug/L	424.0	3.590	12,720
As1891_A		15.06	ug/L	0.1934	1.284	3.088
Au2427_A		2.796	ug/L	0.4453	15.93	26.94
B_2089_A		12.70	ug/L	0.2955	2.327	14.76
Ba4554_R		192.6	ug/L	7.759	4.028	14,430
Be3130_R		1.034	ug/L	0.02471	2.389	49.40
Ca3158_R		5,313	ug/L	218.1	4.106	8,904
Cd2265_A		0.01965	ug/L	0.07551	384.3	23.43
Co2286_A		25.36	ug/L	0.09974	0.3933	133.3
Cr2677_A		52.75	ug/L	0.5912	1.121	1,147
Cu3273_A		34.79	ug/L	0.5185	1.490	853.4
Fe2599_R		23,330	ug/L	1,006	4.313	36,210
K_7664_R		1,777	ug/L	73.35	4.128	1,673
Li6707_R		7.867	ug/L	0.4689	5.961	164.7
Mg2025_A		1,569	ug/L	4.408	0.2810	276.8
Mn2576_R		312.8	ug/L	15.58	4.981	2,517
Mo2020_A		5.561	ug/L	0.3465	6.230	12.17
Na5895_R		12,750	ug/L	478.9	3.757	37,150
Ni2316_A		36.60	ug/L	0.1104	0.3017	98.97
Pb2203_A		39.96	ug/L	0.3636	0.9100	46.10
Sb2068_A		0.4366	ug/L	0.2177	49.86	-0.08294

SI1950-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:29:30PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Se1960_A		0.2123	ug/L	2.107	992.3	1.016
Si2516_R		2,436	ug/L	97.94	4.021	967.4
Sn1899_A		23.16	ug/L	0.5800	2.504	11.13
Sr4215_R		65.72	ug/L	2.820	4.291	6,171
Ti3349_A		895.1	ug/L	15.24	1.703	47,590
Tl1908_A		0.1842	ug/L	0.6253	339.5	-0.5637
V_2924_A		59.60	ug/L	0.9137	1.533	1,618
Zn2062_A		92.59	ug/L	0.07887	0.08518	278.3
Y_3600_R		28,938	Cts/S	553.97	1.9143	28,938
Y_2243_A		10,231	Cts/S	13.234	0.12935	10,231
Y_3600_A		406,420	Cts/S	1,490.9	0.36683	406,420

SI1950-003

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:34:13PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.008232	ug/L	0.1945	2,363	-189.8
Al3961_R		6,023	ug/L	234.3	3.891	6,462
As1891_A		7.803	ug/L	1.254	16.07	1.231
Au2427_A		1.596	ug/L	0.9890	61.95	17.17
B_2089_A		7.252	ug/L	0.1273	1.755	8.956
Ba4554_R		66.18	ug/L	2.225	3.362	4,964
Be3130_R		0.5730	ug/L	0.04629	8.079	3.727
Ca3158_R		1,093	ug/L	35.30	3.228	1,830
Cd2265_A		-0.02829	ug/L	0.08889	314.2	12.95
Co2286_A		8.595	ug/L	0.1683	1.958	52.18
Cr2677_A		19.05	ug/L	0.09920	0.5207	411.4
Cu3273_A		7.963	ug/L	0.2215	2.782	204.7
Fe2599_R		13,400	ug/L	511.4	3.817	20,720
K_7664_R		816.0	ug/L	38.89	4.765	741.4
Li6707_R		5.525	ug/L	0.1360	2.461	123.7
Mg2025_A		706.5	ug/L	3.013	0.4264	123.3
Mn2576_R		89.76	ug/L	2.943	3.279	717.8
Mo2020_A		1.581	ug/L	0.04242	2.683	4.964
Na5895_R	W	37,100	ug/L	1,323	3.566	107,100
Ni2316_A		12.94	ug/L	0.2273	1.756	33.43
Pb2203_A		16.57	ug/L	0.5884	3.550	18.13
Sb2068_A		0.9706	ug/L	0.3191	32.87	-0.03976
Se1960_A		0.2943	ug/L	1.382	469.4	0.9073
Si2516_R		1,951	ug/L	78.67	4.033	774.9
Sn1899_A		21.94	ug/L	0.6244	2.846	10.48
Sr4215_R		35.86	ug/L	1.124	3.133	3,345
Ti3349_A		737.9	ug/L	3.665	0.4967	38,530
Tl1908_A		-1.162	ug/L	0.1271	10.94	-0.7466
V_2924_A		25.24	ug/L	0.02514	0.09964	678.0
Zn2062_A		23.85	ug/L	0.1221	0.5121	70.44
Y_3600_R		28,823	Cts/S	406.76	1.4113	28,823
Y_2243_A		10,093	Cts/S	8.7884	0.087075	10,093
Y_3600_A		399,150	Cts/S	2,138.4	0.53574	399,150

LCSWID03ICW2

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:38:58PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.00	ug/L	0.2053	0.4190	1,956

LCSWID03ICW2

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:38:58PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Al3961_R		1,943	ug/L	55.04	2.833	2,070
As1891_A		99.70	ug/L	2.331	2.338	30.61
Au2427_A		3.662	ug/L	0.01071	0.2924	15.92
B_2089_A		488.0	ug/L	0.2290	0.04693	498.3
Ba4554_R		1,881	ug/L	53.53	2.847	138,500
Be3130_R		48.45	ug/L	1.093	2.257	6,157
Ca3158_R		2,369	ug/L	61.78	2.608	3,918
Cd2265_A		245.9	ug/L	0.1560	0.06342	4,186
Co2286_A		506.6	ug/L	1.260	0.2487	2,364
Cr2677_A		198.4	ug/L	2.502	1.261	4,263
Cu3273_A		250.6	ug/L	1.906	0.7608	6,040
Fe2599_R		956.0	ug/L	18.81	1.967	1,486
K_7664_R		9,394	ug/L	274.5	2.922	8,904
Li6707_R		471.0	ug/L	13.36	2.836	8,048
Mg2025_A		4,985	ug/L	7.449	0.1494	885.1
Mn2576_R		474.5	ug/L	8.134	1.714	3,764
Mo2020_A		101.2	ug/L	0.4686	0.4631	182.0
Na5895_R		7,076	ug/L	232.6	3.286	20,460
Ni2316_A		504.2	ug/L	0.8102	0.1607	1,400
Pb2203_A		99.06	ug/L	1.187	1.198	115.8
Sb2068_A		101.2	ug/L	1.124	1.110	36.93
Se1960_A		100.2	ug/L	4.448	4.438	19.73
Si2516_R		934.6	ug/L	10.35	1.107	375.5
Sn1899_A		503.8	ug/L	1.935	0.3841	210.0
Sr4215_R		480.8	ug/L	12.01	2.498	44,650
Ti3349_A		508.8	ug/L	3.365	0.6615	26,940
Tl1908_A		105.7	ug/L	0.5135	0.4858	41.64
V_2924_A		506.9	ug/L	3.778	0.7452	13,550
Zn2062_A		493.7	ug/L	0.6306	0.1277	1,473
Y_3600_R		28,521	Cts/S	196.85	0.69021	28,521
Y_2243_A		10,143	Cts/S	20.245	0.19959	10,143
Y_3600_A		404,690	Cts/S	3,076.1	0.76012	404,690

PBT1236A

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:43:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1317	ug/L	0.1490	113.2	22.06
Al3961_R		-11.49	ug/L	17.41	151.5	-7.797
As1891_A		-0.8980	ug/L	1.470	163.7	-0.8212
Au2427_A		-0.2952	ug/L	0.3985	135.0	1.350
B_2089_A		3.835	ug/L	0.4551	11.87	5.159
Ba4554_R	F	49.94	ug/L	1.240	2.483	3,691
Be3130_R		0.01154	ug/L	0.03725	322.7	-0.8977
Ca3158_R		18.76	ug/L	3.028	16.14	36.13
Cd2265_A		0.06055	ug/L	0.03257	53.79	1.486
Co2286_A		0.05092	ug/L	0.08739	171.6	3.422
Cr2677_A		0.1635	ug/L	0.1004	61.45	8.869
Cu3273_A		5.174	ug/L	0.02301	0.4448	138.2
Fe2599_R		-11.18	ug/L	1.022	9.139	6.823
K_7664_R		317.5	ug/L	59.83	18.84	257.6
Li6707_R		6.223	ug/L	1.481	23.80	133.5
Mg2025_A		-15.20	ug/L	0.07160	0.4709	-1.750
Mn2576_R		1.964	ug/L	0.1457	7.421	12.52
Mo2020_A		-0.3426	ug/L	0.4154	121.3	1.480
Na5895_R	F	267,900	ug/L	9,726	3.630	758,900

PBT1236A

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:43:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ni2316_A		0.7499	ug/L	0.03669	4.892	1.302
Pb2203_A		1.229	ug/L	0.1333	10.84	-0.01363
Sb2068_A		1.046	ug/L	0.4693	44.86	-0.1053
Se1960_A		2.339	ug/L	2.130	91.06	1.107
Si2516_R		13.84	ug/L	7.559	54.61	19.00
Sn1899_A		0.4795	ug/L	1.106	230.7	1.547
Sr4215_R		1.373	ug/L	0.08169	5.948	104.3
Ti3349_A		0.6293	ug/L	0.1013	16.10	13.78
Tl1908_A		-1.142	ug/L	1.413	123.8	-0.2647
V_2924_A		0.1945	ug/L	0.3124	160.6	-7.190
Zn2062_A		12.23	ug/L	0.1135	0.9280	34.01
Y_3600_R		28,320	Cts/S	371.70	1.3125	28,320
Y_2243_A		9,536.5	Cts/S	26.254	0.27531	9,536.5
Y_3600_A		370,920	Cts/S	1,632.2	0.44005	370,920

PBWID03ICW2

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:48:29PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2306	ug/L	0.1833	79.48	28.74
Al3961_R		-22.45	ug/L	13.09	58.31	-19.55
As1891_A		-1.054	ug/L	0.9877	93.74	-0.9387
Au2427_A		-0.2525	ug/L	0.7275	288.1	1.675
B_2089_A		1.227	ug/L	0.1019	8.306	2.893
Ba4554_R		0.4527	ug/L	0.02776	6.132	74.08
Be3130_R		-0.02806	ug/L	0.01576	56.14	-5.963
Ca3158_R		-15.63	ug/L	4.560	29.18	-20.59
Cd2265_A		-0.02991	ug/L	0.005562	18.60	0.04647
Co2286_A		0.004554	ug/L	0.01140	250.3	3.478
Cr2677_A		0.2290	ug/L	0.1330	58.09	11.39
Cu3273_A		-0.3422	ug/L	0.007945	2.322	18.80
Fe2599_R		-7.090	ug/L	1.685	23.76	13.30
K_7664_R		151.2	ug/L	11.22	7.423	101.8
Li6707_R		5.058	ug/L	1.258	24.87	115.9
Mg2025_A		-20.76	ug/L	0.1849	0.8907	-2.883
Mn2576_R		0.7522	ug/L	0.09630	12.80	3.031
Mo2020_A		-0.4898	ug/L	0.1152	23.51	1.333
Na5895_R		213.2	ug/L	5.816	2.728	908.4
Ni2316_A		-0.05643	ug/L	0.2451	434.4	-0.8700
Pb2203_A		0.02363	ug/L	0.6015	2,546	-1.469
Sb2068_A		0.3089	ug/L	0.1313	42.49	-0.3969
Se1960_A		0.5631	ug/L	2.853	506.6	0.8562
Si2516_R		-7.519	ug/L	9.291	123.6	11.00
Sn1899_A		-1.094	ug/L	0.6814	62.29	1.011
Sr4215_R		-0.06216	ug/L	0.09350	150.4	-28.72
Ti3349_A		0.2065	ug/L	0.1071	51.88	-7.525
Tl1908_A		-0.8579	ug/L	1.630	190.0	-0.1676
V_2924_A		0.3218	ug/L	0.2132	66.26	-4.513
Zn2062_A		0.5111	ug/L	0.1271	24.88	1.216
Y_3600_R		28,854	Cts/S	210.32	0.72893	28,854
Y_2243_A		10,318	Cts/S	11.527	0.11172	10,318
Y_3600_A		415,390	Cts/S	4,973.3	1.1973	415,390

SI2070-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ

SI2070-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:53:15PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.429	ug/L	0.09356	6.546	-1,221
Al3961_R	W	143,000	ug/L	2,915	2.038	161,800
As1891_A		44.38	ug/L	0.8692	1.959	9.864
Au2427_A		7.364	ug/L	0.6035	8.196	78.87
B_2089_A		86.97	ug/L	0.5196	0.5974	94.01
Ba4554_R		546.6	ug/L	0.1500	0.02745	42,940
Be3130_R		12.95	ug/L	0.06148	0.4748	1,737
Ca3158_R	W	42,690	ug/L	200.6	0.4698	75,150
Cd2265_A		-0.4193	ug/L	0.1144	27.29	75.15
Co2286_A		61.45	ug/L	0.1671	0.2719	302.8
Cr2677_A		195.2	ug/L	0.7776	0.3985	4,287
Cu3273_A		216.4	ug/L	0.8955	0.4138	5,341
Fe2599_R	W	83,860	ug/L	176.7	0.2107	136,700
K_7664_R		10,650	ug/L	178.6	1.676	10,770
Li6707_R		111.6	ug/L	0.03421	0.03066	2,055
Mg2025_A		21,450	ug/L	87.64	0.4086	3,872
Mn2576_R	W	1,238	ug/L	5.286	0.4270	10,480
Mo2020_A		32.03	ug/L	0.001782	0.005565	61.38
Na5895_R	W	105,000	ug/L	1,998	1.903	319,200
Ni2316_A		129.6	ug/L	0.3332	0.2572	362.3
Pb2203_A		166.9	ug/L	0.3519	0.2109	185.1
Sb2068_A		-0.5959	ug/L	1.435	240.8	0.8420
Se1960_A		-1.281	ug/L	0.5678	44.34	1.963
Si2516_R	F	106,300	ug/L	5,239	4.930	43,790
Sn1899_A		16.25	ug/L	1.439	8.855	8.484
Sr4215_R		947.5	ug/L	1.112	0.1174	93,840
Ti3349_A		287.8	ug/L	35.38	12.29	15,510
Tl1908_A		-2.346	ug/L	0.6073	25.89	-2.163
V_2924_A		149.2	ug/L	0.5345	0.3583	4,067
Zn2062_A		437.5	ug/L	0.2181	0.04985	1,355
Y_3600_R		30,401	Cts/S	102.46	0.33703	30,401
Y_2243_A		10,531	Cts/S	13.915	0.13214	10,531
Y_3600_A		412,230	Cts/S	576.29	0.13980	412,230

SI2070-002

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:57:57PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3822	ug/L	0.07341	19.21	-477.9
Al3961_R	W	42,220	ug/L	954.5	2.261	45,340
As1891_A		15.96	ug/L	1.937	12.14	2.933
Au2427_A		3.887	ug/L	1.291	33.20	37.08
B_2089_A		43.03	ug/L	0.2565	0.5962	46.27
Ba4554_R		182.0	ug/L	4.608	2.531	13,600
Be3130_R		4.399	ug/L	0.05483	1.246	558.9
Ca3158_R		15,650	ug/L	360.4	2.303	26,150
Cd2265_A		-0.1881	ug/L	0.1299	69.06	29.22
Co2286_A		22.20	ug/L	0.2198	0.9903	109.0
Cr2677_A		69.53	ug/L	0.02537	0.03649	1,519
Cu3273_A		79.83	ug/L	0.004972	0.006228	1,967
Fe2599_R	W	33,400	ug/L	818.0	2.449	51,710
K_7664_R		4,024	ug/L	75.05	1.865	3,835
Li6707_R		35.32	ug/L	0.04125	0.1168	637.4
Mg2025_A		8,294	ug/L	5.456	0.06578	1,464
Mn2576_R		452.6	ug/L	9.110	2.013	3,636
Mo2020_A		15.64	ug/L	0.02931	0.1874	30.42

SI2070-002

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 1:57:57PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	44,520	ug/L	1,073	2.410	128,700
Ni2316_A		47.27	ug/L	0.3924	0.8301	128.4
Pb2203_A		59.29	ug/L	0.9363	1.579	65.04
Sb2068_A		1.611	ug/L	1.166	72.39	0.6716
Se1960_A		1.523	ug/L	0.04721	3.099	1.517
Si2516_R	W	41,520	ug/L	533.6	1.285	16,250
Sn1899_A		5.560	ug/L	0.2272	4.087	3.803
Sr4215_R		328.8	ug/L	8.081	2.458	30,900
Ti3349_A		99.17	ug/L	1.382	1.394	5,287
Tl1908_A		-1.324	ug/L	1.086	82.04	-0.8857
V_2924_A		59.29	ug/L	0.1644	0.2774	1,594
Zn2062_A		159.0	ug/L	0.05532	0.03479	480.9
Y_3600_R		28,864	Cts/S	91.594	0.31733	28,864
Y_2243_A		10,290	Cts/S	13.818	0.13429	10,290
Y_3600_A		408,640	Cts/S	372.23	0.091091	408,640

LCSOID02ICS2

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:02:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.95	ug/L	1.210	2.375	2,045
Al3961_R		2,059	ug/L	25.22	1.225	2,221
As1891_A		99.11	ug/L	0.3781	0.3815	30.86
Au2427_A		2.226	ug/L	0.4322	19.41	9.425
B_2089_A		503.7	ug/L	0.05603	0.01112	521.4
Ba4554_R		1,895	ug/L	70.21	3.706	141,300
Be3130_R		50.09	ug/L	0.8461	1.689	6,449
Ca3158_R		2,365	ug/L	51.70	2.186	3,962
Cd2265_A		246.6	ug/L	0.1297	0.05259	4,259
Co2286_A		515.4	ug/L	0.4783	0.09281	2,440
Cr2677_A		202.1	ug/L	3.102	1.534	4,371
Cu3273_A		254.7	ug/L	5.002	1.964	6,175
Fe2599_R		1,014	ug/L	12.23	1.206	1,595
K_7664_R		9,488	ug/L	232.1	2.446	9,108
Li6707_R		466.4	ug/L	12.75	2.734	8,072
Mg2025_A		5,002	ug/L	19.93	0.3984	901.4
Mn2576_R		491.6	ug/L	7.474	1.520	3,950
Mo2020_A		91.98	ug/L	1.842	2.003	168.0
Na5895_R		7,219	ug/L	176.7	2.447	21,130
Ni2316_A		514.4	ug/L	0.7839	0.1524	1,449
Pb2203_A		99.36	ug/L	0.4881	0.4913	117.8
Sb2068_A		99.18	ug/L	0.4145	0.4179	36.72
Se1960_A		101.6	ug/L	2.261	2.225	20.29
Si2516_R		1,098	ug/L	9.384	0.8547	444.2
Sn1899_A		492.5	ug/L	0.5978	0.1214	208.3
Sr4215_R		476.1	ug/L	9.600	2.016	44,780
Ti3349_A		488.0	ug/L	9.238	1.893	26,000
Tl1908_A	W	116.2	ug/L	2.847	2.450	46.63
V_2924_A		511.8	ug/L	9.794	1.914	13,770
Zn2062_A		511.2	ug/L	0.1213	0.02374	1,547
Y_3600_R		28,884	Cts/S	18.010	0.062355	28,884
Y_2243_A		10,292	Cts/S	12.136	0.11792	10,292
Y_3600_A		407,220	Cts/S	5,266.2	1.2932	407,220

LCS2ID02ICS2

Method Name: K6010-2011 Method Revision: 1,728

LC2SID02ICS2

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:07:17PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.02	ug/L	0.4521	0.8862	2,038
Al3961_R		2,021	ug/L	54.35	2.690	2,206
As1891_A		98.46	ug/L	0.08772	0.08909	30.51
Au2427_A		2.863	ug/L	0.1179	4.119	12.30
B_2089_A		507.0	ug/L	1.414	0.2789	522.2
Ba4554_R		1,899	ug/L	71.24	3.751	143,400
Be3130_R		49.73	ug/L	0.9012	1.812	6,481
Ca3158_R		2,339	ug/L	51.78	2.214	3,965
Cd2265_A		245.3	ug/L	1.136	0.4630	4,215
Co2286_A		518.7	ug/L	2.138	0.4122	2,443
Cr2677_A		204.4	ug/L	1.361	0.6661	4,397
Cu3273_A		259.3	ug/L	0.9857	0.3801	6,255
Fe2599_R		985.2	ug/L	21.69	2.202	1,569
K_7664_R		9,305	ug/L	220.6	2.371	9,041
Li6707_R		466.6	ug/L	12.10	2.593	8,173
Mg2025_A		5,016	ug/L	5.325	0.1062	899.5
Mn2576_R		489.7	ug/L	11.98	2.445	3,983
Mo2020_A		93.98	ug/L	1.912	2.035	170.8
Na5895_R		7,081	ug/L	200.4	2.830	20,990
Ni2316_A		518.5	ug/L	0.7827	0.1510	1,453
Pb2203_A		100.2	ug/L	1.438	1.435	118.3
Sb2068_A		100.2	ug/L	1.184	1.181	36.93
Se1960_A		104.0	ug/L	2.002	1.924	20.66
Si2516_R		989.4	ug/L	4.487	0.4535	406.6
Sn1899_A		495.0	ug/L	1.494	0.3018	208.3
Sr4215_R		474.1	ug/L	12.33	2.602	45,140
Ti3349_A		491.7	ug/L	0.3087	0.06278	26,060
Tl1908_A	W	117.1	ug/L	3.669	3.132	46.79
V_2924_A		512.9	ug/L	2.215	0.4320	13,730
Zn2062_A		512.5	ug/L	1.802	0.3516	1,544
Y_3600_R		29,238	Cts/S	223.72	0.76517	29,238
Y_2243_A		10,241	Cts/S	40.580	0.39625	10,241
Y_3600_A		405,110	Cts/S	2,947.6	0.72759	405,110

PBSID02ICS2

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:11:54PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3368	ug/L	0.2947	87.50	32.39
Al3961_R		5.914	ug/L	1.743	29.46	10.91
As1891_A		0.9012	ug/L	1.574	174.7	-0.3162
Au2427_A		-0.8967	ug/L	0.2401	26.78	-1.275
B_2089_A		2.121	ug/L	0.1423	6.709	3.820
Ba4554_R	F	14.33	ug/L	0.5118	3.571	1,110
Be3130_R		0.02140	ug/L	0.02160	101.0	0.3649
Ca3158_R		2.296	ug/L	4.693	204.4	9.346
Cd2265_A		0.1222	ug/L	0.03169	25.94	2.692
Co2286_A		0.3524	ug/L	0.1189	33.74	5.099
Cr2677_A		0.2620	ug/L	0.03288	12.55	12.03
Cu3273_A		0.9979	ug/L	0.2650	26.56	51.48
Fe2599_R		23.69	ug/L	2.612	11.03	61.03
K_7664_R		62.18	ug/L	29.52	47.47	16.05
Li6707_R		2.289	ug/L	1.059	46.27	68.22
Mg2025_A		-19.69	ug/L	0.2950	1.498	-2.658
Mn2576_R		0.9250	ug/L	0.6472	69.96	4.431
Mo2020_A		0.5394	ug/L	0.06087	11.28	3.175

PBSID02ICS2

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:11:54PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		78.50	ug/L	8.443	10.76	520.8
Ni2316_A		0.2524	ug/L	0.1303	51.63	0.001389
Pb2203_A		2.045	ug/L	0.3617	17.69	0.9606
Sb2068_A		1.021	ug/L	1.161	113.7	-0.1193
Se1960_A		1.669	ug/L	0.2290	13.72	1.062
Si2516_R		36.26	ug/L	7.189	19.82	28.16
Sn1899_A		-0.01845	ug/L	0.01273	69.00	1.455
Sr4215_R		0.5437	ug/L	0.02580	4.745	28.26
Ti3349_A		0.9348	ug/L	0.06483	6.935	31.89
Tl1908_A		1.055	ug/L	0.5915	56.06	0.6328
V_2924_A		0.2454	ug/L	0.1121	45.67	-6.766
Zn2062_A		3.804	ug/L	0.1041	2.737	11.15
Y_3600_R		28,910	Cts/S	15.756	0.054501	28,910
Y_2243_A		10,253	Cts/S	11.188	0.10912	10,253
Y_3600_A		412,810	Cts/S	2,132.3	0.51653	412,810

CCV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:16:40PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		498.6	ug/L	0.6889	0.1382	19,480
Al3961_R		12,190	ug/L	195.5	1.604	12,890
As1891_A		491.4	ug/L	0.7149	0.1455	151.2
Au2427_A		502.2	ug/L	19.48	3.879	2,261
B_2089_A		496.8	ug/L	0.8050	0.1620	513.8
Ba4554_R		483.5	ug/L	8.684	1.796	35,450
Be3130_R		485.8	ug/L	8.029	1.653	61,780
Ca3158_R		12,010	ug/L	178.1	1.483	19,720
Cd2265_A		492.8	ug/L	1.124	0.2282	8,308
Co2286_A		502.7	ug/L	1.652	0.3287	2,321
Cr2677_A		494.3	ug/L	1.636	0.3309	10,470
Cu3273_A		501.0	ug/L	0.2082	0.04155	11,890
Fe2599_R		12,150	ug/L	196.0	1.614	18,500
K_7664_R		11,990	ug/L	223.1	1.861	11,310
Li6707_R		480.2	ug/L	8.803	1.833	8,159
Mg2025_A		12,700	ug/L	8.116	0.06392	2,204
Mn2576_R		484.6	ug/L	6.976	1.440	3,824
Mo2020_A		500.4	ug/L	3.907	0.7808	882.5
Na5895_R		11,980	ug/L	191.9	1.602	34,240
Ni2316_A		502.7	ug/L	0.4163	0.08282	1,381
Pb2203_A		498.4	ug/L	0.7569	0.1519	582.0
Sb2068_A		496.3	ug/L	0.8021	0.1616	189.1
Se1960_A		494.7	ug/L	3.865	0.7813	93.48
Si2516_R		12,240	ug/L	195.8	1.600	4,718
Sn1899_A		503.1	ug/L	0.6979	0.1387	207.5
Sr4215_R		487.0	ug/L	7.697	1.581	44,990
Ti3349_A		501.7	ug/L	1.696	0.3380	26,220
Tl1908_A		503.6	ug/L	3.256	0.6465	203.9
V_2924_A		502.2	ug/L	1.892	0.3768	13,150
Zn2062_A		492.2	ug/L	0.5957	0.1210	1,452
Y_3600_R		28,361	Cts/S	380.00	1.3399	28,361
Y_2243_A		10,038	Cts/S	4.6127	0.045952	10,038
Y_3600_A		399,170	Cts/S	1,140.8	0.28580	399,170

CCB

Method Name: K6010-2011 Method Revision: 1,728

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:21:16PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2333	ug/L	0.3502	150.1	28.23
Al3961_R		-7.803	ug/L	4.383	56.17	-3.697
As1891_A		-0.03919	ug/L	0.4066	1,038	-0.6136
Au2427_A		3.152	ug/L	0.1733	5.496	17.34
B_2089_A		0.7104	ug/L	0.03679	5.178	2.404
Ba4554_R		0.4033	ug/L	0.2376	58.91	68.77
Be3130_R		0.1851	ug/L	0.05533	29.89	21.09
Ca3158_R		-15.97	ug/L	4.522	28.32	-20.60
Cd2265_A		0.1230	ug/L	0.05947	48.34	2.689
Co2286_A		0.2497	ug/L	0.007823	3.133	4.630
Cr2677_A		0.2028	ug/L	0.1473	72.63	10.59
Cu3273_A		-0.04552	ug/L	0.1114	244.8	25.63
Fe2599_R		-2.717	ug/L	2.759	101.5	19.59
K_7664_R		51.22	ug/L	6.234	12.17	5.269
Li6707_R		2.062	ug/L	1.284	62.28	62.42
Mg2025_A		-18.31	ug/L	0.05520	0.3015	-2.424
Mn2576_R		0.8201	ug/L	0.02803	3.418	3.493
Mo2020_A		1.165	ug/L	0.2855	24.51	4.311
Na5895_R		42.27	ug/L	1.477	3.495	405.0
Ni2316_A		0.03340	ug/L	0.2011	601.9	-0.6102
Pb2203_A		-0.1959	ug/L	0.3020	154.2	-1.731
Sb2068_A		0.9496	ug/L	0.1825	19.22	-0.1464
Se1960_A		1.824	ug/L	1.938	106.2	1.095
Si2516_R		52.00	ug/L	7.431	14.29	33.44
Sn1899_A		-0.6155	ug/L	0.9464	153.8	1.208
Sr4215_R		0.1974	ug/L	0.01454	7.363	-4.248
Ti3349_A		0.8824	ug/L	0.1222	13.85	28.76
Tl1908_A		-0.03151	ug/L	0.3257	1,033	0.1786
V_2924_A		0.4792	ug/L	0.03922	8.184	-0.4679
Zn2062_A		0.2020	ug/L	0.03151	15.60	0.2770
Y_3600_R		28,138	Cts/S	401.54	1.4271	28,138
Y_2243_A		10,284	Cts/S	1.8987	0.018463	10,284
Y_3600_A		407,820	Cts/S	1,272.3	0.31198	407,820

SI1906-002

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:26:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		6.510	ug/L	1.575	24.19	-2,052
Al3961_R	W	47,080	ug/L	624.5	1.327	51,970
As1891_A		30.56	ug/L	0.5105	1.670	1.860
Au2427_A		10.54	ug/L	0.04793	0.4545	112.6
B_2089_A		486.5	ug/L	0.7501	0.1542	488.1
Ba4554_R		452.9	ug/L	7.820	1.727	34,700
Be3130_R		6.188	ug/L	0.1363	2.202	726.8
Ca3158_R	W	90,170	ug/L	1,041	1.155	154,800
Cd2265_A		18.02	ug/L	0.2178	1.208	449.8
Co2286_A		37.58	ug/L	0.2063	0.5490	187.0
Cr2677_A		335.3	ug/L	5.325	1.588	7,052
Cu3273_A	W	1,043	ug/L	10.70	1.026	24,420
Fe2599_R	W	156,500	ug/L	2,437	1.557	248,900
K_7664_R	W	30,570	ug/L	361.7	1.183	30,220
Li6707_R		91.20	ug/L	1.235	1.354	1,644
Mg2025_A	W	70,490	ug/L	132.3	0.1877	12,110
Mn2576_R	W	3,483	ug/L	36.87	1.059	28,750
Mo2020_A		-1.241	ug/L	0.1610	12.97	-0.004676

SI1906-002

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:26:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	253,000	ug/L	4,504	1.780	750,100
Ni2316_A		111.9	ug/L	0.4715	0.4214	287.6
Pb2203_A	W	1,539	ug/L	2.314	0.1504	1,807
Sb2068_A		-0.3072	ug/L	0.6847	222.9	1.076
Se1960_A		-1.540	ug/L	1.029	66.87	1.936
Si2516_R	W	26,440	ug/L	433.9	1.641	10,630
Sn1899_A		72.52	ug/L	0.7730	1.066	31.11
Sr4215_R		871.3	ug/L	7.178	0.8239	84,150
Ti3349_A	W	1,016	ug/L	10.78	1.061	52,460
Tl1908_A		1.588	ug/L	1.323	83.32	-3.389
V_2924_A		258.7	ug/L	3.366	1.301	6,776
Zn2062_A	W	3,007	ug/L	3.186	0.1060	8,872
Y_3600_R		29,649	Cts/S	306.87	1.0350	29,649
Y_2243_A		10,028	Cts/S	37.507	0.37402	10,028
Y_3600_A		394,610	Cts/S	4,707.5	1.1930	394,610

SI1906-004

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:30:45PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-4.508	ug/L	4.887	108.4	-3,256
Al3961_R	W	81,980	ug/L	1,105	1.347	90,390
As1891_A		1.562	ug/L	0.4429	28.36	-9.489
Au2427_A		8.046	ug/L	1.562	19.42	139.9
B_2089_A		515.8	ug/L	2.003	0.3884	512.9
Ba4554_R		388.1	ug/L	6.112	1.575	29,720
Be3130_R		7.984	ug/L	0.1151	1.441	939.8
Ca3158_R	W	113,400	ug/L	989.0	0.8725	194,400
Cd2265_A		22.91	ug/L	0.5045	2.203	578.3
Co2286_A		53.80	ug/L	0.3656	0.6795	262.1
Cr2677_A		390.9	ug/L	2.657	0.6797	8,115
Cu3273_A		5.365	ug/L	0.3861	7.197	124.8
Fe2599_R	W	211,700	ug/L	10,440	4.933	336,200
K_7664_R	W	38,780	ug/L	336.0	0.8665	38,320
Li6707_R		174.7	ug/L	2.324	1.330	3,119
Mg2025_A	W	106,600	ug/L	190.3	0.1786	18,150
Mn2576_R	W	2,629	ug/L	24.13	0.9178	21,690
Mo2020_A		-2.932	ug/L	0.1470	5.012	-2.988
Na5895_R	F	261,400	ug/L	5,839	2.234	774,300
Ni2316_A		199.5	ug/L	0.04113	0.02062	516.9
Pb2203_A	W	1,768	ug/L	5.551	0.3140	2,055
Sb2068_A		-0.7385	ug/L	1.235	167.2	1.552
Se1960_A		9.539	ug/L	1.496	15.69	4.407
Si2516_R	W	27,040	ug/L	415.9	1.538	10,850
Sn1899_A		8.285	ug/L	0.5316	6.416	4.780
Sr4215_R		736.1	ug/L	6.377	0.8664	71,020
Ti3349_A	W	1,291	ug/L	11.78	0.9122	65,790
Tl1908_A		1.829	ug/L	1.281	70.06	-2.873
V_2924_A		365.7	ug/L	2.850	0.7794	9,480
Zn2062_A	W	4,805	ug/L	3.647	0.07589	14,060
Y_3600_R		29,620	Cts/S	37.386	0.12622	29,620
Y_2243_A		9,942.4	Cts/S	12.803	0.12877	9,942.4
Y_3600_A		389,490	Cts/S	3,087.8	0.79279	389,490

SI1906-006

Method Name: K6010-2011 Method Revision: 1,728

SI1906-006

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:35:36PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.540	ug/L	2.492	161.8	-2,945
Al3961_R	W	73,440	ug/L	175.4	0.2388	81,850
As1891_A		5.961	ug/L	2.267	38.04	-7.456
Au2427_A		6.413	ug/L	0.5507	8.587	126.6
B_2089_A		504.6	ug/L	0.7034	0.1394	501.6
Ba4554_R		490.5	ug/L	5.808	1.184	37,960
Be3130_R		7.556	ug/L	0.009940	0.1316	875.5
Ca3158_R	W	122,600	ug/L	524.0	0.4274	212,500
Cd2265_A		26.91	ug/L	0.4780	1.777	630.7
Co2286_A		48.34	ug/L	0.1600	0.3310	239.5
Cr2677_A		380.3	ug/L	0.4883	0.1284	7,958
Cu3273_A		70.60	ug/L	0.3378	0.4785	1,644
Fe2599_R	W	196,300	ug/L	6,601	3.362	315,300
K_7664_R	W	35,900	ug/L	96.34	0.2683	35,850
Li6707_R		145.0	ug/L	1.507	1.039	2,622
Mg2025_A	W	106,700	ug/L	60.97	0.05713	18,170
Mn2576_R	W	2,280	ug/L	7.356	0.3227	19,010
Mo2020_A		-3.233	ug/L	0.09096	2.814	-3.515
Na5895_R	F	242,500	ug/L	2,990	1.233	726,100
Ni2316_A		190.0	ug/L	0.07847	0.04131	492.7
Pb2203_A	W	2,208	ug/L	3.283	0.1487	2,566
Sb2068_A		0.08992	ug/L	0.5773	642.0	1.512
Se1960_A		1.931	ug/L	2.361	122.3	2.827
Si2516_R	W	30,810	ug/L	80.23	0.2604	12,500
Sn1899_A		25.56	ug/L	0.8260	3.232	11.78
Sr4215_R		726.2	ug/L	6.116	0.8422	70,820
Ti3349_A	W	1,467	ug/L	1.775	0.1210	75,380
Tl1908_A		1.675	ug/L	0.6104	36.44	-2.718
V_2924_A		360.0	ug/L	1.172	0.3255	9,417
Zn2062_A	W	5,509	ug/L	4.788	0.08692	16,110
Y_3600_R		29,938	Cts/S	437.23	1.4604	29,938
Y_2243_A		9,938.3	Cts/S	7.3311	0.073766	9,938.3
Y_3600_A		392,790	Cts/S	651.87	0.16596	392,790

SI1906-006A

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:40:26PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		469.3	ug/L	2.701	0.5755	14,400
Al3961_R	W	115,300	ug/L	1,693	1.468	129,500
As1891_A		531.0	ug/L	0.3787	0.07132	150.4
Au2427_A		11.41	ug/L	0.1464	1.283	171.5
B_2089_A	W	1,068	ug/L	1.376	0.1289	1,069
Ba4554_R	W	1,227	ug/L	22.54	1.837	95,600
Be3130_R		521.9	ug/L	5.956	1.141	70,410
Ca3158_R	W	137,100	ug/L	1,152	0.8404	239,500
Cd2265_A		521.0	ug/L	1.419	0.2724	8,881
Co2286_A		569.0	ug/L	1.379	0.2423	2,611
Cr2677_A		995.7	ug/L	1.826	0.1834	20,720
Cu3273_A	W	1,211	ug/L	0.7187	0.05934	28,130
Fe2599_R	F	254,400	ug/L	1,314	0.5165	411,600
K_7664_R	W	51,960	ug/L	500.9	0.9641	52,300
Li6707_R		787.1	ug/L	10.11	1.284	14,210
Mg2025_A	W	136,000	ug/L	27.23	0.02002	23,070
Mn2576_R	W	3,526	ug/L	42.26	1.199	29,620
Mo2020_A		470.3	ug/L	5.520	1.174	817.5

SI1906-006A

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:40:26PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	250,300	ug/L	848.8	0.3392	754,900
Ni2316_A		772.9	ug/L	1.917	0.2481	2,064
Pb2203_A	W	3,298	ug/L	3.894	0.1181	3,812
Sb2068_A		512.5	ug/L	1.572	0.3066	196.8
Se1960_A		462.2	ug/L	3.242	0.7013	88.37
Si2516_R	W	42,930	ug/L	586.6	1.366	17,550
Sn1899_A		27.63	ug/L	0.1120	0.4055	12.57
Sr4215_R	W	1,284	ug/L	18.75	1.460	126,200
Ti3349_A	W	2,575	ug/L	1.150	0.04467	132,000
Tl1908_A		483.8	ug/L	2.410	0.4982	188.1
V_2924_A		980.8	ug/L	0.04847	0.004942	25,400
Zn2062_A	W	6,898	ug/L	14.86	0.2154	20,080
Y_3600_R		30,167	Cts/S	292.32	0.96903	30,167
Y_2243_A		9,892.9	Cts/S	23.014	0.23263	9,892.9
Y_3600_A		391,660	Cts/S	476.98	0.12178	391,660

SI1906-006L

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:45:11PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		5.337	ug/L	0.9413	17.64	-579.5
Al3961_R		75,370	ug/L	315.3	0.4183	15,930
As1891_A		-1.194	ug/L	3.043	254.9	-2.580
Au2427_A		3.524	ug/L	5.931	168.3	27.15
B_2089_A		524.3	ug/L	8.865	1.691	106.6
Ba4554_R		526.9	ug/L	9.074	1.722	7,759
Be3130_R		8.442	ug/L	0.1339	1.586	185.0
Ca3158_R		120,200	ug/L	1,896	1.577	39,520
Cd2265_A		30.04	ug/L	0.8651	2.880	141.8
Co2286_A		58.66	ug/L	1.076	1.834	60.75
Cr2677_A		405.4	ug/L	4.884	1.205	1,715
Cu3273_A		194.4	ug/L	3.167	1.629	932.8
Fe2599_R	W	214,500	ug/L	1,845	0.8602	65,310
K_7664_R		35,260	ug/L	356.8	1.012	6,640
Li6707_R		179.9	ug/L	5.254	2.920	637.8
Mg2025_A		117,000	ug/L	2,279	1.947	4,026
Mn2576_R		2,384	ug/L	30.75	1.290	3,766
Mo2020_A		11.19	ug/L	2.431	21.73	6.093
Na5895_R	W	246,200	ug/L	4,066	1.652	139,900
Ni2316_A		224.5	ug/L	5.152	2.295	117.5
Pb2203_A		2,582	ug/L	43.67	1.692	605.1
Sb2068_A		10.28	ug/L	4.948	48.11	0.7079
Se1960_A		68.77	ug/L	10.38	15.10	3.680
Si2516_R		32,200	ug/L	104.1	0.3234	2,487
Sn1899_A		24.28	ug/L	1.291	5.317	3.421
Sr4215_R		701.5	ug/L	10.74	1.531	12,950
Ti3349_A		1,563	ug/L	22.86	1.463	16,180
Tl1908_A		-5.553	ug/L	3.078	55.44	-1.025
V_2924_A		380.7	ug/L	6.033	1.584	1,997
Zn2062_A	W	6,112	ug/L	133.1	2.178	3,610
Y_3600_R		28,376	Cts/S	156.81	0.55261	28,376
Y_2243_A		10,037	Cts/S	26.244	0.26146	10,037
Y_3600_A		395,860	Cts/S	595.08	0.15033	395,860

SI1906-006P

Method Name: K6010-2011 Method Revision: 1,728

SI1906-006P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:49:52PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-2.110	ug/L	1.162	55.07	-2,764
Al3961_R	W	69,290	ug/L	1,064	1.536	76,590
As1891_A		53.88	ug/L	1.969	3.655	7.758
Au2427_A		7.168	ug/L	0.6381	8.902	120.4
B_2089_A		909.8	ug/L	1.152	0.1266	899.1
Ba4554_R	W	1,892	ug/L	39.10	2.067	145,100
Be3130_R		49.50	ug/L	0.6560	1.325	6,442
Ca3158_R	W	114,600	ug/L	1,356	1.183	197,000
Cd2265_A		221.4	ug/L	1.340	0.6052	3,842
Co2286_A		454.8	ug/L	1.226	0.2696	2,083
Cr2677_A		494.5	ug/L	0.8878	0.1795	10,260
Cu3273_A		3.858	ug/L	0.1299	3.368	89.13
Fe2599_R	W	183,700	ug/L	2,448	1.332	292,500
K_7664_R	W	43,310	ug/L	443.2	1.023	42,910
Li6707_R		573.1	ug/L	8.331	1.454	10,190
Mg2025_A	W	102,500	ug/L	143.3	0.1398	17,390
Mn2576_R	W	2,475	ug/L	36.66	1.481	20,470
Mo2020_A		-0.2689	ug/L	0.4112	152.9	1.526
Na5895_R	F	243,700	ug/L	4,866	1.997	723,500
Ni2316_A		580.7	ug/L	0.7320	0.1260	1,550
Pb2203_A	W	1,856	ug/L	8.265	0.4453	2,147
Sb2068_A		1.687	ug/L	0.6654	39.44	1.035
Se1960_A		10.11	ug/L	3.430	33.92	4.233
Si2516_R	W	29,320	ug/L	435.7	1.486	11,800
Sn1899_A		279.4	ug/L	2.180	0.7802	114.2
Sr4215_R	W	1,121	ug/L	17.66	1.576	108,400
Ti3349_A	W	1,677	ug/L	0.2033	0.01212	85,580
Tl1908_A		72.71	ug/L	0.7198	0.9900	24.35
V_2924_A		777.6	ug/L	1.355	0.1743	20,130
Zn2062_A	W	5,405	ug/L	25.69	0.4753	15,730
Y_3600_R		29,691	Cts/S	343.51	1.1569	29,691
Y_2243_A		9,892.0	Cts/S	19.831	0.20047	9,892.0
Y_3600_A		389,990	Cts/S	557.00	0.14282	389,990

SI1906-006S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:54:40PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-5.752	ug/L	3.360	58.41	-3,278
Al3961_R	W	88,280	ug/L	1,797	2.036	99,980
As1891_A		49.23	ug/L	0.9357	1.901	5.223
Au2427_A		10.48	ug/L	0.2375	2.266	145.1
B_2089_A		967.3	ug/L	0.5522	0.05709	953.3
Ba4554_R	W	2,197	ug/L	38.34	1.745	172,600
Be3130_R		57.41	ug/L	0.6729	1.172	7,664
Ca3158_R	W	127,600	ug/L	1,426	1.117	224,800
Cd2265_A		234.0	ug/L	0.2550	0.1090	4,065
Co2286_A		535.2	ug/L	0.6195	0.1157	2,443
Cr2677_A		620.1	ug/L	2.404	0.3877	12,870
Cu3273_A		5.429	ug/L	0.04535	0.8354	125.0
Fe2599_R	W	209,100	ug/L	7,803	3.731	341,200
K_7664_R	W	46,990	ug/L	752.0	1.601	47,700
Li6707_R		646.6	ug/L	8.246	1.275	11,780
Mg2025_A	W	119,100	ug/L	234.9	0.1972	20,150
Mn2576_R	W	2,997	ug/L	33.64	1.122	25,400
Mo2020_A		-0.7166	ug/L	0.3280	45.76	0.7372

SI1906-006S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:54:40PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	250,100	ug/L	6,644	2.656	761,000
Ni2316_A		693.2	ug/L	1.865	0.2691	1,847
Pb2203_A	W	2,088	ug/L	2.011	0.09633	2,408
Sb2068_A		1.983	ug/L	0.1023	5.161	1.565
Se1960_A		4.992	ug/L	2.796	56.01	3.576
Si2516_R	W	32,440	ug/L	512.2	1.579	13,370
Sn1899_A		295.9	ug/L	1.886	0.6374	120.6
Sr4215_R	W	1,187	ug/L	15.94	1.343	117,700
Ti3349_A	W	1,861	ug/L	16.94	0.9101	95,030
Tl1908_A		88.42	ug/L	1.394	1.577	29.76
V_2924_A		893.4	ug/L	6.489	0.7264	23,120
Zn2062_A	W	5,903	ug/L	3.984	0.06748	17,140
Y_3600_R		30,431	Cts/S	483.27	1.5881	30,431
Y_2243_A		9,867.0	Cts/S	29.392	0.29789	9,867.0
Y_3600_A		390,100	Cts/S	1,136.5	0.29135	390,100

SI1906-008

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 2:59:30PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-4.002	ug/L	2.578	64.40	-3,078
Al3961_R	W	68,900	ug/L	403.5	0.5857	75,630
As1891_A		-0.2732	ug/L	1.799	658.6	-9.400
Au2427_A		6.521	ug/L	0.4351	6.672	131.6
B_2089_A		858.3	ug/L	0.6145	0.07159	833.4
Ba4554_R		534.3	ug/L	6.820	1.277	40,710
Be3130_R		5.874	ug/L	0.01559	0.2654	623.0
Ca3158_R	W	126,000	ug/L	635.3	0.5042	215,100
Cd2265_A		19.93	ug/L	0.4481	2.248	508.0
Co2286_A		46.48	ug/L	0.1437	0.3092	227.9
Cr2677_A		330.0	ug/L	1.944	0.5890	6,816
Cu3273_A		0.8427	ug/L	0.1016	12.06	13.57
Fe2599_R	W	201,700	ug/L	7,395	3.666	319,000
K_7664_R	W	31,130	ug/L	350.6	1.126	30,610
Li6707_R		614.2	ug/L	7.795	1.269	10,840
Mg2025_A	W	103,400	ug/L	15.27	0.01476	17,220
Mn2576_R	W	1,760	ug/L	5.029	0.2858	14,450
Mo2020_A		-0.2163	ug/L	0.4574	211.5	1.706
Na5895_R	F	248,300	ug/L	2,751	1.108	732,200
Ni2316_A		194.5	ug/L	0.4539	0.2333	493.3
Pb2203_A	W	1,795	ug/L	0.2310	0.01287	2,042
Sb2068_A		-1.996	ug/L	1.996	100.0	-0.2837
Se1960_A		3.133	ug/L	1.976	63.06	2.946
Si2516_R	W	27,180	ug/L	21.06	0.07749	10,860
Sn1899_A		298.3	ug/L	0.7770	0.2605	119.7
Sr4215_R	W	1,155	ug/L	7.962	0.6894	110,900
Ti3349_A	W	1,636	ug/L	18.60	1.137	82,910
Tl1908_A		1.807	ug/L	0.8691	48.11	-1.998
V_2924_A		296.4	ug/L	2.598	0.8764	7,670
Zn2062_A	W	5,370	ug/L	4.305	0.08016	15,360
Y_3600_R		29,485	Cts/S	27.958	0.094821	29,485
Y_2243_A		9,718.1	Cts/S	2.2638	0.023294	9,718.1
Y_3600_A		387,320	Cts/S	1,875.1	0.48414	387,320

SI1906-010

Method Name: K6010-2011 Method Revision: 1,728

SI1906-010

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:04:20PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-2.181	ug/L	1.118	51.28	-2,929
Al3961_R	W	31,540	ug/L	276.1	0.8755	33,880
As1891_A		0.9655	ug/L	0.3056	31.66	-8.711
Au2427_A		3.625	ug/L	0.7748	21.37	122.5
B_2089_A		225.4	ug/L	0.2785	0.1235	217.1
Ba4554_R		524.3	ug/L	6.757	1.289	39,020
Be3130_R		2.285	ug/L	0.02499	1.094	229.7
Ca3158_R	W	222,100	ug/L	8,439	3.799	370,400
Cd2265_A		11.44	ug/L	0.1860	1.625	361.3
Co2286_A		38.52	ug/L	0.03307	0.08585	178.8
Cr2677_A		612.4	ug/L	0.7545	0.1232	12,530
Cu3273_A		290.3	ug/L	0.2090	0.07201	6,623
Fe2599_R	W	198,200	ug/L	3,607	1.820	306,200
K_7664_R		9,868	ug/L	113.3	1.148	9,448
Li6707_R		42.48	ug/L	0.3505	0.8250	759.0
Mg2025_A	W	108,500	ug/L	69.09	0.06366	17,830
Mn2576_R		881.5	ug/L	11.30	1.282	7,076
Mo2020_A		-0.8727	ug/L	0.04832	5.537	0.6675
Na5895_R	W	87,530	ug/L	936.3	1.070	252,300
Ni2316_A		192.8	ug/L	0.8841	0.4587	482.6
Pb2203_A	W	4,393	ug/L	10.90	0.2482	4,933
Sb2068_A		1.556	ug/L	0.4170	26.79	2.248
Se1960_A		-1.442	ug/L	0.04351	3.017	1.806
Si2516_R		14,870	ug/L	165.9	1.116	5,803
Sn1899_A		59.32	ug/L	0.3868	0.6520	24.59
Sr4215_R		571.2	ug/L	4.256	0.7451	53,580
Ti3349_A		701.1	ug/L	0.2703	0.03855	35,300
Tl1908_A		1.024	ug/L	0.2109	20.59	-0.7237
V_2924_A		153.9	ug/L	0.2850	0.1852	3,937
Zn2062_A	W	7,814	ug/L	9.498	0.1216	22,050
Y_3600_R		28,801	Cts/S	181.58	0.63046	28,801
Y_2243_A		9,592.0	Cts/S	22.461	0.23416	9,592.0
Y_3600_A		384,840	Cts/S	89.820	0.023339	384,840

SI1906-012

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:09:13PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-3.255	ug/L	2.863	87.94	-3,607
Al3961_R	W	45,300	ug/L	350.8	0.7743	48,720
As1891_A		-2.595	ug/L	0.8320	32.06	-11.83
Au2427_A		4.266	ug/L	0.9644	22.61	148.3
B_2089_A		347.0	ug/L	0.8961	0.2583	331.0
Ba4554_R		797.3	ug/L	9.002	1.129	59,440
Be3130_R		3.693	ug/L	0.008551	0.2316	371.7
Ca3158_R	W	202,900	ug/L	9,394	4.629	339,000
Cd2265_A		22.53	ug/L	0.3562	1.581	579.1
Co2286_A		42.46	ug/L	0.1287	0.3031	199.7
Cr2677_A		320.9	ug/L	0.8604	0.2681	6,469
Cu3273_A		24.84	ug/L	0.07450	0.2999	544.2
Fe2599_R	W	246,900	ug/L	7,564	3.064	382,000
K_7664_R		20,500	ug/L	227.4	1.109	19,710
Li6707_R		71.92	ug/L	1.504	2.092	1,268
Mg2025_A	W	117,900	ug/L	156.2	0.1325	19,240
Mn2576_R	W	1,280	ug/L	6.525	0.5098	10,290
Mo2020_A		-3.811	ug/L	0.2782	7.301	-4.318

SI1906-012

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:09:13PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	214,700	ug/L	6,418	2.989	619,500
Ni2316_A		201.2	ug/L	0.1058	0.05259	495.8
Pb2203_A	W	2,091	ug/L	1.448	0.06924	2,337
Sb2068_A		-2.502	ug/L	0.3393	13.56	0.4679
Se1960_A		-0.6512	ug/L	0.3931	60.37	2.312
Si2516_R		21,370	ug/L	184.3	0.8624	8,352
Sn1899_A		16.99	ug/L	0.5408	3.183	7.963
Sr4215_R		821.9	ug/L	5.325	0.6479	77,270
Ti3349_A	W	1,150	ug/L	1.050	0.09128	56,830
Tl1908_A		2.390	ug/L	1.791	74.94	-0.9324
V_2924_A		237.5	ug/L	0.9158	0.3856	6,014
Zn2062_A	W	7,860	ug/L	7.071	0.08996	22,030
Y_3600_R		28,859	Cts/S	279.94	0.97001	28,859
Y_2243_A		9,525.5	Cts/S	22.680	0.23809	9,525.5
Y_3600_A		377,670	Cts/S	1,221.6	0.32346	377,670

CCV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:14:12PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		494.9	ug/L	2.555	0.5163	19,530
Al3961_R		12,310	ug/L	2.961	0.02406	12,830
As1891_A		503.3	ug/L	16.06	3.190	152.0
Au2427_A	W	471.8	ug/L	27.26	5.778	2,085
B_2089_A		507.4	ug/L	14.31	2.820	514.9
Ba4554_R		497.0	ug/L	2.128	0.4282	35,920
Be3130_R		485.9	ug/L	0.2796	0.05754	60,940
Ca3158_R		12,230	ug/L	30.13	0.2463	19,820
Cd2265_A		501.7	ug/L	14.41	2.873	8,303
Co2286_A		512.4	ug/L	16.09	3.139	2,322
Cr2677_A		493.2	ug/L	3.897	0.7902	10,550
Cu3273_A		501.7	ug/L	2.936	0.5852	12,020
Fe2599_R		12,210	ug/L	8.243	0.06752	18,330
K_7664_R		12,220	ug/L	94.20	0.7708	11,370
Li6707_R		488.4	ug/L	4.732	0.9689	8,182
Mg2025_A		13,170	ug/L	420.4	3.192	2,243
Mn2576_R		488.0	ug/L	1.132	0.2319	3,797
Mo2020_A		510.8	ug/L	17.92	3.509	884.1
Na5895_R		12,100	ug/L	92.71	0.7660	34,120
Ni2316_A		518.4	ug/L	16.48	3.180	1,398
Pb2203_A		508.6	ug/L	13.85	2.723	582.9
Sb2068_A		512.2	ug/L	17.22	3.361	191.5
Se1960_A		504.2	ug/L	17.25	3.422	93.49
Si2516_R		12,240	ug/L	43.13	0.3525	4,652
Sn1899_A		515.6	ug/L	18.49	3.585	208.7
Sr4215_R		495.5	ug/L	0.3036	0.06128	45,140
Ti3349_A		495.9	ug/L	1.396	0.2815	26,180
Tl1908_A		511.9	ug/L	15.42	3.012	203.5
V_2924_A		492.3	ug/L	2.765	0.5616	13,010
Zn2062_A		503.9	ug/L	16.08	3.191	1,459
Y_3600_R		27,969	Cts/S	32.736	0.11704	27,969
Y_2243_A		9,856.3	Cts/S	229.68	2.3303	9,856.3
Y_3600_A		403,210	Cts/S	2,252.5	0.55866	403,210

CCB

Method Name: K6010-2011 Method Revision: 1,728

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:18:48PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3886	ug/L	0.1943	50.00	34.14
Al3961_R		0.1603	ug/L	2.344	1,462	4.462
As1891_A		0.04357	ug/L	0.5563	1,277	-0.5899
Au2427_A		3.052	ug/L	0.8301	27.20	16.94
B_2089_A		0.8490	ug/L	0.1205	14.19	2.554
Ba4554_R		0.3367	ug/L	0.06942	20.62	60.91
Be3130_R		0.2059	ug/L	0.06343	30.80	22.31
Ca3158_R		-2.611	ug/L	1.277	48.91	1.111
Cd2265_A		0.1267	ug/L	0.1115	87.97	2.777
Co2286_A		0.1719	ug/L	0.01696	9.871	4.275
Cr2677_A		0.4582	ug/L	0.03662	7.994	16.09
Cu3273_A		0.6641	ug/L	0.1172	17.64	42.71
Fe2599_R		14.29	ug/L	3.336	23.33	42.93
K_7664_R		135.8	ug/L	1.183	0.8717	80.68
Li6707_R		3.515	ug/L	1.377	39.17	82.17
Mg2025_A		-16.30	ug/L	0.07937	0.4870	-2.079
Mn2576_R		0.5712	ug/L	0.4020	70.38	1.559
Mo2020_A		1.189	ug/L	0.3765	31.66	4.369
Na5895_R		158.0	ug/L	11.69	7.397	694.7
Ni2316_A		0.07990	ug/L	0.1724	215.8	-0.4828
Pb2203_A		0.3008	ug/L	0.3527	117.3	-1.137
Sb2068_A		0.9733	ug/L	1.566	160.9	-0.1387
Se1960_A		4.542	ug/L	0.7071	15.57	1.621
Si2516_R		17.60	ug/L	2.355	13.38	19.31
Sn1899_A		0.02020	ug/L	0.03392	167.9	1.480
Sr4215_R		0.2190	ug/L	0.1015	46.35	-1.890
Ti3349_A		0.8149	ug/L	0.2039	25.02	25.10
Tl1908_A		0.3352	ug/L	0.1197	35.72	0.3348
V_2924_A		0.1346	ug/L	0.3580	266.0	-9.796
Zn2062_A		0.4554	ug/L	0.06015	13.21	1.046
Y_3600_R		26,796	Cts/S	1,605.4	5.9912	26,796
Y_2243_A		10,315	Cts/S	0.49470	0.0047960	10,315
Y_3600_A		407,070	Cts/S	503.27	0.12363	407,070

SI1906-014

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:23:34PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-4.420	ug/L	0.9432	21.34	-3,204
Al3961_R	W	44,040	ug/L	518.1	1.176	47,420
As1891_A		-0.6210	ug/L	2.342	377.0	-9.879
Au2427_A		4.263	ug/L	0.02258	0.5296	132.3
B_2089_A		278.0	ug/L	0.8343	0.3001	267.1
Ba4554_R		738.0	ug/L	8.527	1.155	55,110
Be3130_R		3.696	ug/L	0.01250	0.3383	378.6
Ca3158_R	W	170,300	ug/L	5,794	3.401	285,100
Cd2265_A		23.48	ug/L	0.1669	0.7107	567.9
Co2286_A		39.13	ug/L	0.2101	0.5369	185.8
Cr2677_A		273.5	ug/L	0.2250	0.08226	5,565
Cu3273_A		13.72	ug/L	0.9056	6.602	303.1
Fe2599_R	W	213,300	ug/L	2,365	1.109	330,600
K_7664_R		18,570	ug/L	235.0	1.265	17,880
Li6707_R		67.99	ug/L	2.527	3.717	1,202
Mg2025_A	W	100,800	ug/L	125.2	0.1241	16,550
Mn2576_R	W	1,040	ug/L	9.108	0.8756	8,379
Mo2020_A		-2.803	ug/L	0.2374	8.469	-2.660

SI1906-014

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:23:34PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	164,400	ug/L	1,184	0.7201	475,400
Ni2316_A		184.8	ug/L	0.09052	0.04899	459.4
Pb2203_A	W	2,015	ug/L	1.167	0.05793	2,264
Sb2068_A		-0.2724	ug/L	0.5035	184.9	0.9755
Se1960_A		3.480	ug/L	0.7401	21.26	2.844
Si2516_R		21,590	ug/L	204.0	0.9449	8,456
Sn1899_A		15.00	ug/L	0.8224	5.482	7.233
Sr4215_R		695.9	ug/L	6.305	0.9060	65,520
Ti3349_A	W	1,085	ug/L	0.1637	0.01509	54,100
Tl1908_A		1.355	ug/L	1.479	109.2	-1.121
V_2924_A		230.3	ug/L	0.1496	0.06496	5,879
Zn2062_A	W	7,088	ug/L	17.50	0.2469	19,990
Y_3600_R		28,903	Cts/S	97.338	0.33678	28,903
Y_2243_A		9,581.5	Cts/S	3.4701	0.036217	9,581.5
Y_3600_A		381,130	Cts/S	278.42	0.073051	381,130

SI1906-016

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:28:29PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-2.723	ug/L	1.680	61.68	-2,760
Al3961_R	W	63,250	ug/L	468.1	0.7401	68,130
As1891_A		5.045	ug/L	2.133	42.27	-6.990
Au2427_A		2.633	ug/L	1.603	60.87	110.5
B_2089_A		413.7	ug/L	1.346	0.3253	404.0
Ba4554_R		595.7	ug/L	7.551	1.268	44,530
Be3130_R		5.636	ug/L	0.005027	0.08920	615.8
Ca3158_R	W	138,400	ug/L	518.0	0.3742	231,900
Cd2265_A		105.6	ug/L	0.1073	0.1017	1,896
Co2286_A		30.57	ug/L	0.4639	1.517	153.3
Cr2677_A	W	1,005	ug/L	2.934	0.2920	20,490
Cu3273_A		8.866	ug/L	0.3058	3.449	202.6
Fe2599_R	W	185,100	ug/L	3,369	1.820	287,200
K_7664_R	W	29,630	ug/L	248.1	0.8374	28,580
Li6707_R		100.4	ug/L	1.832	1.825	1,763
Mg2025_A	W	114,000	ug/L	85.70	0.07516	19,060
Mn2576_R	W	1,172	ug/L	1.692	0.1444	9,447
Mo2020_A		-3.733	ug/L	0.5548	14.86	-4.216
Na5895_R	F	267,300	ug/L	57.81	0.02163	773,300
Ni2316_A		246.5	ug/L	0.1367	0.05547	636.0
Pb2203_A	W	2,944	ug/L	4.881	0.1658	3,360
Sb2068_A		3.378	ug/L	0.5519	16.34	3.643
Se1960_A		1.445	ug/L	3.384	234.1	2.469
Si2516_R		22,810	ug/L	148.8	0.6521	8,943
Sn1899_A		22.43	ug/L	2.448	10.91	10.32
Sr4215_R		848.2	ug/L	6.958	0.8203	79,940
Ti3349_A	W	1,266	ug/L	0.6138	0.04848	63,620
Tl1908_A		1.144	ug/L	1.720	150.3	-2.013
V_2924_A		395.0	ug/L	1.587	0.4019	10,030
Zn2062_A	W	10,730	ug/L	2.192	0.02043	30,820
Y_3600_R		28,929	Cts/S	241.35	0.83430	28,929
Y_2243_A		9,758.4	Cts/S	13.923	0.14268	9,758.4
Y_3600_A		384,040	Cts/S	372.87	0.097092	384,040

SI1906-018

Method Name: K6010-2011 Method Revision: 1,728

SI1906-018

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:33:20PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-4.096	ug/L	0.8685	21.20	-2,840
Al3961_R	W	48,760	ug/L	677.6	1.390	51,550
As1891_A		1.882	ug/L	0.2550	13.55	-8.160
Au2427_A		2.858	ug/L	0.03449	1.207	114.7
B_2089_A		390.0	ug/L	0.6771	0.1736	370.9
Ba4554_R		883.5	ug/L	11.35	1.285	64,760
Be3130_R		3.775	ug/L	0.03412	0.9038	372.5
Ca3158_R	W	176,400	ug/L	8,513	4.826	289,900
Cd2265_A		32.09	ug/L	0.09260	0.2885	682.1
Co2286_A		34.84	ug/L	0.1926	0.5528	167.0
Cr2677_A		332.7	ug/L	1.331	0.4000	6,632
Cu3273_A		34.13	ug/L	0.02427	0.07111	753.4
Fe2599_R	W	192,300	ug/L	1,660	0.8632	292,700
K_7664_R		21,790	ug/L	255.0	1.170	20,610
Li6707_R		76.20	ug/L	2.383	3.127	1,319
Mg2025_A	W	119,200	ug/L	140.6	0.1180	19,400
Mn2576_R		896.8	ug/L	5.997	0.6687	7,093
Mo2020_A		-3.642	ug/L	0.2148	5.898	-4.036
Na5895_R	F	257,100	ug/L	1,160	0.4512	729,600
Ni2316_A		171.4	ug/L	0.01346	0.007850	423.3
Pb2203_A	W	3,133	ug/L	3.949	0.1260	3,484
Sb2068_A		-0.08086	ug/L	2.317	2,865	0.8653
Se1960_A		-2.047	ug/L	3.315	161.9	1.733
Si2516_R		21,090	ug/L	45.05	0.2137	8,109
Sn1899_A		22.10	ug/L	0.4968	2.248	9.927
Sr4215_R		824.0	ug/L	6.672	0.8097	76,180
Ti3349_A	W	1,190	ug/L	3.638	0.3056	58,260
Tl1908_A		2.138	ug/L	0.5581	26.11	-0.8582
V_2924_A		262.7	ug/L	0.6504	0.2476	6,562
Zn2062_A	W	8,066	ug/L	5.112	0.06338	22,550
Y_3600_R		28,378	Cts/S	81.466	0.28708	28,378
Y_2243_A		9,501.7	Cts/S	7.9298	0.083456	9,501.7
Y_3600_A		374,020	Cts/S	210.30	0.056229	374,020

SI1906-020

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:38:20PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.6334	ug/L	0.3108	49.07	-2,179
Al3961_R	W	37,580	ug/L	336.5	0.8953	39,870
As1891_A		8.422	ug/L	0.5418	6.434	-4.751
Au2427_A		1.654	ug/L	1.008	60.96	92.48
B_2089_A		299.6	ug/L	0.6359	0.2122	286.8
Ba4554_R		624.6	ug/L	12.71	2.035	45,970
Be3130_R		2.745	ug/L	0.02047	0.7456	244.6
Ca3158_R	W	124,800	ug/L	1,926	1.544	205,800
Cd2265_A		32.32	ug/L	0.03512	0.1087	657.2
Co2286_A		27.96	ug/L	0.2610	0.9333	137.7
Cr2677_A		269.6	ug/L	0.03413	0.01266	5,413
Cu3273_A		586.9	ug/L	0.1425	0.02428	13,110
Fe2599_R	W	156,500	ug/L	1,416	0.9046	239,100
K_7664_R		20,160	ug/L	297.3	1.475	19,140
Li6707_R		57.55	ug/L	1.747	3.036	1,007
Mg2025_A	W	95,590	ug/L	274.7	0.2874	15,640
Mn2576_R		600.8	ug/L	7.012	1.167	4,770
Mo2020_A		-1.950	ug/L	0.1433	7.347	-1.226

SI1906-020

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:38:20PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	230,900	ug/L	749.9	0.3248	657,700
Ni2316_A		157.7	ug/L	0.3310	0.2098	393.6
Pb2203_A	W	2,528	ug/L	4.691	0.1856	2,825
Sb2068_A		0.9088	ug/L	0.3409	37.51	0.8221
Se1960_A		-3.072	ug/L	2.365	76.99	1.273
Si2516_R		19,970	ug/L	185.3	0.9279	7,710
Sn1899_A		38.63	ug/L	0.06449	0.1669	16.41
Sr4215_R		568.2	ug/L	8.125	1.430	52,710
Ti3349_A	W	1,161	ug/L	1.902	0.1638	57,220
Tl1908_A		1.938	ug/L	1.117	57.67	-0.5982
V_2924_A		223.7	ug/L	0.1389	0.06211	5,629
Zn2062_A	W	6,986	ug/L	19.45	0.2784	19,630
Y_3600_R		28,482	Cts/S	46.330	0.16267	28,482
Y_2243_A		9,547.7	Cts/S	16.544	0.17328	9,547.7
Y_3600_A		376,690	Cts/S	462.43	0.12276	376,690

SI1906-022

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:43:01PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.145	ug/L	0.03263	2.849	-2,130
Al3961_R	W	32,740	ug/L	557.7	1.703	34,240
As1891_A		0.2211	ug/L	0.3140	142.0	-6.834
Au2427_A		0.7029	ug/L	0.8802	125.2	83.89
B_2089_A		419.4	ug/L	0.4195	0.1000	398.0
Ba4554_R		702.6	ug/L	14.83	2.110	50,920
Be3130_R		2.210	ug/L	0.01660	0.7512	216.0
Ca3158_R	W	162,100	ug/L	1,726	1.065	263,300
Cd2265_A		16.32	ug/L	0.1466	0.8979	392.0
Co2286_A		27.61	ug/L	0.02998	0.1086	129.7
Cr2677_A		206.2	ug/L	0.3035	0.1472	4,120
Cu3273_A		24.90	ug/L	0.2597	1.043	556.5
Fe2599_R	W	149,700	ug/L	2,072	1.384	225,300
K_7664_R		17,700	ug/L	308.4	1.742	16,540
Li6707_R		48.83	ug/L	0.6767	1.386	845.8
Mg2025_A	W	99,880	ug/L	1.857	0.001860	16,220
Mn2576_R		615.1	ug/L	8.140	1.323	4,810
Mo2020_A		-2.833	ug/L	0.3222	11.37	-2.675
Na5895_R	F	234,900	ug/L	9,789	4.167	659,000
Ni2316_A		120.3	ug/L	0.04330	0.03599	294.5
Pb2203_A	W	2,095	ug/L	3.533	0.1686	2,326
Sb2068_A		-1.285	ug/L	1.309	101.9	0.01020
Se1960_A		1.587	ug/L	3.584	225.8	2.029
Si2516_R		15,350	ug/L	227.3	1.481	5,840
Sn1899_A		16.70	ug/L	0.2960	1.773	7.813
Sr4215_R		729.0	ug/L	10.70	1.468	66,620
Ti3349_A		683.8	ug/L	7.709	1.127	33,470
Tl1908_A		0.9835	ug/L	1.069	108.7	-0.5753
V_2924_A		160.8	ug/L	0.9708	0.6037	4,024
Zn2062_A	W	6,128	ug/L	7.170	0.1170	17,090
Y_3600_R		28,056	Cts/S	145.30	0.51791	28,056
Y_2243_A		9,480.0	Cts/S	16.379	0.17278	9,480.0
Y_3600_A		374,220	Cts/S	1,844.4	0.49286	374,220

SI1906-024

Method Name: K6010-2011 Method Revision: 1,728

SI1906-024

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:47:45PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.097	ug/L	0.6892	62.83	-1,917
Al3961_R	W	79,680	ug/L	1,621	2.034	83,210
As1891_A		17.06	ug/L	1.088	6.374	-1.095
Au2427_A		2.550	ug/L	0.4290	16.83	80.88
B_2089_A		575.8	ug/L	0.9931	0.1725	553.4
Ba4554_R		697.3	ug/L	10.96	1.572	50,540
Be3130_R		4.537	ug/L	0.04918	1.084	361.6
Ca3158_R	W	159,200	ug/L	1,792	1.126	258,500
Cd2265_A		36.25	ug/L	0.1065	0.2939	703.1
Co2286_A		26.74	ug/L	0.1199	0.4484	147.4
Cr2677_A		576.1	ug/L	5.398	0.9370	11,610
Cu3273_A		10.44	ug/L	0.2068	1.980	233.3
Fe2599_R	W	131,600	ug/L	2,214	1.683	197,900
K_7664_R		17,130	ug/L	187.3	1.094	16,000
Li6707_R		123.1	ug/L	2.269	1.842	2,090
Mg2025_A	W	189,700	ug/L	180.4	0.09509	31,240
Mn2576_R		873.1	ug/L	17.92	2.053	6,823
Mo2020_A		-3.694	ug/L	0.2741	7.420	-4.133
Na5895_R	W	164,200	ug/L	2,814	1.713	460,800
Ni2316_A		296.1	ug/L	1.211	0.4090	763.4
Pb2203_A	W	3,421	ug/L	4.709	0.1376	3,840
Sb2068_A		3.004	ug/L	0.5735	19.09	2.072
Se1960_A		1.431	ug/L	3.410	238.2	2.187
Si2516_R	W	42,830	ug/L	785.7	1.835	16,280
Sn1899_A		19.04	ug/L	2.788	14.65	8.839
Sr4215_R		713.1	ug/L	10.40	1.458	65,160
Ti3349_A	W	2,331	ug/L	12.13	0.5205	115,700
Tl1908_A		1.279	ug/L	1.977	154.6	-1.726
V_2924_A		286.8	ug/L	2.291	0.7986	7,244
Zn2062_A	W	9,175	ug/L	25.13	0.2738	25,950
Y_3600_R		28,049	Cts/S	108.38	0.38638	28,049
Y_2243_A		9,613.0	Cts/S	21.255	0.22111	9,613.0
Y_3600_A		379,300	Cts/S	2,506.4	0.66080	379,300

SI1906-026

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:52:31PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.5944	ug/L	0.1799	30.26	-397.2
Al3961_R		12,630	ug/L	214.6	1.700	13,950
As1891_A		12.41	ug/L	0.2631	2.120	2.312
Au2427_A		4.239	ug/L	0.6590	15.54	28.95
B_2089_A		0.9815	ug/L	0.3149	32.09	2.748
Ba4554_R		116.0	ug/L	2.819	2.431	8,924
Be3130_R		4.126	ug/L	0.08598	2.084	480.5
Ca3158_R		19,050	ug/L	232.7	1.221	32,730
Cd2265_A		0.1887	ug/L	0.006254	3.314	28.11
Co2286_A		8.108	ug/L	0.04248	0.5239	52.28
Cr2677_A		11.46	ug/L	0.1356	1.183	272.7
Cu3273_A		15.78	ug/L	0.05483	0.3474	418.0
Fe2599_R		23,970	ug/L	410.0	1.711	38,150
K_7664_R		4,740	ug/L	71.01	1.498	4,651
Li6707_R		60.61	ug/L	0.7511	1.239	1,103
Mg2025_A		3,323	ug/L	8.187	0.2464	610.0
Mn2576_R	W	1,032	ug/L	14.87	1.441	8,525
Mo2020_A		-0.1389	ug/L	0.1606	115.7	2.046

SI1906-026

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:52:31PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		1,098	ug/L	7.622	0.6943	3,557
Ni2316_A		8.664	ug/L	0.2100	2.424	21.55
Pb2203_A		54.62	ug/L	1.736	3.179	66.44
Sb2068_A		0.2277	ug/L	1.275	560.2	-0.1814
Se1960_A		-2.123	ug/L	0.8156	38.41	0.6761
Si2516_R		9,434	ug/L	155.6	1.649	3,805
Sn1899_A		1.080	ug/L	0.3567	33.03	1.997
Sr4215_R		57.42	ug/L	0.8680	1.512	5,527
Ti3349_A		698.2	ug/L	1.096	0.1570	39,030
Tl1908_A		-2.095	ug/L	0.9360	44.68	-2.057
V_2924_A		27.18	ug/L	0.3894	1.433	776.7
Zn2062_A		136.0	ug/L	0.5737	0.4219	427.7
Y_3600_R		29,667	Cts/S	123.88	0.41755	29,667
Y_2243_A		10,697	Cts/S	3.1710	0.029644	10,697
Y_3600_A		427,260	Cts/S	976.18	0.22848	427,260

SI1906-028

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 3:57:14PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		6.769	ug/L	1.531	22.62	-2,563
Al3961_R	W	66,490	ug/L	1.473	0.002215	72,990
As1891_A		36.97	ug/L	0.9169	2.480	1.987
Au2427_A		10.14	ug/L	0.1023	1.008	133.3
B_2089_A		509.7	ug/L	1.692	0.3319	495.3
Ba4554_R		618.0	ug/L	5.852	0.9469	47,030
Be3130_R		7.642	ug/L	0.04871	0.6374	873.5
Ca3158_R	W	347,300	ug/L	509.0	0.1465	592,200
Cd2265_A		40.22	ug/L	0.2243	0.5578	834.1
Co2286_A		49.64	ug/L	0.01262	0.02542	239.7
Cr2677_A		516.7	ug/L	0.7141	0.1382	10,520
Cu3273_A	W	2,455	ug/L	4.127	0.1681	55,700
Fe2599_R	W	196,900	ug/L	1,868	0.9485	311,000
K_7664_R	W	34,590	ug/L	127.5	0.3686	33,980
Li6707_R		137.1	ug/L	3.464	2.526	2,440
Mg2025_A	W	98,230	ug/L	74.56	0.07590	16,350
Mn2576_R	W	3,131	ug/L	6.142	0.1962	25,680
Mo2020_A		-2.518	ug/L	0.2475	9.826	-2.164
Na5895_R	F	238,400	ug/L	1,532	0.6426	702,100
Ni2316_A		217.6	ug/L	0.02887	0.01326	555.3
Pb2203_A	W	2,380	ug/L	5.064	0.2128	2,705
Sb2068_A		3.364	ug/L	0.3530	10.49	2.782
Se1960_A		-7.145	ug/L	1.656	23.18	1.163
Si2516_R	W	31,350	ug/L	13.50	0.04307	12,510
Sn1899_A		107.5	ug/L	1.178	1.096	44.02
Sr4215_R	W	3,286	ug/L	16.14	0.4913	315,300
Ti3349_A	W	1,448	ug/L	8.606	0.5943	72,490
Tl1908_A		3.958	ug/L	1.088	27.48	-2.257
V_2924_A		297.3	ug/L	1.082	0.3638	7,559
Zn2062_A	W	5,830	ug/L	16.82	0.2885	16,670
Y_3600_R		29,449	Cts/S	460.75	1.5646	29,449
Y_2243_A		9,716.4	Cts/S	12.894	0.13271	9,716.4
Y_3600_A		382,550	Cts/S	2,228.8	0.58263	382,550

SI1906-030

Method Name: K6010-2011 Method Revision: 1,728

SI1906-030

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:02:17PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-3.582	ug/L	1.570	43.82	-2,808
Al3961_R	W	62,160	ug/L	634.6	1.021	67,650
As1891_A		6.652	ug/L	0.6641	9.983	-6.524
Au2427_A		10.29	ug/L	0.1863	1.810	129.3
B_2089_A		457.1	ug/L	0.02216	0.004848	452.9
Ba4554_R		771.3	ug/L	12.50	1.621	58,250
Be3130_R		6.939	ug/L	0.003266	0.04708	801.9
Ca3158_R	W	129,400	ug/L	344.5	0.2662	219,000
Cd2265_A		56.88	ug/L	0.1552	0.2729	1,113
Co2286_A		43.62	ug/L	0.05541	0.1270	213.6
Cr2677_A		762.7	ug/L	2.791	0.3659	15,880
Cu3273_A		82.81	ug/L	0.09119	0.1101	1,927
Fe2599_R	W	182,300	ug/L	4,438	2.434	285,800
K_7664_R	W	31,670	ug/L	232.1	0.7330	30,870
Li6707_R		126.1	ug/L	0.6246	0.4954	2,229
Mg2025_A	W	86,540	ug/L	107.6	0.1243	14,680
Mn2576_R	W	2,979	ug/L	11.91	0.3997	24,250
Mo2020_A		-3.128	ug/L	0.1388	4.436	-3.226
Na5895_R	F	210,900	ug/L	830.5	0.3939	616,300
Ni2316_A		221.0	ug/L	0.5373	0.2432	576.7
Pb2203_A	W	2,622	ug/L	3.290	0.1255	3,037
Sb2068_A		0.9579	ug/L	0.1196	12.49	2.839
Se1960_A		-2.122	ug/L	1.088	51.29	1.990
Si2516_R	W	26,770	ug/L	51.30	0.1916	10,610
Sn1899_A		32.14	ug/L	0.6796	2.114	14.40
Sr4215_R	W	1,082	ug/L	9.109	0.8421	103,000
Ti3349_A	W	1,162	ug/L	2.477	0.2132	59,600
Tl1908_A		4.569	ug/L	1.007	22.05	-1.918
V_2924_A		317.5	ug/L	0.3982	0.1254	8,231
Zn2062_A	W	5,269	ug/L	7.342	0.1393	15,350
Y_3600_R		29,230	Cts/S	361.04	1.2352	29,230
Y_2243_A		9,902.5	Cts/S	1.5159	0.015308	9,902.5
Y_3600_A		391,910	Cts/S	1,360.7	0.34718	391,910

LCSOIC25ICS1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:07:08PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		47.34	ug/L	0.1734	0.3664	1,908
Al3961_R		1,922	ug/L	21.42	1.114	2,018
As1891_A		88.62	ug/L	0.1110	0.1252	27.30
Au2427_A		3.639	ug/L	0.02043	0.5615	16.08
B_2089_A		449.2	ug/L	0.5231	0.1165	461.6
Ba4554_R		1,874	ug/L	30.59	1.632	136,000
Be3130_R		46.52	ug/L	0.7275	1.564	5,828
Ca3158_R		2,258	ug/L	30.22	1.338	3,681
Cd2265_A		224.2	ug/L	0.008117	0.003620	3,840
Co2286_A		483.3	ug/L	0.07309	0.01512	2,269
Cr2677_A		188.9	ug/L	0.7409	0.3922	4,103
Cu3273_A		238.1	ug/L	0.3324	0.1396	5,800
Fe2599_R		1,074	ug/L	15.29	1.424	1,642
K_7664_R		8,962	ug/L	87.24	0.9734	8,371
Li6707_R		451.0	ug/L	7.047	1.563	7,596
Mg2025_A		4,650	ug/L	9.342	0.2009	831.2
Mn2576_R		462.7	ug/L	5.313	1.148	3,618
Mo2020_A		91.27	ug/L	0.7940	0.8700	165.4

LCSOIC25ICS1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:07:08PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		6,809	ug/L	88.26	1.296	19,420
Ni2316_A		483.9	ug/L	0.02386	0.004931	1,352
Pb2203_A		91.72	ug/L	0.1393	0.1519	107.8
Sb2068_A		91.72	ug/L	1.366	1.489	33.48
Se1960_A		91.77	ug/L	0.5624	0.6129	18.25
Si2516_R		873.2	ug/L	2.376	0.2721	346.6
Sn1899_A		497.9	ug/L	0.9837	0.1976	208.9
Sr4215_R		465.5	ug/L	7.293	1.567	42,610
Ti3349_A		471.5	ug/L	1.319	0.2797	25,230
Tl1908_A		106.5	ug/L	0.05828	0.05470	42.38
V_2924_A		475.2	ug/L	1.424	0.2996	12,840
Zn2062_A		467.9	ug/L	0.3138	0.06706	1,404
Y_3600_R		28,106	Cts/S	398.67	1.4184	28,106
Y_2243_A		10,207	Cts/S	4.1561	0.040716	10,207
Y_3600_A		408,990	Cts/S	2,250.7	0.55031	408,990

CCV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:11:46PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		494.3	ug/L	3.154	0.6380	19,530
Al3961_R		12,180	ug/L	154.1	1.265	12,630
As1891_A		489.5	ug/L	1.232	0.2517	151.9
Au2427_A		498.0	ug/L	20.60	4.136	2,262
B_2089_A		490.0	ug/L	0.003090	0.0006310	511.1
Ba4554_R		494.3	ug/L	7.264	1.470	35,530
Be3130_R		478.8	ug/L	5.001	1.044	59,720
Ca3158_R		12,110	ug/L	186.5	1.540	19,510
Cd2265_A		485.9	ug/L	0.8387	0.1726	8,263
Co2286_A		497.8	ug/L	0.3191	0.06410	2,318
Cr2677_A		489.2	ug/L	0.2487	0.05085	10,480
Cu3273_A		492.2	ug/L	2.552	0.5184	11,810
Fe2599_R		11,960	ug/L	133.9	1.120	17,860
K_7664_R		12,100	ug/L	173.9	1.438	11,200
Li6707_R		478.9	ug/L	8.528	1.781	7,980
Mg2025_A		12,780	ug/L	6.244	0.04888	2,236
Mn2576_R		486.0	ug/L	4.025	0.8282	3,761
Mo2020_A		493.0	ug/L	3.154	0.6399	877.0
Na5895_R		11,960	ug/L	212.4	1.776	33,530
Ni2316_A		501.7	ug/L	0.09871	0.01968	1,390
Pb2203_A		493.2	ug/L	0.5508	0.1117	580.7
Sb2068_A		493.0	ug/L	2.412	0.4893	189.4
Se1960_A		488.0	ug/L	4.443	0.9104	93.02
Si2516_R		12,130	ug/L	171.5	1.413	4,588
Sn1899_A		501.9	ug/L	0.2845	0.05667	208.8
Sr4215_R		491.1	ug/L	5.884	1.198	44,490
Ti3349_A		496.4	ug/L	2.942	0.5927	26,240
Tl1908_A		496.7	ug/L	3.716	0.7481	202.8
V_2924_A		496.0	ug/L	3.108	0.6266	13,130
Zn2062_A		487.3	ug/L	0.2058	0.04223	1,450
Y_3600_R		27,815	Cts/S	39.576	0.14229	27,815
Y_2243_A		10,125	Cts/S	14.882	0.14699	10,125
Y_3600_A		403,740	Cts/S	1,858.5	0.46031	403,740

CCB

Method Name: K6010-2011 Method Revision: 1,728

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:16:22PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2003	ug/L	0.2869	143.2	27.05
Al3961_R		-8.140	ug/L	2.115	25.98	-4.030
As1891_A		-0.4208	ug/L	0.3504	83.27	-0.7398
Au2427_A		1.988	ug/L	1.627	81.82	12.06
B_2089_A		0.6927	ug/L	0.3611	52.13	2.398
Ba4554_R		0.4428	ug/L	0.1542	34.83	70.56
Be3130_R		0.1497	ug/L	0.03619	24.17	16.35
Ca3158_R		-12.11	ug/L	1.881	15.54	-14.17
Cd2265_A		0.1657	ug/L	0.04716	28.47	3.454
Co2286_A		0.1584	ug/L	0.01416	8.939	4.228
Cr2677_A		0.1611	ug/L	0.01354	8.403	9.809
Cu3273_A		0.2917	ug/L	0.2513	86.13	34.16
Fe2599_R		3.584	ug/L	1.304	36.38	28.68
K_7664_R		112.0	ug/L	18.64	16.64	61.63
Li6707_R		0.6762	ug/L	0.4679	69.20	38.77
Mg2025_A		-17.57	ug/L	3.949	22.48	-2.312
Mn2576_R		0.3785	ug/L	0.2795	73.83	0.03079
Mo2020_A		1.060	ug/L	0.3155	29.76	4.150
Na5895_R		126.5	ug/L	0.7960	0.6292	633.3
Ni2316_A		0.04343	ug/L	0.1159	266.8	-0.5867
Pb2203_A		0.5567	ug/L	0.5802	104.2	-0.8299
Sb2068_A		1.634	ug/L	0.5763	35.28	0.1221
Se1960_A		2.850	ug/L	2.722	95.51	1.300
Si2516_R		14.00	ug/L	9.291	66.35	18.67
Sn1899_A		-0.2289	ug/L	0.5242	229.0	1.380
Sr4215_R		0.2686	ug/L	0.1355	50.44	2.248
Ti3349_A		0.8268	ug/L	0.1494	18.07	26.05
Tl1908_A		-0.3406	ug/L	0.05307	15.58	0.05014
V_2924_A		0.4080	ug/L	0.06421	15.74	-2.401
Zn2062_A		0.3748	ug/L	0.01362	3.633	0.8056
Y_3600_R		27,763	Cts/S	30.374	0.10941	27,763
Y_2243_A		10,353	Cts/S	18.980	0.18333	10,353
Y_3600_A		412,630	Cts/S	3,170.0	0.76824	412,630

PBSIC25ICS1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:21:09PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.02120	ug/L	0.2874	1,356	17.43
Al3961_R		1.590	ug/L	10.23	643.1	6.127
As1891_A		0.5276	ug/L	0.2840	53.83	-0.4436
Au2427_A		1.058	ug/L	0.3405	32.20	7.838
B_2089_A		0.7149	ug/L	0.2639	36.91	2.401
Ba4554_R		0.5027	ug/L	0.1294	25.75	76.21
Be3130_R		0.02356	ug/L	0.05700	241.9	0.6575
Ca3158_R		1.949	ug/L	4.774	244.9	8.546
Cd2265_A		0.03093	ug/L	0.02567	82.98	1.166
Co2286_A		0.05368	ug/L	0.02448	45.61	3.754
Cr2677_A		0.8393	ug/L	0.01306	1.556	24.96
Cu3273_A		0.3636	ug/L	0.2154	59.23	36.35
Fe2599_R		54.22	ug/L	0.08195	0.1511	105.9
K_7664_R		97.79	ug/L	6.735	6.887	49.27
Li6707_R		2.844	ug/L	1.004	35.31	76.09
Mg2025_A		-11.86	ug/L	1.061	8.944	-1.318
Mn2576_R		1.538	ug/L	0.09519	6.188	9.157
Mo2020_A		-0.1878	ug/L	0.08990	47.86	1.900

PBSIC25ICS1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:21:09PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		121.1	ug/L	3.936	3.249	629.4
Ni2316_A		2.787	ug/L	0.3498	12.55	7.234
Pb2203_A		0.07088	ug/L	0.4080	575.7	-1.427
Sb2068_A		1.012	ug/L	1.003	99.10	-0.2086
Se1960_A		3.460	ug/L	2.326	67.23	1.430
Si2516_R		-3.971	ug/L	2.955	74.41	12.12
Sn1899_A		23.21	ug/L	0.3468	1.494	11.37
Sr4215_R		0.1553	ug/L	0.1295	83.41	-8.178
Ti3349_A		0.4151	ug/L	0.04327	10.42	3.813
Tl1908_A		-0.2357	ug/L	0.6854	290.8	0.09487
V_2924_A		0.3364	ug/L	0.3138	93.30	-4.205
Zn2062_A		5.399	ug/L	0.1752	3.246	16.23
Y_3600_R		28,256	Cts/S	175.52	0.62119	28,256
Y_2243_A		10,430	Cts/S	27.084	0.25968	10,430
Y_3600_A		417,720	Cts/S	5,995.4	1.4353	417,720

SI1804-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:25:56PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1055	ug/L	0.6840	648.5	-1,903
Al3961_R	W	95,890	ug/L	1,984	2.069	102,300
As1891_A		46.01	ug/L	2.194	4.768	8.308
Au2427_A		4.023	ug/L	0.3171	7.882	88.31
B_2089_A		22.56	ug/L	0.5386	2.388	25.08
Ba4554_R		246.8	ug/L	5.935	2.405	18,300
Be3130_R		2.850	ug/L	0.05058	1.775	335.6
Ca3158_R		16,250	ug/L	370.9	2.283	26,970
Cd2265_A		4.087	ug/L	0.1704	4.170	191.9
Co2286_A		26.91	ug/L	0.08930	0.3318	134.5
Cr2677_A		127.2	ug/L	0.2669	0.2098	2,794
Cu3273_A		28.00	ug/L	0.08198	0.2927	711.6
Fe2599_R	W	124,600	ug/L	3,161	2.537	191,600
K_7664_R		6,325	ug/L	163.4	2.584	6,012
Li6707_R		50.39	ug/L	0.9881	1.961	890.8
Mg2025_A		5,092	ug/L	0.2387	0.004687	907.0
Mn2576_R	W	1,060	ug/L	20.44	1.928	8,466
Mo2020_A		2.783	ug/L	0.02136	0.7675	7.233
Na5895_R		268.6	ug/L	6.288	2.341	1,061
Ni2316_A		47.68	ug/L	0.2510	0.5264	119.1
Pb2203_A		124.7	ug/L	0.5758	0.4619	142.4
Sb2068_A		-2.569	ug/L	0.5426	21.13	-0.01806
Se1960_A		1.007	ug/L	3.034	301.3	2.342
Si2516_R		1,937	ug/L	45.35	2.342	756.9
Sn1899_A		25.45	ug/L	0.2785	1.094	12.26
Sr4215_R		132.8	ug/L	2.666	2.008	12,380
Ti3349_A		343.3	ug/L	0.7823	0.2279	18,410
Tl1908_A		1.874	ug/L	0.2019	10.77	-0.8338
V_2924_A		278.4	ug/L	0.8250	0.2963	7,589
Zn2062_A		502.5	ug/L	0.9660	0.1922	1,534
Y_3600_R		28,667	Cts/S	166.44	0.58058	28,667
Y_2243_A		10,375	Cts/S	13.588	0.13097	10,375
Y_3600_A		410,070	Cts/S	566.13	0.13806	410,070

SI1804-002

Method Name: K6010-2011 Method Revision: 1,728

SI1804-002

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:30:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-2.690	ug/L	4.436	164.9	-2,973
Al3961_R	W	175,400	ug/L	3,581	2.042	194,300
As1891_A		96.80	ug/L	2.252	2.326	22.13
Au2427_A		5.487	ug/L	2.194	39.99	136.5
B_2089_A		19.33	ug/L	0.2321	1.201	22.12
Ba4554_R		281.9	ug/L	3.853	1.367	21,710
Be3130_R		4.346	ug/L	0.06915	1.591	514.9
Ca3158_R		4,721	ug/L	93.77	1.986	8,145
Cd2265_A		-0.1390	ug/L	0.7486	538.4	178.7
Co2286_A		34.97	ug/L	0.01482	0.04237	179.7
Cr2677_A		196.4	ug/L	0.9799	0.4989	4,378
Cu3273_A		30.72	ug/L	0.4770	1.553	798.1
Fe2599_R	W	184,100	ug/L	13,900	7.549	293,800
K_7664_R		7,170	ug/L	127.4	1.777	7,086
Li6707_R		91.53	ug/L	1.793	1.959	1,657
Mg2025_A		6,051	ug/L	14.54	0.2403	1,096
Mn2576_R		751.1	ug/L	14.52	1.933	6,235
Mo2020_A		3.542	ug/L	0.1188	3.355	8.735
Na5895_R		329.1	ug/L	0.07637	0.02321	1,283
Ni2316_A		68.32	ug/L	0.8588	1.257	173.1
Pb2203_A		118.8	ug/L	0.8741	0.7361	128.1
Sb2068_A		-1.993	ug/L	1.026	51.47	1.234
Se1960_A		-3.457	ug/L	1.010	29.22	2.296
Si2516_R		2,530	ug/L	5.881	0.2324	1,022
Sn1899_A		27.16	ug/L	2.466	9.078	13.20
Sr4215_R		72.06	ug/L	0.9266	1.286	6,969
Ti3349_A		703.8	ug/L	1.407	0.1999	38,380
Tl1908_A		1.057	ug/L	0.3176	30.05	-1.136
V_2924_A		367.0	ug/L	2.011	0.5479	10,190
Zn2062_A		316.5	ug/L	0.3298	0.1042	981.4
Y_3600_R		29,782	Cts/S	533.09	1.7900	29,782
Y_2243_A		10,546	Cts/S	0.83511	0.0079190	10,546
Y_3600_A		416,850	Cts/S	2,099.8	0.50374	416,850

SI1804-003

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:35:27PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-3.168	ug/L	3.778	119.3	-3,407
Al3961_R	W	207,700	ug/L	4,393	2.115	227,700
As1891_A		64.14	ug/L	0.5563	0.8673	10.20
Au2427_A		5.099	ug/L	0.8541	16.75	151.6
B_2089_A		34.89	ug/L	0.5769	1.653	38.68
Ba4554_R		331.8	ug/L	5.876	1.771	25,290
Be3130_R		6.063	ug/L	0.04685	0.7728	720.0
Ca3158_R		3,293	ug/L	37.52	1.139	5,626
Cd2265_A		-1.496	ug/L	0.1750	11.70	184.5
Co2286_A		46.31	ug/L	0.03977	0.08588	237.9
Cr2677_A		252.1	ug/L	3.375	1.338	5,539
Cu3273_A		34.90	ug/L	0.4374	1.253	891.4
Fe2599_R	W	213,500	ug/L	6,018	2.819	337,500
K_7664_R		9,672	ug/L	178.0	1.840	9,476
Li6707_R		97.46	ug/L	0.7670	0.7870	1,744
Mg2025_A		7,904	ug/L	30.51	0.3860	1,439
Mn2576_R	W	1,005	ug/L	14.96	1.490	8,252
Mo2020_A		2.963	ug/L	0.1648	5.561	7.691

SI1804-003

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:35:27PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		348.6	ug/L	7.241	2.077	1,327
Ni2316_A		128.6	ug/L	0.04171	0.03242	345.4
Pb2203_A		103.5	ug/L	1.015	0.9807	106.4
Sb2068_A		-3.107	ug/L	2.320	74.66	1.286
Se1960_A		-4.049	ug/L	2.953	72.93	2.585
Si2516_R		2,400	ug/L	34.97	1.457	956.5
Sn1899_A		28.64	ug/L	0.2075	0.7245	13.91
Sr4215_R		87.07	ug/L	1.111	1.276	8,339
Ti3349_A		888.8	ug/L	13.53	1.522	47,820
Tl1908_A		1.187	ug/L	1.687	142.1	-1.597
V_2924_A		445.6	ug/L	6.136	1.377	12,200
Zn2062_A		300.2	ug/L	0.2780	0.09258	935.7
Y_3600_R		29,473	Cts/S	9.2467	0.031374	29,473
Y_2243_A		10,604	Cts/S	19.461	0.18354	10,604
Y_3600_A		411,260	Cts/S	4,801.5	1.1675	411,260

SI1804-004

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:40:13PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.495	ug/L	1.368	91.48	-2,705
Al3961_R	W	54,280	ug/L	958.7	1.766	57,090
As1891_A		25.35	ug/L	0.1970	0.7770	4.595
Au2427_A		3.609	ug/L	2.173	60.21	106.9
B_2089_A		34.15	ug/L	1.322	3.870	33.76
Ba4554_R	F	22,640	ug/L	950.7	4.199	1,652,000
Be3130_R		1.829	ug/L	0.07480	4.089	-79.27
Ca3158_R		22,980	ug/L	378.5	1.647	37,660
Cd2265_A		361.0	ug/L	0.8866	0.2456	5,951
Co2286_A		499.0	ug/L	0.7973	0.1598	2,221
Cr2677_A	F	30,860	ug/L	17.51	0.05676	656,700
Cu3273_A		216.8	ug/L	0.03117	0.01437	5,134
Fe2599_R	W	182,500	ug/L	3,468	1.900	276,600
K_7664_R		10,790	ug/L	155.0	1.436	10,150
Li6707_R		52.18	ug/L	0.7732	1.482	908.4
Mg2025_A	W	39,320	ug/L	32.57	0.08282	6,504
Mn2576_R	W	1,664	ug/L	27.65	1.662	13,100
Mo2020_A	F	-11.15	ug/L	0.7249	6.504	-11.09
Na5895_R		470.9	ug/L	3.052	0.6481	1,618
Ni2316_A		221.5	ug/L	0.2429	0.1096	558.1
Pb2203_A	W	19,580	ug/L	39.10	0.1996	21,870
Sb2068_A		233.0	ug/L	0.05222	0.02242	156.9
Se1960_A		-3.673	ug/L	2.333	63.51	1.502
Si2516_R		1,976	ug/L	25.01	1.265	758.3
Sn1899_A		63.64	ug/L	0.09510	0.1494	26.19
Sr4215_R		309.1	ug/L	5.259	1.702	28,440
Ti3349_A	W	3,426	ug/L	9.466	0.2763	180,200
Tl1908_A		11.48	ug/L	1.207	10.52	1.707
V_2924_A		218.1	ug/L	0.4182	0.1917	2,579
Zn2062_A	F	129,200	ug/L	982.2	0.7603	363,300
Y_3600_R		28,262	Cts/S	88.420	0.31285	28,262
Y_2243_A		9,557.9	Cts/S	16.764	0.17539	9,557.9
Y_3600_A		401,510	Cts/S	1,169.0	0.29116	401,510

SI1804-005

Method Name: K6010-2011 Method Revision: 1,728

SI1804-005

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:45:11PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.09697	ug/L	0.04431	45.70	-1,610
Al3961_R	W	104,500	ug/L	2,079	1.989	111,200
As1891_A		16.42	ug/L	0.7588	4.622	-0.1475
Au2427_A		2.522	ug/L	0.2892	11.47	74.32
B_2089_A		11.01	ug/L	0.5771	5.243	13.04
Ba4554_R		451.3	ug/L	6.846	1.517	33,340
Be3130_R		1.849	ug/L	0.02547	1.378	168.6
Ca3158_R		7,895	ug/L	129.0	1.634	13,070
Cd2265_A		9.486	ug/L	0.1502	1.584	267.6
Co2286_A		27.32	ug/L	0.1236	0.4525	141.4
Cr2677_A		799.3	ug/L	2.336	0.2923	17,360
Cu3273_A		28.45	ug/L	0.6367	2.238	720.2
Fe2599_R	W	106,000	ug/L	2,028	1.914	162,500
K_7664_R		3,847	ug/L	73.50	1.911	3,629
Li6707_R		52.96	ug/L	0.1329	0.2509	932.1
Mg2025_A		4,324	ug/L	3.882	0.08978	771.2
Mn2576_R		560.2	ug/L	8.876	1.584	4,461
Mo2020_A		0.8482	ug/L	0.1468	17.31	3.853
Na5895_R		213.6	ug/L	0.1578	0.07388	900.9
Ni2316_A		39.72	ug/L	0.3607	0.9082	98.66
Pb2203_A		313.8	ug/L	0.9195	0.2930	367.9
Sb2068_A		3.335	ug/L	1.806	54.17	3.536
Se1960_A		0.6251	ug/L	0.1983	31.73	2.153
Si2516_R		2,198	ug/L	3.606	0.1641	857.4
Sn1899_A		26.76	ug/L	0.04546	0.1699	12.79
Sr4215_R		60.15	ug/L	1.169	1.943	5,580
Ti3349_A		747.0	ug/L	14.92	1.997	39,990
Tl1908_A		0.8986	ug/L	0.4572	50.88	-0.7367
V_2924_A		222.9	ug/L	3.206	1.438	6,002
Zn2062_A	W	5,658	ug/L	9.687	0.1712	17,240
Y_3600_R		28,581	Cts/S	204.61	0.71588	28,581
Y_2243_A		10,355	Cts/S	26.010	0.25117	10,355
Y_3600_A		409,210	Cts/S	3,824.8	0.93468	409,210

SI1804-006

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:49:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1576	ug/L	0.3928	249.3	-1,770
Al3961_R	W	98,950	ug/L	2,405	2.430	106,500
As1891_A		27.58	ug/L	0.3450	1.251	2.893
Au2427_A		2.504	ug/L	0.4746	18.95	80.22
B_2089_A		11.28	ug/L	0.2894	2.565	13.42
Ba4554_R		260.3	ug/L	5.703	2.191	19,480
Be3130_R		2.550	ug/L	0.08077	3.168	269.3
Ca3158_R		7,969	ug/L	131.9	1.655	13,350
Cd2265_A		3.254	ug/L	0.1890	5.810	169.6
Co2286_A		17.87	ug/L	0.1343	0.7517	95.92
Cr2677_A		420.6	ug/L	1.159	0.2756	9,148
Cu3273_A		33.05	ug/L	0.08691	0.2630	830.0
Fe2599_R	W	115,900	ug/L	2,327	2.008	179,700
K_7664_R		4,049	ug/L	71.78	1.773	3,867
Li6707_R		48.86	ug/L	0.5393	1.104	872.2
Mg2025_A		3,951	ug/L	3.036	0.07685	706.4
Mn2576_R		600.8	ug/L	10.25	1.705	4,841
Mo2020_A		1.784	ug/L	0.2370	13.28	5.496

SI1804-006

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:49:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		209.2	ug/L	4.593	2.196	898.7
Ni2316_A		35.43	ug/L	0.2999	0.8464	85.64
Pb2203_A		143.8	ug/L	1.365	0.9493	164.7
Sb2068_A		2.405	ug/L	0.2271	9.441	2.631
Se1960_A		1.064	ug/L	0.02750	2.586	2.281
Si2516_R		2,792	ug/L	2.034	0.07286	1,099
Sn1899_A		24.55	ug/L	1.354	5.514	11.91
Sr4215_R		57.79	ug/L	1.001	1.732	5,422
Ti3349_A		664.8	ug/L	2.362	0.3553	35,590
Tl1908_A		1.637	ug/L	0.9564	58.43	-0.5186
V_2924_A		242.7	ug/L	1.396	0.5753	6,581
Zn2062_A	W	1,897	ug/L	2.709	0.1428	5,805
Y_3600_R		28,917	Cts/S	103.22	0.35696	28,917
Y_2243_A		10,402	Cts/S	21.580	0.20746	10,402
Y_3600_A		409,200	Cts/S	2,866.4	0.70049	409,200

SI1804-007

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:54:34PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.061	ug/L	1.008	94.93	-1,746
Al3961_R	W	129,500	ug/L	2,489	1.922	143,500
As1891_A		25.05	ug/L	0.1395	0.5567	2.326
Au2427_A		3.763	ug/L	0.4542	12.07	81.68
B_2089_A		11.41	ug/L	0.1408	1.234	13.85
Ba4554_R		308.7	ug/L	5.565	1.803	23,790
Be3130_R		2.961	ug/L	0.06215	2.099	320.6
Ca3158_R		9,623	ug/L	140.0	1.455	16,610
Cd2265_A		1.489	ug/L	0.1586	10.65	136.5
Co2286_A		21.06	ug/L	0.03504	0.1664	115.2
Cr2677_A		140.3	ug/L	1.189	0.8472	3,104
Cu3273_A		44.09	ug/L	0.06731	0.1527	1,118
Fe2599_R	W	110,500	ug/L	1,793	1.622	176,600
K_7664_R		4,200	ug/L	27.12	0.6458	4,133
Li6707_R		69.51	ug/L	1.544	2.221	1,266
Mg2025_A		4,935	ug/L	2.637	0.05343	900.0
Mn2576_R		938.5	ug/L	20.03	2.135	7,788
Mo2020_A		2.150	ug/L	0.02927	1.361	6.237
Na5895_R		258.6	ug/L	4.619	1.786	1,073
Ni2316_A		46.91	ug/L	0.3882	0.8274	121.6
Pb2203_A		256.2	ug/L	0.08238	0.03216	302.2
Sb2068_A		-0.01210	ug/L	0.4652	3,846	1.094
Se1960_A		-3.194	ug/L	2.382	74.59	1.660
Si2516_R		2,768	ug/L	46.05	1.663	1,124
Sn1899_A		26.68	ug/L	0.1834	0.6874	13.08
Sr4215_R		66.70	ug/L	1.287	1.930	6,452
Ti3349_A		790.8	ug/L	3.598	0.4550	42,810
Tl1908_A		0.3704	ug/L	0.5288	142.8	-1.433
V_2924_A		257.5	ug/L	0.4254	0.1652	7,091
Zn2062_A		247.0	ug/L	1.340	0.5424	771.5
Y_3600_R		29,790	Cts/S	299.15	1.0042	29,790
Y_2243_A		10,623	Cts/S	5.3173	0.050052	10,623
Y_3600_A		413,800	Cts/S	482.57	0.11662	413,800

SI1804-007A

Method Name: K6010-2011 Method Revision: 1,728

SI1804-007A

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 4:59:16PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		522.5	ug/L	3.382	0.6472	19,370
Al3961_R	W	136,900	ug/L	2,569	1.877	147,200
As1891_A		540.9	ug/L	4.756	0.8792	169.6
Au2427_A		5.132	ug/L	0.5011	9.764	84.24
B_2089_A		542.1	ug/L	1.236	0.2281	585.8
Ba4554_R		818.0	ug/L	17.77	2.172	61,090
Be3130_R		529.7	ug/L	11.22	2.119	68,600
Ca3158_R		14,850	ug/L	339.8	2.288	24,860
Cd2265_A		522.2	ug/L	0.3370	0.06454	9,316
Co2286_A		555.2	ug/L	0.8016	0.1444	2,692
Cr2677_A		667.0	ug/L	5.532	0.8294	14,490
Cu3273_A		592.5	ug/L	3.548	0.5989	14,410
Fe2599_R	W	112,700	ug/L	2,360	2.094	174,700
K_7664_R		14,500	ug/L	264.5	1.824	13,960
Li6707_R		597.2	ug/L	14.76	2.471	10,340
Mg2025_A		10,500	ug/L	37.44	0.3565	1,915
Mn2576_R	W	1,429	ug/L	30.54	2.137	11,500
Mo2020_A		517.2	ug/L	4.890	0.9454	954.9
Na5895_R		5,889	ug/L	120.6	2.048	17,310
Ni2316_A		584.3	ug/L	1.626	0.2782	1,668
Pb2203_A		760.7	ug/L	0.3046	0.04004	917.3
Sb2068_A		520.6	ug/L	0.04225	0.008116	211.1
Se1960_A		521.2	ug/L	5.749	1.103	104.5
Si2516_R		2,844	ug/L	103.2	3.629	1,122
Sn1899_A		25.58	ug/L	0.9277	3.627	12.47
Sr4215_R		588.2	ug/L	12.10	2.057	55,390
Ti3349_A	W	1,310	ug/L	4.623	0.3530	70,120
Tl1908_A		535.4	ug/L	0.9163	0.1711	225.2
V_2924_A		799.3	ug/L	2.636	0.3298	21,560
Zn2062_A		788.4	ug/L	0.1416	0.01796	2,436
Y_3600_R		28,909	Cts/S	50.394	0.17432	28,909
Y_2243_A		10,510	Cts/S	12.301	0.11704	10,510
Y_3600_A		409,040	Cts/S	2,398.7	0.58642	409,040

SI1804-007L

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:03:54PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4248	ug/L	0.2527	59.49	-313.6
Al3961_R		123,200	ug/L	1,837	1.492	26,040
As1891_A		25.19	ug/L	1.796	7.131	0.007500
Au2427_A		-0.3410	ug/L	2.818	826.2	14.20
B_2089_A		13.63	ug/L	2.063	15.13	4.581
Ba4554_R		298.0	ug/L	5.672	1.903	4,410
Be3130_R		3.280	ug/L	0.1280	3.902	68.46
Ca3158_R		9,171	ug/L	100.1	1.092	3,022
Cd2265_A		1.845	ug/L	0.2827	15.32	27.93
Co2286_A		22.32	ug/L	0.5081	2.276	26.52
Cr2677_A		133.1	ug/L	2.155	1.618	597.3
Cu3273_A		43.11	ug/L	0.2454	0.5691	241.6
Fe2599_R		107,400	ug/L	1,600	1.490	32,740
K_7664_R		4,067	ug/L	202.9	4.990	728.7
Li6707_R		70.23	ug/L	3.219	4.584	266.5
Mg2025_A		5,060	ug/L	125.4	2.479	182.0
Mn2576_R		902.3	ug/L	17.34	1.921	1,425
Mo2020_A		12.52	ug/L	2.649	21.15	6.820

SI1804-007L

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:03:54PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		456.6	ug/L	10.20	2.234	548.1
Ni2316_A		47.59	ug/L	1.445	3.037	23.79
Pb2203_A		270.2	ug/L	6.809	2.520	61.77
Sb2068_A		9.739	ug/L	7.173	73.65	0.5578
Se1960_A		2.357	ug/L	6.820	289.3	1.136
Si2516_R		2,727	ug/L	83.37	3.058	222.1
Sn1899_A		24.75	ug/L	1.928	7.790	3.598
Sr4215_R		64.97	ug/L	0.4508	0.6939	1,180
Ti3349_A		733.8	ug/L	16.55	2.255	7,969
Tl1908_A		-2.349	ug/L	1.071	45.62	-0.3355
V_2924_A		243.4	ug/L	4.660	1.915	1,336
Zn2062_A		257.2	ug/L	7.130	2.772	157.6
Y_3600_R		28,406	Cts/S	371.19	1.3067	28,406
Y_2243_A		10,440	Cts/S	20.525	0.19660	10,440
Y_3600_A		415,900	Cts/S	4,106.4	0.98734	415,900

CCV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:08:38PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		496.4	ug/L	3.590	0.7232	19,590
Al3961_R		12,790	ug/L	346.6	2.711	12,790
As1891_A		488.4	ug/L	1.664	0.3408	151.8
Au2427_A		504.0	ug/L	22.00	4.366	2,293
B_2089_A		490.8	ug/L	0.7059	0.1438	512.7
Ba4554_R		519.9	ug/L	12.21	2.348	36,070
Be3130_R		502.1	ug/L	13.72	2.732	60,440
Ca3158_R		12,680	ug/L	321.2	2.532	19,720
Cd2265_A		485.6	ug/L	0.1005	0.02070	8,272
Co2286_A		498.1	ug/L	0.1680	0.03372	2,324
Cr2677_A		489.2	ug/L	6.002	1.227	10,470
Cu3273_A		492.8	ug/L	6.785	1.377	11,820
Fe2599_R		12,530	ug/L	300.1	2.396	18,060
K_7664_R		12,650	ug/L	200.7	1.587	11,300
Li6707_R		500.2	ug/L	11.79	2.356	8,043
Mg2025_A		12,800	ug/L	8.297	0.06485	2,243
Mn2576_R		506.6	ug/L	11.81	2.331	3,784
Mo2020_A		493.8	ug/L	2.626	0.5318	879.8
Na5895_R		12,640	ug/L	222.4	1.759	34,210
Ni2316_A		502.5	ug/L	0.3644	0.07251	1,394
Pb2203_A		492.9	ug/L	0.2477	0.05025	581.3
Sb2068_A		495.5	ug/L	1.352	0.2728	190.7
Se1960_A		487.6	ug/L	2.234	0.4581	93.10
Si2516_R		12,550	ug/L	300.2	2.391	4,580
Sn1899_A		503.6	ug/L	0.8302	0.1648	209.9
Sr4215_R		515.9	ug/L	13.38	2.594	45,110
Ti3349_A		496.9	ug/L	4.086	0.8223	26,250
Tl1908_A		496.5	ug/L	1.979	0.3987	203.1
V_2924_A		497.4	ug/L	4.347	0.8739	13,160
Zn2062_A		487.9	ug/L	0.4412	0.09044	1,454
Y_3600_R		26,852	Cts/S	623.79	2.3230	26,852
Y_2243_A		10,141	Cts/S	6.3619	0.062733	10,141
Y_3600_A		403,420	Cts/S	1,714.7	0.42504	403,420

CCB

Method Name: K6010-2011 Method Revision: 1,728

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:13:13PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2421	ug/L	0.1104	45.63	28.86
Al3961_R		4.942	ug/L	2.187	44.26	9.479
As1891_A		-1.459	ug/L	0.7788	53.37	-1.071
Au2427_A		1.477	ug/L	0.1395	9.442	9.700
B_2089_A		0.4692	ug/L	0.1696	36.15	2.175
Ba4554_R		0.5227	ug/L	0.1364	26.10	76.23
Be3130_R		0.1720	ug/L	0.01015	5.897	19.15
Ca3158_R		-12.66	ug/L	3.427	27.07	-15.04
Cd2265_A		0.1682	ug/L	0.03973	23.62	3.497
Co2286_A		0.2474	ug/L	0.2209	89.27	4.647
Cr2677_A		0.4234	ug/L	0.2264	53.47	15.60
Cu3273_A		0.06408	ug/L	0.006087	9.498	28.69
Fe2599_R		2.732	ug/L	1.648	60.34	27.41
K_7664_R		77.11	ug/L	14.99	19.44	29.27
Li6707_R		2.808	ug/L	1.347	47.95	74.14
Mg2025_A		-14.80	ug/L	5.158	34.86	-1.818
Mn2576_R		0.6638	ug/L	0.2607	39.27	2.241
Mo2020_A		1.282	ug/L	0.5799	45.22	4.555
Na5895_R		53.01	ug/L	4.543	8.570	429.2
Ni2316_A		-0.02918	ug/L	0.3250	1,114	-0.7928
Pb2203_A		-0.1245	ug/L	0.4013	322.3	-1.659
Sb2068_A		0.9547	ug/L	0.2258	23.65	-0.1444
Se1960_A		1.459	ug/L	0.3173	21.74	1.032
Si2516_R		1.614	ug/L	0.4194	25.99	14.01
Sn1899_A		-0.6592	ug/L	0.05119	7.765	1.198
Sr4215_R		0.2273	ug/L	0.1516	66.71	-1.444
Ti3349_A		0.5878	ug/L	0.1482	25.21	13.25
Tl1908_A		-0.3762	ug/L	0.8233	218.9	0.03523
V_2924_A		0.3311	ug/L	0.2014	60.83	-4.564
Zn2062_A		0.5243	ug/L	0.1386	26.44	1.260
Y_3600_R		27,750	Cts/S	143.78	0.51812	27,750
Y_2243_A		10,355	Cts/S	11.946	0.11536	10,355
Y_3600_A		413,610	Cts/S	3,446.6	0.83329	413,610

SI1804-007P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:17:59PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		44.77	ug/L	1.158	2.586	236.0
Al3961_R	W	177,200	ug/L	4,280	2.415	193,800
As1891_A		105.0	ug/L	2.466	2.349	28.89
Au2427_A		6.831	ug/L	0.001474	0.02158	89.23
B_2089_A		339.0	ug/L	0.3552	0.1048	362.8
Ba4554_R	W	2,105	ug/L	38.74	1.840	159,800
Be3130_R		47.23	ug/L	1.190	2.520	6,119
Ca3158_R		10,330	ug/L	235.7	2.281	17,600
Cd2265_A		211.3	ug/L	0.01497	0.007086	3,865
Co2286_A		455.3	ug/L	0.2160	0.04745	2,233
Cr2677_A		340.6	ug/L	0.1815	0.05328	7,513
Cu3273_A		269.3	ug/L	0.04361	0.01619	6,672
Fe2599_R	W	103,100	ug/L	2,591	2.512	162,600
K_7664_R		14,410	ug/L	261.8	1.817	14,100
Li6707_R		480.7	ug/L	8.628	1.795	8,465
Mg2025_A		10,380	ug/L	17.93	0.1728	1,905
Mn2576_R	W	1,225	ug/L	34.75	2.836	10,030
Mo2020_A		71.59	ug/L	0.5750	0.8032	135.3

SI1804-007P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:17:59PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		6,891	ug/L	105.5	1.532	20,550
Ni2316_A		493.2	ug/L	0.2596	0.05265	1,420
Pb2203_A		298.6	ug/L	0.8981	0.3007	345.7
Sb2068_A		23.89	ug/L	1.402	5.869	9.576
Se1960_A		75.19	ug/L	0.1822	0.2424	17.41
Si2516_R		2,999	ug/L	104.6	3.486	1,202
Sn1899_A		386.7	ug/L	1.254	0.3244	169.0
Sr4215_R		482.8	ug/L	9.859	2.042	46,230
Ti3349_A	W	1,227	ug/L	2.774	0.2261	66,570
Tl1908_A		98.80	ug/L	0.2227	0.2254	39.25
V_2924_A		721.2	ug/L	2.508	0.3477	19,820
Zn2062_A		671.9	ug/L	0.4947	0.07362	2,098
Y_3600_R		29,396	Cts/S	58.409	0.19869	29,396
Y_2243_A		10,617	Cts/S	5.5037	0.051841	10,617
Y_3600_A		414,660	Cts/S	559.88	0.13502	414,660

SI1804-007S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:22:37PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		44.59	ug/L	1.080	2.423	87.21
Al3961_R	W	179,700	ug/L	3,356	1.868	198,700
As1891_A		104.4	ug/L	1.020	0.9767	28.49
Au2427_A		7.580	ug/L	0.3962	5.227	97.25
B_2089_A		345.1	ug/L	0.3864	0.1120	372.4
Ba4554_R	W	2,125	ug/L	42.24	1.987	163,100
Be3130_R		47.56	ug/L	0.8016	1.685	6,248
Ca3158_R		10,490	ug/L	158.7	1.513	18,050
Cd2265_A		210.8	ug/L	0.09419	0.04468	3,897
Co2286_A		460.6	ug/L	0.5259	0.1142	2,274
Cr2677_A		339.8	ug/L	3.687	1.085	7,560
Cu3273_A		263.6	ug/L	2.867	1.088	6,588
Fe2599_R	W	112,400	ug/L	2,031	1.807	179,200
K_7664_R		14,420	ug/L	304.8	2.114	14,260
Li6707_R		511.3	ug/L	9.360	1.831	9,100
Mg2025_A		10,260	ug/L	2.964	0.02890	1,899
Mn2576_R	W	1,460	ug/L	17.50	1.199	12,080
Mo2020_A		72.83	ug/L	0.2064	0.2834	138.8
Na5895_R		6,904	ug/L	139.2	2.016	20,810
Ni2316_A		494.8	ug/L	0.9016	0.1822	1,435
Pb2203_A		250.7	ug/L	0.4902	0.1955	288.8
Sb2068_A		16.67	ug/L	0.08548	0.5129	6.730
Se1960_A		75.20	ug/L	3.993	5.309	17.66
Si2516_R		2,350	ug/L	12.39	0.5272	952.7
Sn1899_A		403.2	ug/L	0.5909	0.1466	177.7
Sr4215_R		514.6	ug/L	8.662	1.683	49,800
Ti3349_A	W	1,038	ug/L	8.734	0.8411	56,820
Tl1908_A		98.63	ug/L	1.110	1.125	39.35
V_2924_A		728.5	ug/L	8.252	1.133	20,180
Zn2062_A		633.4	ug/L	0.3892	0.06145	1,994
Y_3600_R		29,714	Cts/S	87.661	0.29502	29,714
Y_2243_A		10,704	Cts/S	6.4680	0.060427	10,704
Y_3600_A		418,160	Cts/S	3,556.7	0.85057	418,160

SI1804-007S

Method Name: K6010-2011 Method Revision: 1,728

SI1804-007S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:27:17PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		46.62	ug/L	0.8466	1.816	44.23
Al3961_R	W	187,300	ug/L	3,139	1.676	100,100
As1891_A		104.6	ug/L	0.009329	0.008918	13.63
Au2427_A		7.001	ug/L	0.3357	4.796	49.75
B_2089_A		359.5	ug/L	0.05288	0.01471	192.2
Ba4554_R	W	2,215	ug/L	44.86	2.025	82,210
Be3130_R		49.58	ug/L	0.7624	1.538	3,148
Ca3158_R		11,020	ug/L	120.9	1.097	9,171
Cd2265_A		221.3	ug/L	0.6091	0.2752	2,020
Co2286_A		485.7	ug/L	1.023	0.2106	1,185
Cr2677_A		354.2	ug/L	0.4845	0.1368	3,904
Cu3273_A		274.6	ug/L	0.6354	0.2314	3,410
Fe2599_R	W	118,800	ug/L	1,622	1.365	91,580
K_7664_R		14,960	ug/L	208.0	1.391	7,132
Li6707_R		531.9	ug/L	10.92	2.052	4,590
Mg2025_A		10,820	ug/L	8.342	0.07712	988.6
Mn2576_R		1,534	ug/L	20.50	1.336	6,135
Mo2020_A		76.49	ug/L	0.4136	0.5407	73.00
Na5895_R		7,203	ug/L	90.34	1.254	10,630
Ni2316_A		521.9	ug/L	0.7701	0.1476	746.6
Pb2203_A		265.3	ug/L	0.2467	0.09298	150.4
Sb2068_A		21.06	ug/L	2.397	11.38	3.952
Se1960_A		72.57	ug/L	0.1612	0.2221	8.881
Si2516_R		2,166	ug/L	13.00	0.6002	431.3
Sn1899_A		423.1	ug/L	0.2630	0.06216	92.71
Sr4215_R		538.5	ug/L	11.17	2.074	25,190
Ti3349_A		1,065	ug/L	8.972	0.8423	28,840
Tl1908_A		103.9	ug/L	0.4727	0.4550	20.57
V_2924_A		757.0	ug/L	4.867	0.6429	10,380
Zn2062_A		664.6	ug/L	0.8698	0.1309	1,032
Y_3600_R		28,727	Cts/S	505.40	1.7593	28,727
Y_2243_A		10,563	Cts/S	13.639	0.12912	10,563
Y_3600_A		414,000	Cts/S	1,595.9	0.38548	414,000

SI1804-008

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:31:58PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1235	ug/L	1.142	924.5	-1,429
Al3961_R	W	108,400	ug/L	1,720	1.588	116,100
As1891_A		25.83	ug/L	0.5508	2.132	3.400
Au2427_A		4.434	ug/L	0.1043	2.353	72.36
B_2089_A		12.98	ug/L	1.133	8.727	15.40
Ba4554_R		260.6	ug/L	2.895	1.111	19,410
Be3130_R		2.649	ug/L	0.05188	1.958	270.0
Ca3158_R		7,179	ug/L	88.58	1.234	11,980
Cd2265_A		1.739	ug/L	0.1511	8.686	122.4
Co2286_A		18.53	ug/L	0.03172	0.1712	102.2
Cr2677_A		120.8	ug/L	0.7581	0.6275	2,669
Cu3273_A		34.48	ug/L	0.09139	0.2650	877.4
Fe2599_R	W	92,730	ug/L	1,285	1.386	143,200
K_7664_R		3,877	ug/L	41.20	1.063	3,684
Li6707_R		55.79	ug/L	0.6059	1.086	987.4
Mg2025_A		4,354	ug/L	7.321	0.1681	787.9
Mn2576_R	W	1,025	ug/L	14.01	1.367	8,221
Mo2020_A		2.262	ug/L	0.2079	9.189	6.407

SI1804-008

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:31:58PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		223.6	ug/L	1.052	0.4707	936.3
Ni2316_A		40.75	ug/L	0.3514	0.8623	105.1
Pb2203_A		203.0	ug/L	1.373	0.6764	236.7
Sb2068_A		0.2409	ug/L	1.153	478.8	0.8085
Se1960_A		-0.4247	ug/L	0.4851	114.2	1.968
Si2516_R		2,867	ug/L	37.81	1.319	1,126
Sn1899_A		55.41	ug/L	0.06155	0.1111	25.34
Sr4215_R		51.82	ug/L	0.7865	1.518	4,839
Ti3349_A		781.8	ug/L	11.01	1.409	42,240
Tl1908_A		1.847	ug/L	0.7883	42.67	-0.7875
V_2924_A		218.5	ug/L	2.286	1.046	6,004
Zn2062_A		218.4	ug/L	0.3896	0.1784	676.7
Y_3600_R		28,793	Cts/S	471.35	1.6370	28,793
Y_2243_A		10,541	Cts/S	18.214	0.17279	10,541
Y_3600_A		413,050	Cts/S	4,477.5	1.0840	413,050

SI1804-008A

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:36:40PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		529.4	ug/L	2.880	0.5441	20,150
Al3961_R	W	115,000	ug/L	2,402	2.089	123,200
As1891_A		555.5	ug/L	5.646	1.016	173.3
Au2427_A		6.083	ug/L	0.6704	11.02	76.01
B_2089_A		556.4	ug/L	1.406	0.2528	595.2
Ba4554_R		781.1	ug/L	15.69	2.008	58,130
Be3130_R		546.0	ug/L	11.85	2.171	70,460
Ca3158_R		12,550	ug/L	284.3	2.266	20,930
Cd2265_A		539.4	ug/L	1.165	0.2160	9,501
Co2286_A		570.3	ug/L	1.270	0.2226	2,736
Cr2677_A		654.8	ug/L	2.181	0.3331	14,390
Cu3273_A		591.0	ug/L	3.642	0.6163	14,530
Fe2599_R	W	94,840	ug/L	2,200	2.320	146,500
K_7664_R		14,320	ug/L	333.5	2.329	13,740
Li6707_R		596.4	ug/L	11.18	1.875	10,280
Mg2025_A		10,070	ug/L	12.19	0.1210	1,818
Mn2576_R	W	1,522	ug/L	35.67	2.344	12,210
Mo2020_A		537.5	ug/L	5.201	0.9676	982.1
Na5895_R		5,952	ug/L	116.5	1.958	17,430
Ni2316_A		599.7	ug/L	1.222	0.2037	1,697
Pb2203_A		723.9	ug/L	2.615	0.3612	865.5
Sb2068_A		538.9	ug/L	3.766	0.6988	215.8
Se1960_A		536.8	ug/L	2.168	0.4039	106.2
Si2516_R		2,997	ug/L	77.99	2.602	1,179
Sn1899_A		53.45	ug/L	0.1687	0.3155	24.17
Sr4215_R		592.1	ug/L	10.81	1.826	55,560
Ti3349_A	W	1,301	ug/L	5.753	0.4423	70,450
Tl1908_A		556.6	ug/L	0.3333	0.05989	231.8
V_2924_A		765.7	ug/L	4.433	0.5789	20,880
Zn2062_A		784.7	ug/L	2.064	0.2631	2,399
Y_3600_R		28,807	Cts/S	104.55	0.36292	28,807
Y_2243_A		10,401	Cts/S	4.5508	0.043755	10,401
Y_3600_A		413,720	Cts/S	1,331.4	0.32181	413,720

SI1804-008L

Method Name: K6010-2011 Method Revision: 1,728

SI1804-008L

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:41:18PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		1.996	ug/L	0.4564	22.87	-271.2
Al3961_R		111,500	ug/L	1,965	1.763	23,380
As1891_A		28.01	ug/L	12.90	46.06	0.2762
Au2427_A		0.4539	ug/L	1.977	435.5	13.40
B_2089_A		16.76	ug/L	1.036	6.178	5.193
Ba4554_R		269.6	ug/L	7.207	2.673	3,961
Be3130_R		3.153	ug/L	0.2878	9.126	63.40
Ca3158_R		7,441	ug/L	149.7	2.012	2,433
Cd2265_A		2.081	ug/L	0.02275	1.093	26.76
Co2286_A		21.21	ug/L	0.3631	1.712	25.52
Cr2677_A		125.3	ug/L	0.4404	0.3516	563.1
Cu3273_A		35.56	ug/L	0.8684	2.442	204.0
Fe2599_R		97,790	ug/L	1,886	1.929	29,570
K_7664_R		3,957	ug/L	47.25	1.194	701.9
Li6707_R		66.02	ug/L	4.320	6.544	250.1
Mg2025_A		4,618	ug/L	36.17	0.7831	165.4
Mn2576_R		1,070	ug/L	15.88	1.484	1,677
Mo2020_A		10.28	ug/L	2.567	24.98	5.969
Na5895_R		360.4	ug/L	3.993	1.108	489.4
Ni2316_A		42.16	ug/L	0.4183	0.9923	20.82
Pb2203_A		223.8	ug/L	3.987	1.782	50.47
Sb2068_A		12.54	ug/L	3.795	30.26	0.7276
Se1960_A		12.72	ug/L	17.97	141.3	1.510
Si2516_R		3,145	ug/L	54.52	1.734	252.4
Sn1899_A		54.87	ug/L	0.4556	0.8303	6.135
Sr4215_R		53.92	ug/L	0.5498	1.020	967.7
Ti3349_A		802.5	ug/L	1.766	0.2201	8,730
Tl1908_A		-1.124	ug/L	2.997	266.6	-0.2627
V_2924_A		226.2	ug/L	0.04746	0.02098	1,243
Zn2062_A		231.9	ug/L	0.5611	0.2419	141.4
Y_3600_R		28,173	Cts/S	97.996	0.34783	28,173
Y_2243_A		10,390	Cts/S	14.364	0.13826	10,390
Y_3600_A		416,430	Cts/S	1,334.2	0.32038	416,430

SI1804-008P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:46:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	^	0.0000	ug/L	0.0000	0.0000	-1,390
Al3961_R	W	146,500	ug/L	2,476	1.690	158,400
As1891_A		329.7	ug/L	4.371	1.326	86.98
Au2427_A		10.93	ug/L	1.940	17.76	260.7
B_2089_A		369.8	ug/L	1.232	0.3331	383.9
Ba4554_R	W	2,094	ug/L	32.01	1.528	157,100
Be3130_R		57.43	ug/L	0.8346	1.453	7,414
Ca3158_R		9,490	ug/L	155.2	1.635	15,970
Cd2265_A		218.9	ug/L	0.1787	0.08164	4,133
Co2286_A		504.2	ug/L	0.5719	0.1134	2,388
Cr2677_A		384.6	ug/L	3.655	0.9504	8,372
Cu3273_A		292.2	ug/L	0.9512	0.3256	7,062
Fe2599_R	F	368,900	ug/L	13,100	3.551	574,800
K_7664_R		13,630	ug/L	205.9	1.511	13,180
Li6707_R		510.7	ug/L	6.517	1.276	8,889
Mg2025_A		9,395	ug/L	13.17	0.1401	1,677
Mn2576_R	W	1,772	ug/L	26.06	1.470	14,350
Mo2020_A		84.82	ug/L	0.3360	0.3962	155.1

SI1804-008P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:46:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		7,048	ug/L	94.00	1.334	20,760
Ni2316_A		542.4	ug/L	1.763	0.3251	1,483
Pb2203_A		405.2	ug/L	0.7911	0.1953	488.6
Sb2068_A		19.98	ug/L	0.9309	4.658	9.968
Se1960_A		76.27	ug/L	4.398	5.767	18.60
Si2516_R		2,774	ug/L	66.82	2.409	1,079
Sn1899_A		432.8	ug/L	2.185	0.5050	183.3
Sr4215_R		516.8	ug/L	7.924	1.533	48,900
Ti3349_A		856.4	ug/L	10.41	1.215	45,640
Tl1908_A		100.7	ug/L	0.8308	0.8249	38.52
V_2924_A		780.5	ug/L	6.381	0.8175	21,150
Zn2062_A	W	1,175	ug/L	1.965	0.1672	3,559
Y_3600_R		29,057	Cts/S	210.82	0.72553	29,057
Y_2243_A		10,295	Cts/S	14.748	0.14325	10,295
Y_3600_A		407,300	Cts/S	3,925.5	0.96377	407,300

SI1804-008S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:50:44PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		46.14	ug/L	0.8735	1.893	376.4
Al3961_R	W	149,700	ug/L	3,140	2.098	162,200
As1891_A		107.2	ug/L	0.08101	0.07559	29.63
Au2427_A		6.635	ug/L	0.6084	9.170	84.39
B_2089_A		392.2	ug/L	0.01250	0.003187	416.2
Ba4554_R	W	2,133	ug/L	41.97	1.968	160,500
Be3130_R		48.27	ug/L	0.7295	1.511	6,217
Ca3158_R		9,371	ug/L	131.6	1.404	15,810
Cd2265_A		218.2	ug/L	0.1811	0.08299	3,951
Co2286_A		472.3	ug/L	0.6018	0.1274	2,295
Cr2677_A		320.7	ug/L	3.101	0.9670	7,056
Cu3273_A		270.8	ug/L	2.896	1.070	6,686
Fe2599_R	W	97,780	ug/L	1,755	1.795	152,800
K_7664_R		13,950	ug/L	308.3	2.209	13,530
Li6707_R		506.4	ug/L	13.31	2.628	8,838
Mg2025_A		9,624	ug/L	10.76	0.1118	1,755
Mn2576_R	W	1,202	ug/L	20.59	1.714	9,751
Mo2020_A		81.01	ug/L	0.8604	1.062	151.7
Na5895_R		7,006	ug/L	146.5	2.092	20,700
Ni2316_A		507.3	ug/L	0.7467	0.1472	1,450
Pb2203_A		272.1	ug/L	1.986	0.7298	314.8
Sb2068_A		26.93	ug/L	0.09008	0.3345	10.34
Se1960_A		82.31	ug/L	2.132	2.590	18.48
Si2516_R		2,859	ug/L	50.45	1.764	1,136
Sn1899_A		434.6	ug/L	1.762	0.4055	188.3
Sr4215_R		519.3	ug/L	9.329	1.797	49,270
Ti3349_A	W	1,051	ug/L	9.732	0.9256	56,900
Tl1908_A		101.4	ug/L	0.1708	0.1685	40.17
V_2924_A		699.6	ug/L	8.858	1.266	19,170
Zn2062_A		666.1	ug/L	1.162	0.1745	2,063
Y_3600_R		29,137	Cts/S	143.57	0.49276	29,137
Y_2243_A		10,533	Cts/S	21.746	0.20647	10,533
Y_3600_A		413,570	Cts/S	3,620.4	0.87539	413,570

SI1847-004

Method Name: K6010-2011 Method Revision: 1,728

SI1847-004

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 5:55:24PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.4106	ug/L	0.5113	124.5	24.34
Al3961_R		57.44	ug/L	9.281	16.16	119.3
As1891_A		3.831	ug/L	5.621	146.7	0.002442
Au2427_A		12.56	ug/L	0.9044	7.202	11.03
B_2089_A		166.1	ug/L	0.3916	0.2358	78.98
Ba4554_R		7.992	ug/L	0.2189	2.739	317.4
Be3130_R		0.04283	ug/L	0.07023	164.0	0.2145
Ca3158_R	W	464,500	ug/L	22,970	4.946	364,100
Cd2265_A		0.1580	ug/L	0.01771	11.21	1.780
Co2286_A		1.880	ug/L	0.1426	7.588	7.185
Cr2677_A		1.220	ug/L	0.2954	24.21	22.80
Cu3273_A		8.105	ug/L	0.2954	3.644	114.7
Fe2599_R		68.37	ug/L	9.365	13.70	72.49
K_7664_R		5,341	ug/L	44.08	0.8254	2,374
Li6707_R		166.3	ug/L	0.7750	0.4659	1,372
Mg2025_A	W	272,700	ug/L	283.6	0.1040	21,850
Mn2576_R	W	4,504	ug/L	65.43	1.453	16,980
Mo2020_A		-1.313	ug/L	0.2127	16.20	0.9615
Na5895_R	W	70,160	ug/L	853.0	1.216	95,250
Ni2316_A		13.55	ug/L	0.4550	3.359	16.70
Pb2203_A		0.2333	ug/L	1.344	576.1	-1.233
Sb2068_A		8.808	ug/L	1.230	13.96	1.100
Se1960_A		0.8582	ug/L	0.4136	48.20	0.9436
Si2516_R		4,032	ug/L	29.31	0.7269	753.0
Sn1899_A		0.1191	ug/L	0.5721	480.5	1.357
Sr4215_R		1,533	ug/L	19.09	1.245	67,650
Ti3349_A		4.021	ug/L	0.2931	7.290	81.71
Tl1908_A		5.622	ug/L	0.03858	0.6862	-0.6326
V_2924_A		0.2156	ug/L	0.2829	131.2	-27.38
Zn2062_A		32.10	ug/L	0.4056	1.263	43.89
Y_3600_R		27,087	Cts/S	450.74	1.6640	27,087
Y_2243_A		9,357.1	Cts/S	1.0825	0.011569	9,357.1
Y_3600_A		374,870	Cts/S	1,779.6	0.47472	374,870

SI1968-009

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:00:15PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3742	ug/L	0.5442	145.4	-886.5
Al3961_R	W	36,270	ug/L	1,063	2.932	37,530
As1891_A		17.99	ug/L	0.9556	5.312	2.008
Au2427_A		1.413	ug/L	0.8866	62.72	38.50
B_2089_A		125.4	ug/L	0.5859	0.4671	121.2
Ba4554_R		128.8	ug/L	3.222	2.501	9,247
Be3130_R		2.322	ug/L	0.03789	1.632	137.8
Ca3158_R	W	475,100	ug/L	15,290	3.219	761,700
Cd2265_A		0.3016	ug/L	0.08554	28.37	62.70
Co2286_A		14.86	ug/L	0.2592	1.745	87.30
Cr2677_A		108.0	ug/L	0.5955	0.5512	2,167
Cu3273_A		141.9	ug/L	0.1235	0.08705	3,165
Fe2599_R	W	64,020	ug/L	1,889	2.950	95,050
K_7664_R		12,820	ug/L	326.2	2.544	11,810
Li6707_R		79.63	ug/L	3.277	4.116	1,344
Mg2025_A	W	29,760	ug/L	6.311	0.02121	4,862
Mn2576_R		748.7	ug/L	21.99	2.938	5,771
Mo2020_A		12.81	ug/L	0.2106	1.644	23.45

SI1968-009

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:00:15PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	81,640	ug/L	1,859	2.277	226,200
Ni2316_A		50.01	ug/L	0.3210	0.6419	122.6
Pb2203_A		116.2	ug/L	0.4014	0.3454	127.0
Sb2068_A		3.640	ug/L	0.1159	3.184	1.547
Se1960_A		-0.04705	ug/L	0.4087	868.8	1.293
Si2516_R		2,426	ug/L	110.3	4.548	919.5
Sn1899_A		36.01	ug/L	0.4800	1.333	15.37
Sr4215_R	W	3,558	ug/L	68.81	1.934	320,900
Ti3349_A	W	1,682	ug/L	11.96	0.7110	82,630
Tl1908_A		3.051	ug/L	0.1841	6.035	-0.2282
V_2924_A		119.6	ug/L	0.5103	0.4266	3,014
Zn2062_A		417.7	ug/L	0.2046	0.04897	1,172
Y_3600_R		27,685	Cts/S	99.322	0.35875	27,685
Y_2243_A		9,536.4	Cts/S	3.3525	0.035155	9,536.4
Y_3600_A		375,500	Cts/S	286.97	0.076423	375,500

CCV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:05:05PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		502.3	ug/L	1.492	0.2970	19,650
Al3961_R		12,130	ug/L	67.38	0.5556	12,470
As1891_A		489.5	ug/L	4.406	0.9001	151.9
Au2427_A		502.3	ug/L	19.00	3.782	2,281
B_2089_A		489.8	ug/L	0.9036	0.1845	510.9
Ba4554_R		492.0	ug/L	5.955	1.210	35,070
Be3130_R	W	472.5	ug/L	5.273	1.116	58,440
Ca3158_R		12,120	ug/L	168.2	1.388	19,360
Cd2265_A		485.7	ug/L	1.539	0.3169	8,260
Co2286_A		497.7	ug/L	0.6748	0.1356	2,318
Cr2677_A		494.7	ug/L	2.332	0.4714	10,490
Cu3273_A		499.9	ug/L	0.9485	0.1897	11,880
Fe2599_R	W	11,820	ug/L	172.1	1.456	17,510
K_7664_R		12,060	ug/L	197.2	1.634	11,070
Li6707_R		475.7	ug/L	9.220	1.938	7,861
Mg2025_A		12,760	ug/L	17.36	0.1360	2,233
Mn2576_R		478.1	ug/L	5.794	1.212	3,669
Mo2020_A		492.8	ug/L	4.134	0.8388	876.7
Na5895_R		12,050	ug/L	157.3	1.305	33,500
Ni2316_A		502.8	ug/L	0.7177	0.1428	1,393
Pb2203_A		493.4	ug/L	0.7589	0.1538	581.0
Sb2068_A		496.6	ug/L	2.215	0.4461	190.8
Se1960_A		485.7	ug/L	3.757	0.7736	92.58
Si2516_R	W	11,810	ug/L	161.9	1.371	4,427
Sn1899_A		502.3	ug/L	0.1270	0.02528	209.0
Sr4215_R		490.5	ug/L	5.927	1.208	44,060
Ti3349_A		504.8	ug/L	0.8861	0.1755	26,420
Tl1908_A		496.4	ug/L	2.263	0.4558	202.7
V_2924_A		499.2	ug/L	0.9832	0.1970	13,090
Zn2062_A		488.6	ug/L	1.551	0.3173	1,454
Y_3600_R		27,580	Cts/S	9.3871	0.034036	27,580
Y_2243_A		10,124	Cts/S	19.205	0.18970	10,124
Y_3600_A		399,660	Cts/S	1,205.5	0.30163	399,660

CCB

Method Name: K6010-2011 Method Revision: 1,728

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:09:41PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3233	ug/L	0.09522	29.45	32.24
Al3961_R		-7.544	ug/L	4.377	58.02	-3.402
As1891_A		-0.3529	ug/L	0.3215	91.10	-0.7161
Au2427_A		2.663	ug/L	0.3835	14.40	15.15
B_2089_A		0.4736	ug/L	0.1551	32.74	2.162
Ba4554_R		0.4156	ug/L	0.003474	0.8360	68.26
Be3130_R		0.1985	ug/L	0.004895	2.466	22.33
Ca3158_R		-2.713	ug/L	7.343	270.6	0.9315
Cd2265_A		0.2066	ug/L	0.004299	2.080	4.152
Co2286_A		0.1403	ug/L	0.1587	113.1	4.128
Cr2677_A		0.2951	ug/L	0.08531	28.91	12.78
Cu3273_A		0.5436	ug/L	0.008736	1.607	40.48
Fe2599_R		1.871	ug/L	6.594	352.5	26.01
K_7664_R		62.21	ug/L	8.899	14.30	15.35
Li6707_R		3.310	ug/L	0.5847	17.67	81.99
Mg2025_A		-15.52	ug/L	0.2138	1.378	-1.945
Mn2576_R		0.6216	ug/L	0.3497	56.26	1.899
Mo2020_A		0.8944	ug/L	0.3266	36.52	3.840
Na5895_R		44.76	ug/L	0.9804	2.190	404.4
Ni2316_A		0.2050	ug/L	0.1210	59.02	-0.1283
Pb2203_A		-0.4471	ug/L	0.2464	55.12	-2.040
Sb2068_A		1.713	ug/L	1.561	91.14	0.1552
Se1960_A		2.152	ug/L	1.058	49.18	1.162
Si2516_R		6.844	ug/L	9.189	134.3	15.90
Sn1899_A		-0.8284	ug/L	0.2778	33.54	1.124
Sr4215_R		0.1619	ug/L	0.1675	103.4	-7.341
Ti3349_A		0.5403	ug/L	0.2517	46.59	10.65
Tl1908_A		0.7935	ug/L	0.03280	4.134	0.5277
V_2924_A		0.1790	ug/L	0.05809	32.44	-8.676
Zn2062_A		0.4167	ug/L	0.04581	10.99	0.9301
Y_3600_R		27,620	Cts/S	53.539	0.19384	27,620
Y_2243_A		10,326	Cts/S	22.141	0.21442	10,326
Y_3600_A		413,860	Cts/S	1,113.8	0.26911	413,860

SI1994-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:14:28PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		6.228	ug/L	0.2978	4.782	-41.67
Al3961_R		6,563	ug/L	97.87	1.491	6,815
As1891_A		9.730	ug/L	0.09751	1.002	1.572
Au2427_A		1.929	ug/L	0.2161	11.20	22.04
B_2089_A		12.37	ug/L	0.2468	1.996	14.63
Ba4554_R		391.9	ug/L	7.427	1.895	28,240
Be3130_R		0.4019	ug/L	0.007871	1.958	15.26
Ca3158_R		14,150	ug/L	294.8	2.083	22,850
Cd2265_A		1.788	ug/L	0.02830	1.583	50.92
Co2286_A		3.725	ug/L	0.1839	4.936	25.54
Cr2677_A		55.87	ug/L	0.04106	0.07349	1,220
Cu3273_A		791.8	ug/L	1.432	0.1808	19,210
Fe2599_R		20,100	ug/L	415.5	2.067	30,060
K_7664_R		3,815	ug/L	92.95	2.436	3,509
Li6707_R		10.08	ug/L	0.7271	7.216	195.3
Mg2025_A		6,460	ug/L	9.963	0.1542	1,143
Mn2576_R		216.2	ug/L	3.011	1.393	1,676
Mo2020_A		8.522	ug/L	0.1232	1.445	17.64

SI1994-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:14:28PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		3,509	ug/L	73.32	2.089	10,060
Ni2316_A		20.86	ug/L	0.2634	1.263	55.74
Pb2203_A		51.13	ug/L	0.8394	1.642	60.69
Sb2068_A		6.986	ug/L	0.3357	4.806	2.189
Se1960_A		6.761	ug/L	1.107	16.38	2.228
Si2516_R		1,491	ug/L	3.403	0.2283	575.3
Sn1899_A		66.28	ug/L	0.7581	1.144	29.38
Sr4215_R		110.9	ug/L	1.531	1.380	10,060
Ti3349_A		367.5	ug/L	3.636	0.9895	19,630
Tl1908_A		-1.457	ug/L	0.6767	46.46	-0.7956
V_2924_A		16.08	ug/L	0.06647	0.4135	431.5
Zn2062_A	W	1,115	ug/L	1.267	0.1136	3,385
Y_3600_R		27,877	Cts/S	293.65	1.0534	27,877
Y_2243_A		10,318	Cts/S	4.3816	0.042464	10,318
Y_3600_A		408,560	Cts/S	1,015.7	0.24861	408,560

LCSWID02ICW1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:19:12PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.15	ug/L	0.6716	1.288	2,088
Al3961_R		1,993	ug/L	74.83	3.754	2,070
As1891_A		99.01	ug/L	2.706	2.734	30.92
Au2427_A		1.917	ug/L	0.3002	15.66	8.006
B_2089_A		492.8	ug/L	0.002526	0.0005130	511.5
Ba4554_R		1,912	ug/L	105.8	5.532	137,300
Be3130_R		48.23	ug/L	1.818	3.770	5,978
Ca3158_R		2,450	ug/L	103.7	4.234	3,950
Cd2265_A		245.1	ug/L	0.2096	0.08553	4,245
Co2286_A		517.1	ug/L	0.6869	0.1328	2,456
Cr2677_A		205.4	ug/L	2.804	1.365	4,427
Cu3273_A		257.5	ug/L	1.837	0.7136	6,226
Fe2599_R		952.7	ug/L	36.05	3.784	1,444
K_7664_R		9,545	ug/L	309.5	3.243	8,825
Li6707_R		479.1	ug/L	18.21	3.801	7,983
Mg2025_A		5,336	ug/L	7.603	0.1425	963.3
Mn2576_R		489.2	ug/L	22.54	4.607	3,785
Mo2020_A	W	82.69	ug/L	3.385	4.094	151.7
Na5895_R		7,279	ug/L	261.4	3.591	20,520
Ni2316_A		528.1	ug/L	1.578	0.2989	1,493
Pb2203_A		99.87	ug/L	0.1641	0.1643	118.8
Sb2068_A		102.9	ug/L	1.974	1.918	38.33
Se1960_A		95.90	ug/L	0.5758	0.6004	19.26
Si2516_R		928.8	ug/L	49.53	5.333	363.8
Sn1899_A		489.3	ug/L	7.585	1.550	207.7
Sr4215_R		491.5	ug/L	17.51	3.563	44,520
Ti3349_A		499.0	ug/L	1.336	0.2677	26,500
Tl1908_A		107.7	ug/L	1.419	1.317	43.20
V_2924_A		513.8	ug/L	5.006	0.9743	13,780
Zn2062_A		510.3	ug/L	0.2521	0.04941	1,549
Y_3600_R		27,826	Cts/S	667.76	2.3998	27,826
Y_2243_A		10,324	Cts/S	36.239	0.35100	10,324
Y_3600_A		406,010	Cts/S	4,838.8	1.1918	406,010

PBWID02ICW1

Method Name: K6010-2011 Method Revision: 1,728

PBWID02ICW1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:23:52PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1070	ug/L	0.05532	51.70	14.73
Al3961_R		-10.78	ug/L	4.048	37.55	-6.808
As1891_A		0.2160	ug/L	1.821	842.8	-0.5423
Au2427_A		-0.08513	ug/L	0.4394	516.2	2.488
B_2089_A		0.1594	ug/L	0.1622	101.8	1.861
Ba4554_R		1.139	ug/L	0.01982	1.740	121.1
Be3130_R		0.02283	ug/L	0.01065	46.63	0.5751
Ca3158_R		-13.65	ug/L	6.615	48.46	-16.71
Cd2265_A		0.06430	ug/L	0.009470	14.73	1.702
Co2286_A		0.1633	ug/L	0.04739	29.02	4.298
Cr2677_A		0.04665	ug/L	0.1061	227.5	7.291
Cu3273_A		0.8342	ug/L	0.2045	24.52	47.34
Fe2599_R		-7.721	ug/L	1.532	19.84	11.92
K_7664_R		23.28	ug/L	20.55	88.26	-20.72
Li6707_R		1.325	ug/L	0.3537	26.69	49.78
Mg2025_A		-16.58	ug/L	3.088	18.62	-2.164
Mn2576_R		0.4473	ug/L	0.3630	81.17	0.5591
Mo2020_A		0.7895	ug/L	0.3229	40.90	3.704
Na5895_R		35.90	ug/L	3.155	8.789	383.8
Ni2316_A		0.1786	ug/L	0.1264	70.76	-0.2059
Pb2203_A		0.3720	ug/L	0.009020	2.425	-1.067
Sb2068_A		-0.4991	ug/L	0.7869	157.7	-0.7398
Se1960_A		0.1146	ug/L	2.313	2,018	0.7810
Si2516_R		-10.27	ug/L	0.7977	7.770	9.588
Sn1899_A		1.986	ug/L	0.3841	19.34	2.343
Sr4215_R		0.08917	ug/L	0.06902	77.40	-14.06
Ti3349_A		0.5273	ug/L	0.02375	4.504	9.863
Tl1908_A		-0.1682	ug/L	0.02958	17.59	0.1239
V_2924_A		0.5394	ug/L	0.0006930	0.1284	1.239
Zn2062_A		0.4668	ug/L	0.02763	5.919	1.099
Y_3600_R		27,898	Cts/S	130.36	0.46729	27,898
Y_2243_A		10,477	Cts/S	17.399	0.16607	10,477
Y_3600_A		411,580	Cts/S	1,742.4	0.42335	411,580

SI2011-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:28:40PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3463	ug/L	0.4642	134.0	4.025
Al3961_R		-9.078	ug/L	7.646	84.23	-4.847
As1891_A		1.617	ug/L	0.08573	5.303	-0.08874
Au2427_A		-1.147	ug/L	1.156	100.8	-2.375
B_2089_A		21.17	ug/L	0.2229	1.053	22.50
Ba4554_R		0.9708	ug/L	0.1096	11.29	106.9
Be3130_R		-0.02814	ug/L	0.02814	100.0	-5.686
Ca3158_R		108.5	ug/L	4.202	3.874	177.1
Cd2265_A		0.03600	ug/L	0.01483	41.19	1.181
Co2286_A		0.6603	ug/L	0.07228	10.95	6.318
Cr2677_A		-0.1243	ug/L	0.002158	1.736	3.359
Cu3273_A		28.14	ug/L	0.1935	0.6877	670.8
Fe2599_R		38.06	ug/L	2.876	7.557	78.88
K_7664_R		143.4	ug/L	13.05	9.101	89.30
Li6707_R		6.849	ug/L	1.236	18.05	138.8
Mg2025_A		265.4	ug/L	1.807	0.6807	45.87
Mn2576_R		5.784	ug/L	0.2614	4.520	41.22
Mo2020_A		-0.1755	ug/L	0.2195	125.1	1.827

SI2011-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:28:40PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	110,700	ug/L	2,972	2.684	303,000
Ni2316_A		0.6533	ug/L	0.09987	15.29	1.086
Pb2203_A		-0.02987	ug/L	0.2213	740.9	-1.467
Sb2068_A		0.1556	ug/L	0.1185	76.14	-0.4508
Se1960_A		1.478	ug/L	1.831	123.9	0.9924
Si2516_R		2,797	ug/L	116.8	4.178	1,050
Sn1899_A		0.1599	ug/L	0.8636	540.1	1.479
Sr4215_R		0.3882	ug/L	0.1041	26.82	12.80
Ti3349_A		0.03718	ug/L	0.03605	96.95	-15.59
Tl1908_A		-0.6513	ug/L	0.3847	59.07	-0.08094
V_2924_A		0.3353	ug/L	0.1417	42.25	-3.927
Zn2062_A		40.26	ug/L	0.06474	0.1608	117.2
Y_3600_R		27,357	Cts/S	498.72	1.8230	27,357
Y_2243_A		9,914.4	Cts/S	8.4755	0.085486	9,914.4
Y_3600_A		386,600	Cts/S	508.47	0.13153	386,600

SI2011-001A

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:33:30PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		515.0	ug/L	1.705	0.3311	19,940
Al3961_R		11,210	ug/L	358.7	3.201	11,550
As1891_A		558.7	ug/L	0.3376	0.06042	173.6
Au2427_A		1.751	ug/L	0.3448	19.69	9.125
B_2089_A		584.3	ug/L	0.2968	0.05080	605.6
Ba4554_R		543.7	ug/L	21.98	4.043	38,850
Be3130_R		552.8	ug/L	15.07	2.725	68,560
Ca3158_R		6,154	ug/L	141.9	2.306	9,862
Cd2265_A		554.8	ug/L	0.1576	0.02841	9,416
Co2286_A		572.2	ug/L	0.3823	0.06682	2,661
Cr2677_A		564.6	ug/L	1.378	0.2441	11,790
Cu3273_A		587.6	ug/L	0.5893	0.1003	13,750
Fe2599_R		5,528	ug/L	163.5	2.957	8,222
K_7664_R		11,160	ug/L	299.6	2.683	10,270
Li6707_R		573.6	ug/L	15.82	2.759	9,499
Mg2025_A		6,379	ug/L	2.711	0.04250	1,128
Mn2576_R		572.5	ug/L	13.73	2.398	4,406
Mo2020_A		495.2	ug/L	18.64	3.765	879.8
Na5895_R	W	110,900	ug/L	5,239	4.725	306,800
Ni2316_A		596.8	ug/L	0.2661	0.04459	1,653
Pb2203_A		540.3	ug/L	0.5646	0.1045	635.4
Sb2068_A		561.5	ug/L	1.109	0.1975	217.5
Se1960_A		549.1	ug/L	7.828	1.426	104.4
Si2516_R		3,044	ug/L	82.47	2.709	1,156
Sn1899_A		-0.2542	ug/L	0.5313	209.0	1.337
Sr4215_R		564.9	ug/L	13.61	2.408	50,890
Ti3349_A		562.4	ug/L	3.205	0.5699	28,990
Tl1908_A		573.9	ug/L	2.001	0.3487	234.0
V_2924_A		583.9	ug/L	2.375	0.4068	15,090
Zn2062_A		648.9	ug/L	0.5453	0.08404	1,929
Y_3600_R		27,665	Cts/S	489.24	1.7685	27,665
Y_2243_A		10,112	Cts/S	1.8753	0.018544	10,112
Y_3600_A		393,630	Cts/S	1,719.3	0.43679	393,630

SI2011-001L

Method Name: K6010-2011 Method Revision: 1,728

SI2011-001L

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:38:14PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		2.008	ug/L	1.602	79.79	34.34
Al3961_R		25.51	ug/L	89.43	350.5	9.647
As1891_A		2.415	ug/L	7.267	300.9	-0.4412
Au2427_A		-5.178	ug/L	2.400	46.34	-1.925
B_2089_A		22.98	ug/L	2.138	9.307	6.521
Ba4554_R		3.616	ug/L	0.6827	18.88	89.27
Be3130_R		1.034	ug/L	0.5284	51.09	23.06
Ca3158_R		54.96	ug/L	25.39	46.20	22.58
Cd2265_A		0.2364	ug/L	0.1141	48.25	1.378
Co2286_A		0.5059	ug/L	0.2291	45.28	3.900
Cr2677_A		0.8838	ug/L	0.1252	14.17	9.874
Cu3273_A		28.74	ug/L	0.1742	0.6059	163.1
Fe2599_R		22.10	ug/L	12.61	57.05	29.45
K_7664_R		495.2	ug/L	89.72	18.12	48.85
Li6707_R		25.19	ug/L	3.931	15.61	109.3
Mg2025_A		181.1	ug/L	15.80	8.724	7.151
Mn2576_R		9.793	ug/L	0.7545	7.705	12.05
Mo2020_A		36.26	ug/L	8.453	23.31	15.17
Na5895_R		103,200	ug/L	2,018	1.956	56,660
Ni2316_A		0.7387	ug/L	0.4484	60.71	-0.2721
Pb2203_A		-2.390	ug/L	0.1703	7.127	-2.059
Sb2068_A		13.36	ug/L	2.828	21.17	0.5213
Se1960_A		15.06	ug/L	1.198	7.961	1.312
Si2516_R		2,519	ug/L	95.29	3.783	199.8
Sn1899_A		-2.347	ug/L	1.024	43.64	1.260
Sr4215_R		0.6504	ug/L	0.6986	107.4	-10.15
Ti3349_A		4.279	ug/L	1.167	27.27	27.25
Tl1908_A		-6.315	ug/L	4.358	69.01	-0.3342
V_2924_A		0.4844	ug/L	1.136	234.5	-11.63
Zn2062_A		39.55	ug/L	1.087	2.748	23.42
Y_3600_R		27,331	Cts/S	146.10	0.53456	27,331
Y_2243_A		10,204	Cts/S	3.4254	0.033570	10,204
Y_3600_A		401,260	Cts/S	1,945.5	0.48486	401,260

SI2011-001P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:43:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.75	ug/L	0.2585	0.4900	2,008
Al3961_R		1,972	ug/L	55.24	2.801	2,010
As1891_A		102.7	ug/L	1.256	1.223	30.98
Au2427_A		3.784	ug/L	0.4750	12.55	15.85
B_2089_A		505.0	ug/L	0.4626	0.09161	506.1
Ba4554_R	W	1,973	ug/L	76.48	3.876	139,100
Be3130_R		48.94	ug/L	1.332	2.721	5,951
Ca3158_R		2,638	ug/L	56.74	2.151	4,174
Cd2265_A		240.1	ug/L	0.1620	0.06750	4,014
Co2286_A		504.9	ug/L	0.1307	0.02588	2,315
Cr2677_A		203.3	ug/L	0.6060	0.2981	4,167
Cu3273_A		275.6	ug/L	1.400	0.5079	6,332
Fe2599_R		960.0	ug/L	25.58	2.665	1,428
K_7664_R		9,949	ug/L	239.5	2.408	9,026
Li6707_R		504.2	ug/L	11.71	2.323	8,241
Mg2025_A		5,407	ug/L	7.165	0.1325	941.7
Mn2576_R		513.6	ug/L	13.31	2.593	3,899
Mo2020_A		87.86	ug/L	3.000	3.414	155.5

SI2011-001P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:43:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	111,700	ug/L	5,127	4.592	304,900
Ni2316_A		531.9	ug/L	0.5253	0.09874	1,451
Pb2203_A		95.04	ug/L	0.06033	0.06348	109.1
Sb2068_A		103.1	ug/L	0.6361	0.6170	37.01
Se1960_A		97.15	ug/L	0.6974	0.7179	18.82
Si2516_R		3,814	ug/L	116.6	3.057	1,424
Sn1899_A		502.3	ug/L	7.982	1.589	205.7
Sr4215_R		503.9	ug/L	12.60	2.500	44,780
Ti3349_A		503.2	ug/L	1.009	0.2006	25,410
Tl1908_A		102.1	ug/L	0.3267	0.3200	39.37
V_2924_A		518.0	ug/L	0.1596	0.03080	13,210
Zn2062_A		554.8	ug/L	0.2130	0.03840	1,626
Y_3600_R		27,292	Cts/S	138.46	0.50731	27,292
Y_2243_A		9,966.4	Cts/S	12.107	0.12148	9,966.4
Y_3600_A		385,940	Cts/S	838.16	0.21717	385,940

SI2011-001S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:47:49PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.24	ug/L	0.3971	0.7601	2,003
Al3961_R		1,966	ug/L	52.89	2.690	2,004
As1891_A		104.5	ug/L	0.3638	0.3481	31.54
Au2427_A		2.633	ug/L	0.1620	6.154	10.74
B_2089_A		505.7	ug/L	0.6344	0.1255	506.7
Ba4554_R	W	1,996	ug/L	83.16	4.166	140,700
Be3130_R		48.88	ug/L	1.434	2.934	5,946
Ca3158_R		2,672	ug/L	68.35	2.558	4,229
Cd2265_A		241.3	ug/L	0.01316	0.005456	4,034
Co2286_A		507.8	ug/L	0.04126	0.008127	2,327
Cr2677_A		203.6	ug/L	1.737	0.8533	4,205
Cu3273_A		277.9	ug/L	1.655	0.5954	6,434
Fe2599_R		967.9	ug/L	29.89	3.088	1,440
K_7664_R		10,010	ug/L	255.8	2.556	9,085
Li6707_R		509.4	ug/L	15.40	3.024	8,329
Mg2025_A		5,449	ug/L	1.244	0.02282	948.8
Mn2576_R		511.5	ug/L	13.06	2.553	3,884
Mo2020_A		89.23	ug/L	2.549	2.857	157.9
Na5895_R	W	114,600	ug/L	5,759	5.027	312,800
Ni2316_A		536.8	ug/L	0.9101	0.1696	1,464
Pb2203_A		96.44	ug/L	0.4151	0.4305	110.7
Sb2068_A		104.1	ug/L	1.133	1.088	37.34
Se1960_A		97.61	ug/L	3.283	3.363	18.91
Si2516_R		3,792	ug/L	111.2	2.933	1,416
Sn1899_A		512.5	ug/L	4.776	0.9318	209.9
Sr4215_R		506.5	ug/L	14.35	2.833	45,030
Ti3349_A		500.4	ug/L	1.333	0.2664	25,460
Tl1908_A		102.8	ug/L	0.6088	0.5922	39.67
V_2924_A		514.9	ug/L	3.379	0.6563	13,230
Zn2062_A		560.2	ug/L	0.1511	0.02697	1,642
Y_3600_R		27,298	Cts/S	199.66	0.73141	27,298
Y_2243_A		9,964.8	Cts/S	11.248	0.11288	9,964.8
Y_3600_A		388,870	Cts/S	2,046.8	0.52634	388,870

LCSOIC31ICS1

Method Name: K6010-2011 Method Revision: 1,728

LCSOIC31ICS1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:52:35PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		48.62	ug/L	0.1963	0.4037	1,923
Al3961_R		1,849	ug/L	80.38	4.348	1,896
As1891_A		94.67	ug/L	0.8107	0.8563	29.36
Au2427_A		4.114	ug/L	0.1238	3.009	18.10
B_2089_A		444.7	ug/L	0.7252	0.1631	459.4
Ba4554_R		1,888	ug/L	78.36	4.151	133,800
Be3130_R		45.14	ug/L	2.223	4.925	5,520
Ca3158_R		2,369	ug/L	114.6	4.838	3,771
Cd2265_A		226.8	ug/L	0.4556	0.2009	3,902
Co2286_A		487.4	ug/L	0.3539	0.07261	2,300
Cr2677_A		193.6	ug/L	0.5915	0.3056	4,121
Cu3273_A		242.3	ug/L	1.439	0.5941	5,785
Fe2599_R		878.9	ug/L	33.35	3.795	1,317
K_7664_R		8,958	ug/L	350.4	3.912	8,172
Li6707_R		469.0	ug/L	18.76	4.000	7,716
Mg2025_A		5,057	ug/L	8.663	0.1713	906.9
Mn2576_R		476.3	ug/L	25.31	5.315	3,637
Mo2020_A		96.39	ug/L	0.2031	0.2107	175.4
Na5895_R		7,299	ug/L	242.1	3.318	20,310
Ni2316_A		515.2	ug/L	0.1491	0.02893	1,446
Pb2203_A		91.62	ug/L	0.3218	0.3512	108.2
Sb2068_A		97.36	ug/L	0.7937	0.8153	35.69
Se1960_A		96.07	ug/L	2.461	2.562	19.16
Si2516_R		868.5	ug/L	64.88	7.470	336.8
Sn1899_A		539.5	ug/L	1.262	0.2338	227.3
Sr4215_R		475.8	ug/L	21.34	4.485	42,550
Ti3349_A		486.5	ug/L	3.229	0.6637	25,510
Tl1908_A		110.0	ug/L	0.7688	0.6989	43.96
V_2924_A		487.8	ug/L	2.366	0.4850	12,920
Zn2062_A		481.4	ug/L	1.697	0.3524	1,452
Y_3600_R		27,464	Cts/S	439.99	1.6020	27,464
Y_2243_A		10,256	Cts/S	5.0875	0.049605	10,256
Y_3600_A		400,830	Cts/S	925.56	0.23091	400,830

PBSIC31ICS1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:57:16PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2468	ug/L	0.005562	2.254	8.713
Al3961_R		7.600	ug/L	16.94	222.9	12.17
As1891_A		-0.6675	ug/L	0.2979	44.63	-0.8272
Au2427_A		-1.289	ug/L	0.09712	7.535	-3.150
B_2089_A		0.4908	ug/L	0.2062	42.01	2.202
Ba4554_R		1.613	ug/L	0.1342	8.320	152.0
Be3130_R		-0.03720	ug/L	0.05170	139.0	-6.753
Ca3158_R		29.61	ug/L	1.908	6.443	52.00
Cd2265_A		0.09420	ug/L	0.002206	2.342	2.236
Co2286_A		0.1718	ug/L	0.1166	67.89	4.334
Cr2677_A		0.6123	ug/L	0.04099	6.695	19.32
Cu3273_A		1.466	ug/L	0.2170	14.80	61.80
Fe2599_R		4.529	ug/L	3.329	73.51	29.56
K_7664_R		90.50	ug/L	14.23	15.73	40.89
Li6707_R		4.967	ug/L	0.4216	8.488	108.2
Mg2025_A		-5.657	ug/L	2.015	35.63	-0.2041
Mn2576_R		0.9822	ug/L	0.5188	52.82	4.653
Mo2020_A		0.6982	ug/L	0.003116	0.4463	3.531

PBSIC31ICS1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 6:57:16PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		116.8	ug/L	3.402	2.911	596.8
Ni2316_A		0.3795	ug/L	0.01667	4.393	0.3685
Pb2203_A		-0.2054	ug/L	0.03483	16.96	-1.774
Sb2068_A		0.7395	ug/L	0.2568	34.73	-0.3369
Se1960_A		3.807	ug/L	0.2778	7.297	1.501
Si2516_R		-3.275	ug/L	6.637	202.7	11.99
Sn1899_A		28.04	ug/L	0.6675	2.380	13.47
Sr4215_R		0.4096	ug/L	0.06134	14.98	14.72
Ti3349_A		0.6000	ug/L	0.08335	13.89	13.56
Tl1908_A		-0.5912	ug/L	1.145	193.6	-0.05698
V_2924_A		0.5703	ug/L	0.07441	13.05	2.005
Zn2062_A		1.065	ug/L	0.05233	4.915	2.937
Y_3600_R		27,313	Cts/S	431.59	1.5802	27,313
Y_2243_A		10,462	Cts/S	5.2894	0.050557	10,462
Y_3600_A		405,170	Cts/S	553.02	0.13649	405,170

CCV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:02:03PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		504.9	ug/L	2.796	0.5537	19,520
Al3961_R	W	11,740	ug/L	222.5	1.895	11,670
As1891_A		476.9	ug/L	0.7683	0.1611	149.0
Au2427_A		499.7	ug/L	22.28	4.458	2,284
B_2089_A	W	466.3	ug/L	0.05804	0.01245	489.6
Ba4554_R		488.5	ug/L	10.72	2.194	33,680
Be3130_R	W	459.9	ug/L	8.989	1.955	55,010
Ca3158_R		12,490	ug/L	185.9	1.489	19,290
Cd2265_A	W	458.1	ug/L	0.01314	0.002869	7,843
Co2286_A		479.7	ug/L	0.01548	0.003227	2,249
Cr2677_A		481.4	ug/L	1.753	0.3640	10,080
Cu3273_A		479.0	ug/L	1.383	0.2886	11,240
Fe2599_R	W	11,270	ug/L	169.9	1.508	16,140
K_7664_R	W	11,680	ug/L	270.8	2.318	10,370
Li6707_R		487.7	ug/L	11.13	2.282	7,795
Mg2025_A		13,050	ug/L	2.401	0.01840	2,297
Mn2576_R		494.6	ug/L	10.21	2.064	3,671
Mo2020_A	W	468.0	ug/L	3.002	0.6415	838.1
Na5895_R		12,110	ug/L	243.4	2.009	32,580
Ni2316_A		511.0	ug/L	0.3900	0.07633	1,425
Pb2203_A	W	465.1	ug/L	0.8776	0.1887	551.2
Sb2068_A		484.2	ug/L	0.6341	0.1309	187.2
Se1960_A	W	458.3	ug/L	2.354	0.5136	88.00
Si2516_R		11,990	ug/L	269.8	2.251	4,347
Sn1899_A		517.8	ug/L	1.546	0.2986	216.9
Sr4215_R		493.7	ug/L	9.758	1.977	42,890
Ti3349_A		492.5	ug/L	2.414	0.4901	25,460
Tl1908_A		474.7	ug/L	1.395	0.2938	195.0
V_2924_A		489.8	ug/L	2.852	0.5823	12,690
Zn2062_A		481.6	ug/L	0.07948	0.01650	1,443
Y_3600_R		26,675	Cts/S	251.26	0.94194	26,675
Y_2243_A		10,192	Cts/S	7.3848	0.072456	10,192
Y_3600_A		394,820	Cts/S	3,008.5	0.76197	394,820

CCB

Method Name: K6010-2011 Method Revision: 1,728

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:06:40PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1964	ug/L	0.07934	40.41	10.73
Al3961_R		-7.904	ug/L	3.522	44.56	-3.597
As1891_A		0.7119	ug/L	1.380	193.8	-0.3799
Au2427_A		2.069	ug/L	0.2156	10.42	12.50
B_2089_A		0.2079	ug/L	0.3517	169.1	1.926
Ba4554_R		0.9245	ug/L	0.09702	10.49	100.0
Be3130_R		0.3483	ug/L	0.1120	32.16	39.11
Ca3158_R		-6.300	ug/L	2.562	40.67	-4.624
Cd2265_A		0.1823	ug/L	0.002879	1.579	3.761
Co2286_A		0.2832	ug/L	0.05242	18.51	4.838
Cr2677_A		0.1789	ug/L	0.2135	119.3	9.984
Cu3273_A		1.001	ug/L	0.2782	27.79	50.48
Fe2599_R		2.862	ug/L	6.298	220.0	26.25
K_7664_R		16.98	ug/L	18.73	110.3	-25.30
Li6707_R		3.526	ug/L	0.8803	24.96	81.94
Mg2025_A		-17.15	ug/L	2.382	13.88	-2.243
Mn2576_R		0.6296	ug/L	0.2177	34.57	1.872
Mo2020_A		1.674	ug/L	0.5193	31.03	5.290
Na5895_R		59.58	ug/L	11.59	19.45	426.1
Ni2316_A		-0.1043	ug/L	0.1929	184.9	-1.009
Pb2203_A		-0.7469	ug/L	0.6809	91.16	-2.421
Sb2068_A		2.200	ug/L	1.128	51.28	0.3460
Se1960_A		1.764	ug/L	1.289	73.08	1.096
Si2516_R		11.40	ug/L	1.322	11.60	16.85
Sn1899_A		0.1929	ug/L	0.05136	26.62	1.566
Sr4215_R		0.4319	ug/L	0.06805	15.75	16.19
Ti3349_A		0.3530	ug/L	0.3273	92.71	0.5125
Tl1908_A		-0.3900	ug/L	0.5011	128.5	0.02896
V_2924_A		0.5886	ug/L	0.02303	3.913	2.369
Zn2062_A		0.1609	ug/L	0.09582	59.56	0.1543
Y_3600_R		26,432	Cts/S	195.93	0.74124	26,432
Y_2243_A		10,405	Cts/S	9.7870	0.094063	10,405
Y_3600_A		403,930	Cts/S	89.887	0.022253	403,930

SI1693-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:11:25PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.05449	ug/L	0.06999	128.5	10.89
Al3961_R	W	31,800	ug/L	224.2	0.7049	30,920
As1891_A		-2.733	ug/L	1.311	47.99	-1.388
Au2427_A		6.282	ug/L	0.6750	10.74	19.53
B_2089_A		33.78	ug/L	0.1031	0.3052	34.19
Ba4554_R		139.5	ug/L	0.6682	0.4792	9,444
Be3130_R		0.003289	ug/L	0.02617	795.6	-2.931
Ca3158_R		1,010	ug/L	14.43	1.428	1,533
Cd2265_A		5.917	ug/L	0.01019	0.1722	97.26
Co2286_A		7.244	ug/L	0.05671	0.7828	35.57
Cr2677_A		112.6	ug/L	0.3639	0.3233	2,202
Cu3273_A	W	2,231	ug/L	12.28	0.5503	48,700
Fe2599_R		571.7	ug/L	5.906	1.033	823.1
K_7664_R		7,505	ug/L	24.63	0.3282	6,510
Li6707_R		9.267	ug/L	1.609	17.36	170.9
Mg2025_A		9,673	ug/L	11.26	0.1164	1,607
Mn2576_R	W	1,319	ug/L	9.288	0.7040	9,596
Mo2020_A		-0.1833	ug/L	0.08297	45.26	1.809

SI1693-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:11:25PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	318,800	ug/L	10,860	3.408	833,400
Ni2316_A		11.36	ug/L	0.01017	0.08951	29.42
Pb2203_A		11.64	ug/L	0.4214	3.621	6.942
Sb2068_A		1.677	ug/L	1.447	86.31	0.3878
Se1960_A		0.9032	ug/L	0.2998	33.19	1.151
Si2516_R		217.4	ug/L	4.602	2.117	89.54
Sn1899_A		0.9471	ug/L	0.5889	62.18	1.757
Sr4215_R		4.926	ug/L	0.004035	0.08191	398.7
Ti3349_A		15.28	ug/L	2.154	14.10	719.0
Tl1908_A		-0.5011	ug/L	1.250	249.5	-1.073
V_2924_A		2.147	ug/L	0.09669	4.503	19.41
Zn2062_A	W	1,201	ug/L	2.032	0.1691	3,426
Y_3600_R		26,134	Cts/S	777.78	2.9762	26,134
Y_2243_A		9,693.6	Cts/S	18.998	0.19598	9,693.6
Y_3600_A		367,690	Cts/S	2,636.3	0.71699	367,690

SI1693-001A

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:16:13PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		546.9	ug/L	2.669	0.4880	19,750
Al3961_R	W	40,650	ug/L	1,060	2.608	40,070
As1891_A		528.8	ug/L	0.7558	0.1429	157.1
Au2427_A		7.779	ug/L	0.6038	7.762	25.21
B_2089_A		545.1	ug/L	0.9280	0.1702	541.6
Ba4554_R		650.7	ug/L	19.56	3.006	44,510
Be3130_R		515.5	ug/L	11.62	2.254	61,210
Ca3158_R		6,817	ug/L	179.9	2.639	10,460
Cd2265_A		507.3	ug/L	0.5083	0.1002	8,235
Co2286_A		528.6	ug/L	0.3213	0.06079	2,352
Cr2677_A		633.5	ug/L	1.804	0.2848	12,340
Cu3273_A	W	2,694	ug/L	13.74	0.5102	58,710
Fe2599_R		5,763	ug/L	149.9	2.601	8,205
K_7664_R		17,660	ug/L	521.6	2.954	15,570
Li6707_R		565.4	ug/L	17.10	3.025	8,963
Mg2025_A		15,100	ug/L	15.16	0.1004	2,523
Mn2576_R	W	1,774	ug/L	51.54	2.906	13,070
Mo2020_A		501.4	ug/L	1.392	0.2776	852.1
Na5895_R	F	301,000	ug/L	12,390	4.115	796,700
Ni2316_A		568.5	ug/L	0.1125	0.01979	1,505
Pb2203_A		491.9	ug/L	0.5400	0.1098	548.5
Sb2068_A		531.1	ug/L	1.786	0.3363	197.0
Se1960_A		518.4	ug/L	3.047	0.5877	94.56
Si2516_R		470.7	ug/L	16.22	3.446	183.2
Sn1899_A		0.9817	ug/L	1.136	115.7	1.767
Sr4215_R		539.1	ug/L	14.68	2.724	46,490
Ti3349_A		552.0	ug/L	0.2796	0.05066	26,540
Tl1908_A		498.9	ug/L	0.1671	0.03349	193.4
V_2924_A		556.1	ug/L	0.9180	0.1651	13,380
Zn2062_A	W	1,727	ug/L	3.121	0.1807	4,914
Y_3600_R		26,484	Cts/S	469.64	1.7733	26,484
Y_2243_A		9,671.7	Cts/S	3.2294	0.033390	9,671.7
Y_3600_A		367,190	Cts/S	1,594.4	0.43422	367,190

SI1693-001L

Method Name: K6010-2011 Method Revision: 1,728

SI1693-001L

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:20:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04745	ug/L	0.1656	349.0	15.52
Al3961_R		37,280	ug/L	892.4	2.394	7,398
As1891_A		3.924	ug/L	1.138	28.99	-0.3474
Au2427_A		3.510	ug/L	7.270	207.1	3.421
B_2089_A		42.84	ug/L	2.067	4.826	10.28
Ba4554_R		163.8	ug/L	3.885	2.372	2,291
Be3130_R		0.8206	ug/L	0.2316	28.22	17.17
Ca3158_R		1,167	ug/L	12.68	1.087	365.3
Cd2265_A		7.343	ug/L	0.3584	4.882	25.57
Co2286_A		9.826	ug/L	0.3296	3.354	12.52
Cr2677_A		138.3	ug/L	0.7507	0.5429	574.0
Cu3273_A		2,736	ug/L	8.065	0.2948	12,590
Fe2599_R		652.9	ug/L	16.11	2.467	209.1
K_7664_R		9,059	ug/L	154.1	1.701	1,572
Li6707_R		41.65	ug/L	6.626	15.91	159.1
Mg2025_A		12,190	ug/L	269.2	2.208	422.9
Mn2576_R		1,548	ug/L	37.96	2.452	2,295
Mo2020_A		5.937	ug/L	2.674	45.05	4.285
Na5895_R	W	404,500	ug/L	10,910	2.697	215,800
Ni2316_A		14.03	ug/L	0.5912	4.212	7.058
Pb2203_A		11.44	ug/L	0.9300	8.133	0.05265
Sb2068_A		9.368	ug/L	1.279	13.65	0.2766
Se1960_A		6.574	ug/L	20.77	315.9	1.050
Si2516_R		236.0	ug/L	24.81	10.51	29.91
Sn1899_A		0.9803	ug/L	0.005909	0.6027	1.522
Sr4215_R		6.220	ug/L	0.2231	3.587	86.90
Ti3349_A		19.84	ug/L	2.748	13.85	183.8
Tl1908_A		-11.64	ug/L	5.451	46.82	-1.026
V_2924_A		3.269	ug/L	0.7770	23.77	-1.281
Zn2062_A		1,448	ug/L	29.44	2.032	861.0
Y_3600_R		26,656	Cts/S	129.03	0.48405	26,656
Y_2243_A		10,104	Cts/S	1.8067	0.017882	10,104
Y_3600_A		387,050	Cts/S	1,187.2	0.30672	387,050

SI1693-001P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:25:39PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.72	ug/L	0.2781	0.5378	1,859
Al3961_R	W	32,380	ug/L	1,364	4.212	31,920
As1891_A		101.2	ug/L	0.5414	0.5352	29.67
Au2427_A		10.54	ug/L	0.6480	6.150	34.88
B_2089_A		491.4	ug/L	1.060	0.2156	479.0
Ba4554_R	W	2,079	ug/L	67.75	3.258	142,200
Be3130_R		46.68	ug/L	1.627	3.485	5,508
Ca3158_R		3,500	ug/L	95.83	2.738	5,375
Cd2265_A		232.9	ug/L	0.8069	0.3464	3,787
Co2286_A		477.7	ug/L	0.8971	0.1878	2,130
Cr2677_A		305.4	ug/L	1.731	0.5669	5,930
Cu3273_A	W	2,442	ug/L	12.33	0.5051	52,990
Fe2599_R		1,419	ug/L	50.88	3.584	2,039
K_7664_R		16,830	ug/L	491.8	2.923	14,850
Li6707_R		514.3	ug/L	16.61	3.230	8,160
Mg2025_A		14,410	ug/L	22.79	0.1582	2,409
Mn2576_R	W	1,755	ug/L	60.09	3.425	12,940
Mo2020_A		92.96	ug/L	0.2949	0.3172	159.9

SI1693-001P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:25:39PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	304,100	ug/L	19,850	6.529	805,300
Ni2316_A		515.4	ug/L	0.3515	0.06821	1,367
Pb2203_A		100.0	ug/L	0.8949	0.8946	107.1
Sb2068_A		102.5	ug/L	1.515	1.478	35.95
Se1960_A		99.49	ug/L	0.2459	0.2472	18.99
Si2516_R		1,194	ug/L	33.27	2.786	441.9
Sn1899_A		514.8	ug/L	2.826	0.5490	205.0
Sr4215_R		504.6	ug/L	17.67	3.503	43,530
Ti3349_A		518.2	ug/L	5.735	1.107	24,790
Tl1908_A		92.43	ug/L	0.04045	0.04377	33.50
V_2924_A		504.7	ug/L	5.088	1.008	12,170
Zn2062_A	W	1,667	ug/L	3.106	0.1863	4,753
Y_3600_R		26,496	Cts/S	334.51	1.2625	26,496
Y_2243_A		9,689.3	Cts/S	16.919	0.17462	9,689.3
Y_3600_A		365,630	Cts/S	2,259.1	0.61785	365,630

SI1693-001S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:30:21PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.14	ug/L	0.2389	0.4581	1,852
Al3961_R	W	32,250	ug/L	1,073	3.328	31,420
As1891_A		100.4	ug/L	1.556	1.550	29.52
Au2427_A		11.01	ug/L	0.3888	3.532	37.06
B_2089_A		486.5	ug/L	0.06653	0.01368	475.5
Ba4554_R	W	2,064	ug/L	64.99	3.149	139,600
Be3130_R		47.16	ug/L	1.385	2.936	5,501
Ca3158_R		3,489	ug/L	97.92	2.807	5,296
Cd2265_A		231.6	ug/L	0.1799	0.07764	3,777
Co2286_A		474.8	ug/L	0.4417	0.09303	2,123
Cr2677_A		304.9	ug/L	0.6910	0.2267	5,849
Cu3273_A	W	2,419	ug/L	8.088	0.3343	51,880
Fe2599_R		1,420	ug/L	46.22	3.256	2,016
K_7664_R		16,800	ug/L	529.8	3.153	14,660
Li6707_R		516.3	ug/L	16.01	3.102	8,098
Mg2025_A		14,240	ug/L	13.38	0.09397	2,388
Mn2576_R	W	1,749	ug/L	56.83	3.249	12,750
Mo2020_A		92.12	ug/L	0.8013	0.8698	158.9
Na5895_R	F	295,500	ug/L	15,820	5.352	773,700
Ni2316_A		512.7	ug/L	0.2756	0.05376	1,363
Pb2203_A		99.37	ug/L	0.2215	0.2229	106.7
Sb2068_A		101.7	ug/L	0.2502	0.2461	35.77
Se1960_A		97.42	ug/L	0.4466	0.4585	18.67
Si2516_R		1,186	ug/L	6.654	0.5610	434.0
Sn1899_A		511.1	ug/L	1.423	0.2785	204.1
Sr4215_R		503.9	ug/L	16.16	3.206	42,980
Ti3349_A		522.4	ug/L	1.708	0.3270	24,690
Tl1908_A		93.24	ug/L	0.5210	0.5588	33.90
V_2924_A		508.9	ug/L	1.401	0.2753	12,130
Zn2062_A	W	1,640	ug/L	3.170	0.1933	4,687
Y_3600_R		26,192	Cts/S	216.10	0.82506	26,192
Y_2243_A		9,715.9	Cts/S	6.5520	0.067436	9,715.9
Y_3600_A		361,330	Cts/S	425.67	0.11781	361,330

SI1978-001

Method Name: K6010-2011 Method Revision: 1,728

SI1978-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:35:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.02667	ug/L	0.3315	1,243	17.55
Al3961_R		448.4	ug/L	13.01	2.900	452.8
As1891_A		0.7815	ug/L	0.6790	86.88	-0.3437
Au2427_A		-0.5572	ug/L	0.3874	69.53	-0.07500
B_2089_A		19.37	ug/L	0.6195	3.198	19.92
Ba4554_R		81.54	ug/L	2.134	2.617	5,654
Be3130_R		0.07796	ug/L	0.1181	151.5	7.120
Ca3158_R		10,860	ug/L	186.1	1.714	16,780
Cd2265_A		1.728	ug/L	0.03759	2.175	28.69
Co2286_A		0.3816	ug/L	0.2074	54.36	4.952
Cr2677_A		2.484	ug/L	0.03127	1.259	54.05
Cu3273_A		44.92	ug/L	0.04114	0.09158	1,003
Fe2599_R		20.45	ug/L	2.352	11.50	51.69
K_7664_R		1,564	ug/L	61.90	3.957	1,354
Li6707_R		12.23	ug/L	0.8016	6.557	221.2
Mg2025_A		1,332	ug/L	2.037	0.1529	261.6
Mn2576_R		42.47	ug/L	1.543	3.633	312.7
Mo2020_A	F	-13.54	ug/L	0.007394	0.05460	-20.96
Na5895_R	F	246,100	ug/L	379.7	0.1543	656,500
Ni2316_A		5.446	ug/L	0.05006	0.9192	13.78
Pb2203_A		279.1	ug/L	1.787	0.6404	315.3
Sb2068_A		38.33	ug/L	1.336	3.485	-0.5352
Se1960_A		2.528	ug/L	1.096	43.34	1.167
Si2516_R		1,293	ug/L	18.30	1.415	480.4
Sn1899_A		0.9237	ug/L	0.3324	35.99	1.751
Sr4215_R		91.51	ug/L	2.047	2.237	7,935
Ti3349_A		0.2313	ug/L	0.09474	40.95	-6.113
Tl1908_A		-2.176	ug/L	0.6160	28.30	-0.7130
V_2924_A		0.3217	ug/L	0.002018	0.6272	-2.571
Zn2062_A	F	102,000	ug/L	606.5	0.5949	291,400
Y_3600_R		26,680	Cts/S	189.87	0.71169	26,680
Y_2243_A		9,709.7	Cts/S	2.9165	0.030037	9,709.7
Y_3600_A		367,250	Cts/S	2,796.5	0.76147	367,250

SI1979-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:39:55PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.05270	ug/L	0.2553	484.5	2.582
Al3961_R		386.3	ug/L	12.39	3.206	381.2
As1891_A		-1.996	ug/L	0.3060	15.33	-1.145
Au2427_A		-0.8211	ug/L	0.04241	5.165	-0.5493
B_2089_A		5.321	ug/L	0.01686	0.3168	6.731
Ba4554_R		553.8	ug/L	12.32	2.225	37,490
Be3130_R		-0.01122	ug/L	0.07180	640.2	-3.490
Ca3158_R		1,689	ug/L	41.76	2.472	2,567
Cd2265_A		5.902	ug/L	0.02985	0.5057	97.58
Co2286_A		0.2991	ug/L	0.07436	24.86	4.518
Cr2677_A		333.8	ug/L	3.341	1.001	6,512
Cu3273_A		301.6	ug/L	3.373	1.119	6,602
Fe2599_R		900.1	ug/L	21.08	2.342	1,286
K_7664_R		562.0	ug/L	51.32	9.131	451.6
Li6707_R		10.93	ug/L	0.6376	5.833	196.9
Mg2025_A		291.6	ug/L	1.248	0.4279	49.47
Mn2576_R		21.40	ug/L	0.4851	2.267	153.4
Mo2020_A		0.8056	ug/L	0.3075	38.17	3.525

SI1979-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:39:55PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	257,800	ug/L	8,459	3.281	675,300
Ni2316_A		7.476	ug/L	0.3131	4.187	19.13
Pb2203_A		17.78	ug/L	0.3046	1.713	18.62
Sb2068_A		3.145	ug/L	0.9572	30.44	1.601
Se1960_A		0.8134	ug/L	1.258	154.7	0.8610
Si2516_R		130.1	ug/L	2.323	1.785	58.78
Sn1899_A		0.1587	ug/L	0.2042	128.7	1.450
Sr4215_R		687.1	ug/L	15.96	2.322	58,630
Ti3349_A		0.1484	ug/L	0.05367	36.16	-7.340
Tl1908_A		-1.292	ug/L	0.9813	75.97	-0.3430
V_2924_A		0.1230	ug/L	0.2676	217.7	-42.31
Zn2062_A		406.5	ug/L	5.147	1.266	1,162
Y_3600_R		26,198	Cts/S	327.81	1.2513	26,198
Y_2243_A		9,721.4	Cts/S	3.3750	0.034717	9,721.4
Y_3600_A		367,710	Cts/S	3,724.8	1.0130	367,710

SI1695-006A

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:44:44PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.8355	ug/L	0.08197	9.811	-67.06
Al3961_R		1,989	ug/L	23.64	1.189	2,018
As1891_A		7.642	ug/L	0.1196	1.564	1.703
Au2427_A		-0.3280	ug/L	0.5196	158.4	3.325
B_2089_A		16.37	ug/L	0.1381	0.8437	18.90
Ba4554_R		13.67	ug/L	0.2257	1.650	998.4
Be3130_R		0.3159	ug/L	0.03522	11.15	32.71
Ca3158_R		1,120	ug/L	32.43	2.896	1,769
Cd2265_A		0.06824	ug/L	0.02717	39.81	5.157
Co2286_A		0.3908	ug/L	0.01004	2.570	5.934
Cr2677_A		2.081	ug/L	0.03438	1.652	51.46
Cu3273_A		2.532	ug/L	0.2928	11.57	86.93
Fe2599_R		3,416	ug/L	115.1	3.369	5,005
K_7664_R		606.1	ug/L	37.89	6.252	509.2
Li6707_R		6.519	ug/L	0.1585	2.432	132.9
Mg2025_A		564.0	ug/L	4.449	0.7888	102.7
Mn2576_R		17.44	ug/L	0.6763	3.877	129.5
Mo2020_A		-0.02554	ug/L	0.1505	589.3	2.221
Na5895_R		3,193	ug/L	113.7	3.563	8,958
Ni2316_A		0.8329	ug/L	0.07773	9.332	1.245
Pb2203_A		0.6608	ug/L	0.3669	55.53	-0.8030
Sb2068_A		10.62	ug/L	1.742	16.40	-16.30
Se1960_A		1.085	ug/L	1.037	95.54	1.012
Si2516_R		6,885	ug/L	224.9	3.266	2,551
Sn1899_A	W	5,423	ug/L	14.97	0.2760	2,337
Sr4215_R		16.08	ug/L	0.6099	3.794	1,403
Ti3349_A		42.14	ug/L	0.5481	1.301	2,217
Tl1908_A		-1.027	ug/L	0.7217	70.26	-0.2810
V_2924_A		3.261	ug/L	0.05397	1.655	76.67
Zn2062_A		11.77	ug/L	0.7807	6.635	36.19
Y_3600_R		27,210	Cts/S	307.83	1.1313	27,210
Y_2243_A		10,550	Cts/S	23.859	0.22616	10,550
Y_3600_A		405,280	Cts/S	2,143.0	0.52879	405,280

SI1695-006L

Method Name: K6010-2011 Method Revision: 1,728

SI1695-006L

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:49:29PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.742	ug/L	0.3345	19.21	-6.100
Al3961_R		2,180	ug/L	9.993	0.4583	437.6
As1891_A		9.217	ug/L	1.301	14.11	-0.05248
Au2427_A		-5.605	ug/L	2.367	42.22	-1.975
B_2089_A		14.16	ug/L	1.862	13.15	4.640
Ba4554_R		15.26	ug/L	0.7066	4.631	247.8
Be3130_R		0.4524	ug/L	0.06633	14.66	7.923
Ca3158_R		1,061	ug/L	21.29	2.006	333.4
Cd2265_A		0.04706	ug/L	0.08148	173.2	1.442
Co2286_A		0.5996	ug/L	0.3604	60.11	4.222
Cr2677_A		1.466	ug/L	1.130	77.07	12.75
Cu3273_A		6.509	ug/L	1.162	17.85	58.41
Fe2599_R		3,509	ug/L	52.93	1.509	1,028
K_7664_R		737.7	ug/L	70.57	9.566	91.02
Li6707_R		22.27	ug/L	4.677	21.00	97.52
Mg2025_A		495.7	ug/L	15.92	3.212	18.71
Mn2576_R		18.64	ug/L	0.5494	2.947	24.98
Mo2020_A		-3.240	ug/L	1.463	45.14	1.070
Na5895_R		3,723	ug/L	40.81	1.096	2,260
Ni2316_A		-0.5327	ug/L	0.9526	178.8	-1.124
Pb2203_A		-0.4050	ug/L	3.273	808.2	-1.655
Sb2068_A		3.977	ug/L	0.4231	10.64	-0.2130
Se1960_A		11.37	ug/L	6.251	54.96	1.219
Si2516_R		7,338	ug/L	0.8736	0.01191	544.1
Sn1899_A		10.74	ug/L	4.333	40.36	2.428
Sr4215_R		16.07	ug/L	0.3607	2.245	258.6
Ti3349_A		45.82	ug/L	0.6650	1.451	473.1
Tl1908_A		-5.407	ug/L	4.308	79.68	-0.2737
V_2924_A		4.127	ug/L	0.08490	2.057	9.739
Zn2062_A		4.456	ug/L	0.9180	20.60	2.423
Y_3600_R		26,714	Cts/S	172.53	0.64586	26,714
Y_2243_A		10,545	Cts/S	1.9566	0.018554	10,545
Y_3600_A		409,960	Cts/S	2,330.4	0.56845	409,960

SI1847-001R

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:54:17PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3477	ug/L	0.04588	13.19	4.638
Al3961_R		18.98	ug/L	16.40	86.44	60.18
As1891_A		0.7244	ug/L	0.1397	19.28	-0.3599
Au2427_A		-1.736	ug/L	0.3547	20.43	-4.988
B_2089_A		2.779	ug/L	0.3568	12.84	4.319
Ba4554_R		158.8	ug/L	4.922	3.099	10,900
Be3130_R		0.07151	ug/L	0.02150	30.06	6.382
Ca3158_R	W	102,500	ug/L	3,756	3.664	157,300
Cd2265_A		-0.03139	ug/L	0.01128	35.94	0.01863
Co2286_A		0.1004	ug/L	0.05364	53.44	3.784
Cr2677_A		0.2341	ug/L	0.01956	8.356	10.66
Cu3273_A		3.448	ug/L	0.1630	4.728	104.2
Fe2599_R		-8.029	ug/L	0.04027	0.5016	10.88
K_7664_R		400.5	ug/L	8.002	1.998	314.3
Li6707_R		6.152	ug/L	0.04073	0.6621	123.7
Mg2025_A		17,630	ug/L	29.32	0.1663	3,000
Mn2576_R		1.278	ug/L	0.1041	8.147	6.673
Mo2020_A		-0.6064	ug/L	0.05563	9.174	1.080

SI1847-001R

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:54:17PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		8,244	ug/L	285.7	3.466	22,110
Ni2316_A		0.2566	ug/L	0.2632	102.6	0.01385
Pb2203_A		-0.5384	ug/L	0.6147	114.2	-2.072
Sb2068_A		2.685	ug/L	0.6433	23.96	0.5157
Se1960_A		-0.3105	ug/L	0.7042	226.8	0.6624
Si2516_R		4,429	ug/L	166.1	3.751	1,603
Sn1899_A		0.4518	ug/L	0.4389	97.15	1.600
Sr4215_R		325.7	ug/L	11.21	3.443	28,110
Ti3349_A		0.1894	ug/L	0.2272	119.9	-7.888
Tl1908_A		-1.010	ug/L	0.6366	63.04	-0.2231
V_2924_A		0.4008	ug/L	0.04124	10.29	-2.191
Zn2062_A		3.404	ug/L	0.05293	1.555	9.627
Y_3600_R		26,512	Cts/S	410.02	1.5465	26,512
Y_2243_A		9,932.2	Cts/S	7.3789	0.074293	9,932.2
Y_3600_A		385,670	Cts/S	135.09	0.035027	385,670

CCV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 7:59:02PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		512.9	ug/L	0.6181	0.1205	19,540
Al3961_R	W	11,700	ug/L	71.46	0.6106	11,390
As1891_A	W	472.8	ug/L	1.116	0.2361	148.5
Au2427_A		500.0	ug/L	26.71	5.343	2,298
B_2089_A	W	455.2	ug/L	0.7211	0.1584	480.6
Ba4554_R		489.0	ug/L	7.767	1.588	33,010
Be3130_R	W	456.1	ug/L	2.696	0.5911	53,400
Ca3158_R		12,660	ug/L	188.4	1.488	19,150
Cd2265_A	F	443.8	ug/L	1.329	0.2994	7,641
Co2286_A	W	472.4	ug/L	0.9014	0.1908	2,228
Cr2677_A		478.1	ug/L	0.7263	0.1519	9,864
Cu3273_A		475.6	ug/L	0.07886	0.01658	11,000
Fe2599_R	F	11,090	ug/L	112.1	1.011	15,550
K_7664_R	W	11,610	ug/L	245.6	2.115	10,090
Li6707_R		491.6	ug/L	6.966	1.417	7,691
Mg2025_A		13,120	ug/L	6.051	0.04611	2,324
Mn2576_R		498.4	ug/L	7.736	1.552	3,622
Mo2020_A	W	452.2	ug/L	3.660	0.8093	814.6
Na5895_R		12,180	ug/L	229.6	1.886	32,050
Ni2316_A		512.4	ug/L	0.8608	0.1680	1,437
Pb2203_A	W	454.5	ug/L	0.5019	0.1104	541.7
Sb2068_A		479.8	ug/L	1.999	0.4168	186.5
Se1960_A	F	444.4	ug/L	5.028	1.131	85.82
Si2516_R		12,050	ug/L	194.0	1.610	4,277
Sn1899_A		526.1	ug/L	0.3565	0.06775	221.6
Sr4215_R		497.1	ug/L	6.976	1.403	42,280
Ti3349_A		497.7	ug/L	0.1289	0.02590	25,340
Tl1908_A	W	465.3	ug/L	2.390	0.5135	192.2
V_2924_A		494.7	ug/L	0.3243	0.06556	12,630
Zn2062_A		475.5	ug/L	1.549	0.3258	1,432
Y_3600_R		26,113	Cts/S	286.05	1.0954	26,113
Y_2243_A		10,250	Cts/S	10.121	0.098736	10,250
Y_3600_A		388,940	Cts/S	1,537.7	0.39535	388,940

CCB

Method Name: K6010-2011 Method Revision: 1,728

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:03:38PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.08584	ug/L	0.09596	111.8	21.80
Al3961_R		-3.719	ug/L	3.515	94.52	0.4915
As1891_A		0.4243	ug/L	0.6581	155.1	-0.4749
Au2427_A		2.382	ug/L	0.3855	16.18	14.03
B_2089_A		0.2646	ug/L	0.3653	138.1	1.973
Ba4554_R		0.6617	ug/L	0.1360	20.55	81.11
Be3130_R		0.1962	ug/L	0.02563	13.07	20.87
Ca3158_R		-8.645	ug/L	1.600	18.50	-8.111
Cd2265_A		0.1954	ug/L	0.01686	8.630	4.007
Co2286_A		0.3582	ug/L	0.03275	9.144	5.220
Cr2677_A		0.2125	ug/L	0.03068	14.44	10.63
Cu3273_A		1.350	ug/L	0.2878	21.32	58.43
Fe2599_R		2.473	ug/L	4.000	161.8	25.41
K_7664_R		50.00	ug/L	6.415	12.83	3.892
Li6707_R		5.468	ug/L	1.354	24.76	111.1
Mg2025_A		-13.62	ug/L	0.3029	2.223	-1.623
Mn2576_R		0.6888	ug/L	0.1907	27.68	2.281
Mo2020_A		0.9949	ug/L	0.4909	49.34	4.071
Na5895_R		92.46	ug/L	12.19	13.18	506.9
Ni2316_A		0.1558	ug/L	0.2692	172.8	-0.2709
Pb2203_A		-0.5327	ug/L	0.01353	2.539	-2.171
Sb2068_A		0.2227	ug/L	0.6405	287.7	-0.4406
Se1960_A		1.609	ug/L	2.132	132.5	1.071
Si2516_R		-3.815	ug/L	8.721	228.6	11.25
Sn1899_A		-0.3018	ug/L	0.1400	46.39	1.362
Sr4215_R		0.2526	ug/L	0.01550	6.137	0.7528
Ti3349_A		0.4161	ug/L	0.2064	49.59	3.838
Tl1908_A		0.5408	ug/L	0.2585	47.81	0.4268
V_2924_A		0.1991	ug/L	0.1309	65.73	-7.869
Zn2062_A		0.4208	ug/L	0.09066	21.54	0.9547
Y_3600_R		26,120	Cts/S	192.63	0.73746	26,120
Y_2243_A		10,454	Cts/S	0.54923	0.0052540	10,454
Y_3600_A		400,910	Cts/S	3,752.6	0.93603	400,910

SI1847-001RA

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:08:25PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		539.4	ug/L	3.257	0.6038	20,460
Al3961_R		10,650	ug/L	348.5	3.273	10,460
As1891_A		526.4	ug/L	3.424	0.6503	162.6
Au2427_A		2.834	ug/L	0.6883	24.29	13.86
B_2089_A		517.9	ug/L	0.8908	0.1720	535.9
Ba4554_R		671.4	ug/L	25.15	3.745	45,580
Be3130_R		511.3	ug/L	17.00	3.326	60,240
Ca3158_R	W	104,000	ug/L	3,476	3.344	158,200
Cd2265_A		496.3	ug/L	0.5200	0.1048	8,376
Co2286_A		528.4	ug/L	0.1901	0.03598	2,444
Cr2677_A		523.9	ug/L	2.403	0.4586	10,710
Cu3273_A		533.3	ug/L	3.335	0.6254	12,210
Fe2599_R		4,990	ug/L	180.3	3.614	7,052
K_7664_R		10,420	ug/L	387.6	3.719	9,105
Li6707_R		553.2	ug/L	20.24	3.659	8,704
Mg2025_A		22,680	ug/L	24.12	0.1063	3,928
Mn2576_R		545.8	ug/L	17.63	3.230	3,990
Mo2020_A		503.1	ug/L	2.240	0.4453	888.8

SI1847-001RA

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:08:25PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		13,490	ug/L	528.1	3.915	35,700
Ni2316_A		570.7	ug/L	0.5188	0.09091	1,571
Pb2203_A		490.8	ug/L	1.489	0.3034	573.8
Sb2068_A		546.3	ug/L	2.061	0.3772	191.9
Se1960_A		503.9	ug/L	7.061	1.401	95.31
Si2516_R		4,579	ug/L	170.5	3.723	1,645
Sn1899_A	W	5,223	ug/L	10.14	0.1942	2,145
Sr4215_R		847.2	ug/L	29.41	3.472	72,520
Ti3349_A		543.9	ug/L	5.432	0.9987	27,450
Tl1908_A		523.3	ug/L	2.094	0.4002	212.1
V_2924_A		556.2	ug/L	4.103	0.7377	14,070
Zn2062_A		560.1	ug/L	0.8485	0.1515	1,656
Y_3600_R		26,282	Cts/S	354.31	1.3481	26,282
Y_2243_A		10,056	Cts/S	8.9139	0.088643	10,056
Y_3600_A		385,370	Cts/S	803.51	0.20851	385,370

SI1847-001RL

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:13:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.3288	ug/L	1.174	357.1	15.91
Al3961_R		14.79	ug/L	96.80	654.3	14.61
As1891_A		1.110	ug/L	1.372	123.6	-0.5336
Au2427_A		-3.513	ug/L	0.8800	25.05	-0.4000
B_2089_A		2.880	ug/L	0.006311	0.2192	2.265
Ba4554_R		164.7	ug/L	3.218	1.953	2,264
Be3130_R		0.7212	ug/L	0.03315	4.596	14.83
Ca3158_R		105,500	ug/L	1,698	1.610	31,990
Cd2265_A		0.1640	ug/L	0.4078	248.7	1.138
Co2286_A		0.9058	ug/L	0.4131	45.61	4.320
Cr2677_A		2.303	ug/L	0.2484	10.79	15.87
Cu3273_A		8.242	ug/L	0.5913	7.173	65.41
Fe2599_R		-20.26	ug/L	20.07	99.06	16.34
K_7664_R		466.8	ug/L	0.08286	0.01775	41.80
Li6707_R		12.99	ug/L	0.8956	6.896	66.62
Mg2025_A		18,260	ug/L	28.19	0.1544	647.2
Mn2576_R		1.871	ug/L	1.451	77.55	0.001865
Mo2020_A		3.860	ug/L	2.612	67.66	3.623
Na5895_R		8,697	ug/L	176.9	2.034	4,819
Ni2316_A		-0.4420	ug/L	1.929	436.4	-0.9578
Pb2203_A		-1.923	ug/L	2.691	139.9	-1.969
Sb2068_A		2.848	ug/L	4.155	145.9	-0.3036
Se1960_A		4.731	ug/L	4.766	100.7	0.9311
Si2516_R		4,487	ug/L	36.91	0.8226	331.1
Sn1899_A		6.495	ug/L	0.03883	0.5978	2.022
Sr4215_R		335.9	ug/L	5.422	1.614	5,712
Ti3349_A		1.211	ug/L	0.2218	18.32	-5.350
Tl1908_A		-0.8997	ug/L	4.476	497.5	0.1177
V_2924_A		2.036	ug/L	1.628	79.93	-2.359
Zn2062_A		3.679	ug/L	0.6521	17.73	1.901
Y_3600_R		26,187	Cts/S	99.843	0.38126	26,187
Y_2243_A		10,336	Cts/S	18.572	0.17969	10,336
Y_3600_A		400,440	Cts/S	1,100.5	0.27481	400,440

SI1847-001P

Method Name: K6010-2011 Method Revision: 1,728

SI1847-001P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:17:49PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		53.37	ug/L	0.3317	0.6215	2,011
Al3961_R		1,938	ug/L	68.90	3.555	1,968
As1891_A		99.05	ug/L	0.3301	0.3333	29.95
Au2427_A		3.106	ug/L	0.3867	12.45	12.95
B_2089_A		459.2	ug/L	1.975	0.4302	461.9
Ba4554_R	W	2,115	ug/L	77.26	3.653	145,800
Be3130_R		46.76	ug/L	1.779	3.806	5,561
Ca3158_R	W	99,960	ug/L	3,902	3.903	154,500
Cd2265_A		224.3	ug/L	1.030	0.4590	3,761
Co2286_A		490.0	ug/L	1.308	0.2668	2,253
Cr2677_A		199.3	ug/L	0.3315	0.1664	4,039
Cu3273_A		253.5	ug/L	1.374	0.5422	5,763
Fe2599_R		881.5	ug/L	30.84	3.499	1,284
K_7664_R		9,630	ug/L	350.7	3.642	8,544
Li6707_R		489.3	ug/L	17.66	3.609	7,824
Mg2025_A		22,120	ug/L	20.57	0.09301	3,804
Mn2576_R		498.6	ug/L	17.59	3.527	3,703
Mo2020_A		90.71	ug/L	0.8729	0.9623	160.9
Na5895_R		15,150	ug/L	531.1	3.505	40,710
Ni2316_A		528.8	ug/L	1.771	0.3348	1,447
Pb2203_A		89.70	ug/L	0.9969	1.111	103.1
Sb2068_A		100.9	ug/L	1.241	1.229	36.20
Se1960_A		94.27	ug/L	1.452	1.540	18.34
Si2516_R		4,974	ug/L	104.3	2.097	1,813
Sn1899_A		523.2	ug/L	0.7768	0.1485	214.8
Sr4215_R		792.5	ug/L	30.11	3.800	68,910
Ti3349_A		495.4	ug/L	0.9397	0.1897	24,740
Tl1908_A		108.3	ug/L	2.121	1.958	42.02
V_2924_A		516.4	ug/L	1.162	0.2250	13,020
Zn2062_A		498.0	ug/L	1.536	0.3085	1,464
Y_3600_R		26,694	Cts/S	14.450	0.054131	26,694
Y_2243_A		9,993.7	Cts/S	23.401	0.23416	9,993.7
Y_3600_A		381,730	Cts/S	1,854.6	0.48583	381,730

SI1847-001S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:22:29PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		53.22	ug/L	0.5243	0.9852	2,019
Al3961_R		1,970	ug/L	69.62	3.535	1,975
As1891_A		98.99	ug/L	0.3561	0.3597	29.91
Au2427_A		3.113	ug/L	0.1103	3.543	12.90
B_2089_A		471.4	ug/L	2.657	0.5636	473.7
Ba4554_R	W	2,167	ug/L	77.54	3.579	147,500
Be3130_R		48.06	ug/L	1.466	3.050	5,646
Ca3158_R	W	101,200	ug/L	2,937	2.902	154,500
Cd2265_A		226.1	ug/L	0.9048	0.4002	3,788
Co2286_A		495.4	ug/L	1.201	0.2424	2,276
Cr2677_A		199.7	ug/L	0.6284	0.3147	4,078
Cu3273_A		254.6	ug/L	0.9652	0.3792	5,830
Fe2599_R		906.3	ug/L	29.23	3.225	1,303
K_7664_R		9,799	ug/L	373.7	3.814	8,587
Li6707_R		499.2	ug/L	18.50	3.707	7,883
Mg2025_A		22,070	ug/L	49.13	0.2226	3,794
Mn2576_R		509.2	ug/L	18.23	3.581	3,735
Mo2020_A		92.38	ug/L	0.8040	0.8703	163.7

SI1847-001S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:22:29PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		15,350	ug/L	499.0	3.251	40,710
Ni2316_A		533.2	ug/L	1.224	0.2296	1,457
Pb2203_A		90.65	ug/L	0.7879	0.8692	104.2
Sb2068_A		101.3	ug/L	1.165	1.149	36.32
Se1960_A		95.69	ug/L	0.8042	0.8404	18.59
Si2516_R		5,277	ug/L	177.1	3.357	1,898
Sn1899_A		523.8	ug/L	0.2887	0.05513	214.9
Sr4215_R		806.8	ug/L	28.11	3.484	69,280
Ti3349_A		499.5	ug/L	5.069	1.015	25,130
Tl1908_A		105.6	ug/L	0.5927	0.5615	40.84
V_2924_A		520.9	ug/L	4.148	0.7962	13,230
Zn2062_A		501.4	ug/L	1.153	0.2300	1,472
Y_3600_R		26,358	Cts/S	134.20	0.50916	26,358
Y_2243_A		9,985.6	Cts/S	11.012	0.11028	9,985.6
Y_3600_A		384,530	Cts/S	2,435.8	0.63344	384,530

LCSWID06ICW2

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:27:10PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.07	ug/L	0.08040	0.1574	2,014
Al3961_R		1,931	ug/L	56.93	2.948	1,929
As1891_A		97.53	ug/L	0.3349	0.3434	30.38
Au2427_A		4.337	ug/L	0.05961	1.374	18.97
B_2089_A	W	422.4	ug/L	0.8099	0.1917	438.1
Ba4554_R		1,973	ug/L	78.35	3.971	136,200
Be3130_R		46.98	ug/L	1.306	2.781	5,600
Ca3158_R		2,531	ug/L	94.55	3.735	3,924
Cd2265_A		227.4	ug/L	0.2560	0.1126	3,929
Co2286_A		497.9	ug/L	0.8476	0.1702	2,358
Cr2677_A		195.4	ug/L	0.6093	0.3118	4,147
Cu3273_A		244.0	ug/L	0.9578	0.3926	5,808
Fe2599_R		897.9	ug/L	25.10	2.795	1,310
K_7664_R		9,195	ug/L	352.3	3.832	8,171
Li6707_R		454.2	ug/L	20.09	4.424	7,276
Mg2025_A		5,307	ug/L	4.995	0.09413	955.0
Mn2576_R		505.4	ug/L	16.83	3.330	3,759
Mo2020_A		88.10	ug/L	0.5441	0.6176	161.1
Na5895_R		7,289	ug/L	285.0	3.910	19,750
Ni2316_A		535.2	ug/L	0.2276	0.04253	1,509
Pb2203_A		93.47	ug/L	0.08815	0.09430	110.8
Sb2068_A		100.3	ug/L	0.2740	0.2732	37.14
Se1960_A		94.19	ug/L	1.642	1.743	18.88
Si2516_R		896.7	ug/L	37.98	4.236	338.2
Sn1899_A		497.8	ug/L	0.7266	0.1460	210.7
Sr4215_R		465.0	ug/L	17.45	3.752	40,490
Ti3349_A		467.1	ug/L	2.510	0.5374	24,420
Tl1908_A		99.79	ug/L	0.7058	0.7073	39.77
V_2924_A		507.9	ug/L	2.252	0.4434	13,410
Zn2062_A		494.6	ug/L	0.01789	0.003617	1,498
Y_3600_R		26,742	Cts/S	236.21	0.88327	26,742
Y_2243_A		10,298	Cts/S	9.7871	0.095042	10,298
Y_3600_A		399,630	Cts/S	1,050.9	0.26296	399,630

PBWID06ICW2

Method Name: K6010-2011 Method Revision: 1,728

PBWID06ICW2

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:31:51PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1311	ug/L	0.3177	242.4	13.36
Al3961_R		-5.518	ug/L	8.936	162.0	-1.272
As1891_A		-1.581	ug/L	0.2087	13.20	-1.127
Au2427_A		-0.6138	ug/L	0.1210	19.71	0.00002000
B_2089_A		0.2289	ug/L	0.06403	27.97	1.911
Ba4554_R		0.8263	ug/L	0.2038	24.66	94.24
Be3130_R		-0.003122	ug/L	0.03343	1,071	-2.547
Ca3158_R		0.6421	ug/L	0.6844	106.6	6.080
Cd2265_A		-0.0004750	ug/L	0.04541	9,568	0.5673
Co2286_A		0.2103	ug/L	0.01204	5.723	4.539
Cr2677_A		0.3580	ug/L	0.04897	13.68	13.76
Cu3273_A		1.095	ug/L	0.1418	12.95	52.55
Fe2599_R		-6.321	ug/L	4.886	77.31	13.43
K_7664_R		17.36	ug/L	1.020	5.874	-25.15
Li6707_R		3.680	ug/L	1.444	39.24	85.24
Mg2025_A		-20.02	ug/L	5.003	24.99	-2.795
Mn2576_R		1.393	ug/L	0.05985	4.298	7.565
Mo2020_A		-0.1672	ug/L	0.09874	59.06	1.953
Na5895_R		74.95	ug/L	6.155	8.212	471.5
Ni2316_A		-0.01572	ug/L	0.1237	786.8	-0.7682
Pb2203_A		-0.6074	ug/L	0.6677	109.9	-2.275
Sb2068_A		1.683	ug/L	0.3209	19.07	0.1447
Se1960_A		0.1742	ug/L	1.360	780.9	0.7961
Si2516_R		-5.949	ug/L	5.774	97.06	10.74
Sn1899_A		0.02050	ug/L	0.08732	426.0	1.508
Sr4215_R		-0.06357	ug/L	0.05166	81.26	-26.71
Ti3349_A		0.4696	ug/L	0.08859	18.86	6.538
Tl1908_A		-1.639	ug/L	0.3017	18.41	-0.5049
V_2924_A		0.2013	ug/L	0.2135	106.0	-7.661
Zn2062_A		0.4235	ug/L	0.1391	32.85	0.9682
Y_3600_R		26,696	Cts/S	179.82	0.67356	26,696
Y_2243_A		10,514	Cts/S	0.80300	0.0076370	10,514
Y_3600_A		402,490	Cts/S	3,608.7	0.89661	402,490

SI2069-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:36:39PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.06706	ug/L	0.2251	335.6	7.574
Al3961_R		856.5	ug/L	25.33	2.957	877.2
As1891_A		-0.01445	ug/L	1.566	10,840	-0.6299
Au2427_A		-0.6257	ug/L	0.6995	111.8	0.1357
B_2089_A		15.22	ug/L	0.5382	3.536	17.31
Ba4554_R		24.88	ug/L	1.025	4.123	1,782
Be3130_R		0.01130	ug/L	0.05863	518.7	-3.682
Ca3158_R		20,310	ug/L	990.0	4.874	31,940
Cd2265_A		0.1385	ug/L	0.09841	71.06	3.477
Co2286_A		0.3821	ug/L	0.04830	12.64	5.678
Cr2677_A		9.739	ug/L	0.002638	0.02709	212.8
Cu3273_A		4.528	ug/L	0.1339	2.958	133.5
Fe2599_R		520.0	ug/L	15.59	2.998	780.3
K_7664_R		879.2	ug/L	89.31	10.16	755.7
Li6707_R		5.593	ug/L	0.6606	11.81	117.6
Mg2025_A		1,651	ug/L	8.183	0.4957	292.2
Mn2576_R		16.55	ug/L	0.2461	1.487	122.4
Mo2020_A		0.7400	ug/L	0.2253	30.45	3.554

SI2069-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:36:39PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		20,400	ug/L	1,006	4.934	55,640
Ni2316_A		0.5844	ug/L	0.2912	49.83	0.8777
Pb2203_A		1.260	ug/L	0.7128	56.57	-0.09100
Sb2068_A		0.9206	ug/L	0.04557	4.950	-0.1268
Se1960_A		1.398	ug/L	1.908	136.5	1.025
Si2516_R		3,853	ug/L	154.2	4.003	1,431
Sn1899_A		-0.01216	ug/L	0.08120	667.8	1.465
Sr4215_R		99.00	ug/L	4.263	4.306	8,739
Ti3349_A		33.96	ug/L	1.334	3.926	1,761
Tl1908_A		-0.5635	ug/L	1.238	219.7	-0.08217
V_2924_A		3.455	ug/L	0.03844	1.113	78.52
Zn2062_A		13.06	ug/L	0.06695	0.5127	39.23
Y_3600_R		27,168	Cts/S	438.89	1.6155	27,168
Y_2243_A		10,304	Cts/S	10.070	0.097728	10,304
Y_3600_A		400,250	Cts/S	3,062.0	0.76503	400,250

SI2069-001A

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:41:24PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		543.2	ug/L	7.832	1.442	20,750
Al3961_R		11,360	ug/L	579.6	5.103	11,240
As1891_A		521.4	ug/L	0.3702	0.07100	162.3
Au2427_A		1.664	ug/L	0.3148	18.92	8.912
B_2089_A		530.4	ug/L	0.9382	0.1769	553.0
Ba4554_R		539.8	ug/L	23.45	4.345	37,000
Be3130_R		504.6	ug/L	24.04	4.764	60,010
Ca3158_R	W	25,750	ug/L	1,104	4.289	39,560
Cd2265_A		506.1	ug/L	0.9975	0.1971	8,609
Co2286_A		538.5	ug/L	0.4589	0.08523	2,511
Cr2677_A		539.1	ug/L	9.776	1.813	11,100
Cu3273_A		535.9	ug/L	9.296	1.735	12,370
Fe2599_R		5,542	ug/L	269.7	4.867	7,905
K_7664_R		10,790	ug/L	535.0	4.960	9,514
Li6707_R		539.5	ug/L	23.34	4.327	8,570
Mg2025_A		7,614	ug/L	10.20	0.1340	1,344
Mn2576_R		555.1	ug/L	26.09	4.700	4,096
Mo2020_A		510.3	ug/L	3.703	0.7256	908.7
Na5895_R	W	25,690	ug/L	1,161	4.519	68,370
Ni2316_A		578.1	ug/L	0.1848	0.03196	1,604
Pb2203_A		502.1	ug/L	0.5883	0.1172	591.6
Sb2068_A		543.8	ug/L	0.2907	0.05346	192.1
Se1960_A		505.2	ug/L	1.264	0.2502	96.33
Si2516_R		4,110	ug/L	192.9	4.692	1,492
Sn1899_A	W	5,335	ug/L	3.279	0.06146	2,208
Sr4215_R		628.3	ug/L	29.63	4.717	54,280
Ti3349_A		583.4	ug/L	8.027	1.376	29,660
Tl1908_A		536.2	ug/L	2.535	0.4729	219.0
V_2924_A		565.4	ug/L	8.206	1.451	14,410
Zn2062_A		580.1	ug/L	0.5871	0.1012	1,728
Y_3600_R		26,531	Cts/S	344.29	1.2977	26,531
Y_2243_A		10,136	Cts/S	14.654	0.14458	10,136
Y_3600_A		388,300	Cts/S	4,666.3	1.2017	388,300

SI2069-001L

Method Name: K6010-2011 Method Revision: 1,728

SI2069-001L

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:46:04PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.356	ug/L	0.2030	14.97	5.725
Al3961_R		1,090	ug/L	24.60	2.258	221.4
As1891_A		1.901	ug/L	1.276	67.11	-0.4937
Au2427_A		-7.245	ug/L	1.326	18.30	-3.850
B_2089_A		16.40	ug/L	1.366	8.328	5.117
Ba4554_R		32.39	ug/L	0.7503	2.317	481.4
Be3130_R		0.3955	ug/L	0.08583	21.70	6.585
Ca3158_R		25,050	ug/L	698.7	2.790	7,711
Cd2265_A		0.05881	ug/L	0.1105	187.8	0.9075
Co2286_A		0.1694	ug/L	0.4149	244.9	3.763
Cr2677_A		14.30	ug/L	0.01574	0.1100	66.35
Cu3273_A		9.828	ug/L	1.552	15.79	72.33
Fe2599_R		620.4	ug/L	19.33	3.116	199.1
K_7664_R		1,178	ug/L	71.09	6.033	168.7
Li6707_R		12.44	ug/L	0.8344	6.709	65.85
Mg2025_A		1,860	ug/L	135.9	7.303	67.35
Mn2576_R		23.19	ug/L	0.04123	0.1778	31.55
Mo2020_A		5.934	ug/L	2.307	38.89	4.418
Na5895_R		25,350	ug/L	815.6	3.218	13,730
Ni2316_A		0.4836	ug/L	0.6875	142.2	-0.4544
Pb2203_A		-1.893	ug/L	3.630	191.8	-2.011
Sb2068_A		7.433	ug/L	1.368	18.40	0.07397
Se1960_A		17.58	ug/L	1.274	7.249	1.444
Si2516_R		4,690	ug/L	130.8	2.789	350.5
Sn1899_A		-1.111	ug/L	2.221	200.0	1.395
Sr4215_R		121.3	ug/L	3.297	2.719	2,079
Ti3349_A		41.60	ug/L	1.909	4.588	414.9
Tl1908_A		-8.721	ug/L	6.332	72.60	-0.5552
V_2924_A		4.457	ug/L	1.513	33.95	10.35
Zn2062_A		15.49	ug/L	1.438	9.282	9.171
Y_3600_R		26,570	Cts/S	162.83	0.61285	26,570
Y_2243_A		10,443	Cts/S	11.196	0.10721	10,443
Y_3600_A		397,440	Cts/S	1,112.7	0.27997	397,440

SI2069-001P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:50:50PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.69	ug/L	0.4667	0.9208	1,954
Al3961_R		2,828	ug/L	106.1	3.750	2,847
As1891_A		98.09	ug/L	0.3416	0.3482	30.26
Au2427_A		3.270	ug/L	0.4349	13.30	14.29
B_2089_A		465.5	ug/L	1.380	0.2964	478.1
Ba4554_R	W	1,938	ug/L	86.19	4.447	134,700
Be3130_R		46.14	ug/L	2.096	4.542	5,530
Ca3158_R		22,870	ug/L	1,053	4.602	35,650
Cd2265_A		225.4	ug/L	0.5395	0.2394	3,858
Co2286_A		488.5	ug/L	0.2667	0.05458	2,293
Cr2677_A		206.0	ug/L	2.154	1.046	4,291
Cu3273_A		247.5	ug/L	2.408	0.9730	5,782
Fe2599_R		1,437	ug/L	62.87	4.376	2,096
K_7664_R		9,878	ug/L	451.7	4.573	8,839
Li6707_R		475.8	ug/L	23.29	4.894	7,672
Mg2025_A		6,783	ug/L	1.772	0.02613	1,204
Mn2576_R		500.2	ug/L	25.73	5.144	3,745
Mo2020_A		94.11	ug/L	0.4357	0.4630	170.4

SI2069-001P

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:50:50PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	27,510	ug/L	1,156	4.202	74,280
Ni2316_A		524.3	ug/L	1.134	0.2163	1,464
Pb2203_A		92.41	ug/L	0.2256	0.2441	108.4
Sb2068_A		100.2	ug/L	1.181	1.179	36.69
Se1960_A		92.47	ug/L	2.533	2.739	18.39
Si2516_R		4,915	ug/L	221.1	4.498	1,806
Sn1899_A		521.1	ug/L	2.831	0.5433	218.4
Sr4215_R		577.3	ug/L	26.45	4.582	50,610
Ti3349_A		531.2	ug/L	8.072	1.520	27,260
Tl1908_A		95.54	ug/L	0.2584	0.2705	37.60
V_2924_A		510.9	ug/L	4.807	0.9409	13,240
Zn2062_A		502.4	ug/L	0.4186	0.08332	1,508
Y_3600_R		26,917	Cts/S	77.673	0.28856	26,917
Y_2243_A		10,203	Cts/S	0.75178	0.0073680	10,203
Y_3600_A		392,320	Cts/S	4,258.9	1.0856	392,320

CCV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 8:55:29PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		507.2	ug/L	1.879	0.3704	19,650
Al3961_R	W	11,780	ug/L	102.3	0.8688	11,400
As1891_A		477.7	ug/L	0.1344	0.02814	150.3
Au2427_A		499.4	ug/L	27.02	5.411	2,299
B_2089_A	W	459.9	ug/L	0.4706	0.1023	486.4
Ba4554_R		494.2	ug/L	9.181	1.858	33,160
Be3130_R	W	458.1	ug/L	5.261	1.148	53,330
Ca3158_R		12,620	ug/L	166.2	1.316	18,980
Cd2265_A	W	452.2	ug/L	0.2199	0.04862	7,798
Co2286_A		476.7	ug/L	0.01129	0.002367	2,251
Cr2677_A		476.4	ug/L	3.969	0.8331	9,996
Cu3273_A		474.6	ug/L	1.724	0.3634	11,160
Fe2599_R	F	11,180	ug/L	133.9	1.197	15,590
K_7664_R	W	11,730	ug/L	264.5	2.254	10,140
Li6707_R		493.9	ug/L	7.796	1.578	7,681
Mg2025_A		13,120	ug/L	25.50	0.1944	2,327
Mn2576_R		496.3	ug/L	5.368	1.082	3,585
Mo2020_A	W	460.4	ug/L	1.677	0.3642	830.6
Na5895_R		12,280	ug/L	229.3	1.867	32,140
Ni2316_A		513.4	ug/L	1.198	0.2333	1,442
Pb2203_A	W	461.3	ug/L	0.7640	0.1656	550.6
Sb2068_A		484.4	ug/L	1.526	0.3150	188.6
Se1960_A	W	454.7	ug/L	1.785	0.3927	87.93
Si2516_R		12,000	ug/L	146.1	1.218	4,235
Sn1899_A		522.8	ug/L	0.4866	0.09308	220.5
Sr4215_R		498.8	ug/L	6.420	1.287	42,170
Ti3349_A		494.6	ug/L	0.9755	0.1972	25,610
Tl1908_A	W	471.3	ug/L	1.662	0.3526	195.0
V_2924_A		490.7	ug/L	1.958	0.3990	12,730
Zn2062_A		480.4	ug/L	0.05550	0.01155	1,450
Y_3600_R		25,960	Cts/S	325.19	1.2526	25,960
Y_2243_A		10,266	Cts/S	17.470	0.17018	10,266
Y_3600_A		395,480	Cts/S	2,240.1	0.56643	395,480

CCB

Method Name: K6010-2011 Method Revision: 1,728

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:00:05PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.009607	ug/L	0.1739	1,810	18.40
Al3961_R		11.05	ug/L	9.402	85.11	14.88
As1891_A		1.027	ug/L	0.1941	18.90	-0.2812
Au2427_A		2.142	ug/L	0.05066	2.365	12.91
B_2089_A		0.6057	ug/L	0.6688	110.4	2.332
Ba4554_R		0.5413	ug/L	0.1946	35.95	73.44
Be3130_R		0.2355	ug/L	0.05808	24.66	25.59
Ca3158_R		-5.943	ug/L	2.474	41.63	-4.075
Cd2265_A		0.2072	ug/L	0.03886	18.75	4.219
Co2286_A		0.2904	ug/L	0.08152	28.07	4.902
Cr2677_A		0.1196	ug/L	0.1310	109.6	8.850
Cu3273_A		0.9732	ug/L	0.2304	23.67	50.50
Fe2599_R		3.389	ug/L	7.914	233.5	26.81
K_7664_R		8.768	ug/L	1.675	19.10	-32.34
Li6707_R		3.180	ug/L	0.1869	5.877	76.09
Mg2025_A		-19.86	ug/L	0.6222	3.132	-2.745
Mn2576_R		1.020	ug/L	0.1232	12.07	4.738
Mo2020_A		0.9959	ug/L	0.2529	25.40	4.077
Na5895_R		62.47	ug/L	2.270	3.633	431.8
Ni2316_A		0.1733	ug/L	0.2123	122.5	-0.2217
Pb2203_A		0.4825	ug/L	1.922	398.4	-0.9315
Sb2068_A		1.680	ug/L	0.8305	49.44	0.1421
Se1960_A		1.434	ug/L	1.558	108.6	1.038
Si2516_R		0.9637	ug/L	4.792	497.2	13.06
Sn1899_A		-0.3783	ug/L	0.1335	35.30	1.331
Sr4215_R		0.1322	ug/L	0.02305	17.44	-9.543
Ti3349_A		0.5217	ug/L	0.1769	33.92	9.500
Tl1908_A		0.3682	ug/L	0.2955	80.25	0.3523
V_2924_A		0.4747	ug/L	0.1336	28.16	-0.5788
Zn2062_A		0.1625	ug/L	0.002893	1.780	0.1606
Y_3600_R		26,308	Cts/S	433.19	1.6466	26,308
Y_2243_A		10,464	Cts/S	17.827	0.17037	10,464
Y_3600_A		409,740	Cts/S	2,691.2	0.65681	409,740

SI2069-001S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:04:52PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.57	ug/L	0.6270	1.216	1,977
Al3961_R		2,875	ug/L	124.1	4.316	2,903
As1891_A		100.7	ug/L	0.6223	0.6178	31.09
Au2427_A		3.873	ug/L	0.5439	14.04	17.00
B_2089_A		472.0	ug/L	0.1083	0.02294	484.8
Ba4554_R	W	1,970	ug/L	89.00	4.518	137,300
Be3130_R		46.70	ug/L	2.008	4.300	5,612
Ca3158_R		23,320	ug/L	1,097	4.706	36,450
Cd2265_A		229.2	ug/L	0.3857	0.1683	3,925
Co2286_A		494.4	ug/L	0.3651	0.07386	2,321
Cr2677_A		209.0	ug/L	2.539	1.215	4,331
Cu3273_A		252.0	ug/L	3.016	1.197	5,856
Fe2599_R		1,459	ug/L	63.61	4.361	2,134
K_7664_R		10,070	ug/L	494.1	4.907	9,037
Li6707_R		483.2	ug/L	21.34	4.417	7,813
Mg2025_A		6,866	ug/L	1.261	0.01837	1,219
Mn2576_R		507.0	ug/L	22.56	4.449	3,808
Mo2020_A		95.79	ug/L	0.4318	0.4507	173.4

SI2069-001S

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:04:52PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	28,050	ug/L	1,326	4.726	75,950
Ni2316_A		529.3	ug/L	0.3552	0.06712	1,478
Pb2203_A		93.10	ug/L	0.3627	0.3896	109.3
Sb2068_A		101.1	ug/L	1.007	0.9961	37.04
Se1960_A		96.45	ug/L	1.524	1.580	19.15
Si2516_R		4,970	ug/L	223.0	4.486	1,832
Sn1899_A		529.2	ug/L	0.3197	0.06040	221.9
Sr4215_R		586.4	ug/L	25.69	4.382	51,550
Ti3349_A		539.9	ug/L	0.6796	0.1259	27,570
Tl1908_A		99.52	ug/L	1.185	1.191	39.23
V_2924_A		518.1	ug/L	4.316	0.8330	13,360
Zn2062_A		509.5	ug/L	0.1660	0.03257	1,529
Y_3600_R		27,000	Cts/S	325.15	1.2042	27,000
Y_2243_A		10,206	Cts/S	5.2236	0.051183	10,206
Y_3600_A		390,210	Cts/S	2,195.3	0.56258	390,210

SI2069-002

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:09:32PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.4133	ug/L	0.04413	10.68	-4.275
Al3961_R		42.34	ug/L	4.625	10.92	59.17
As1891_A		-0.2418	ug/L	0.7607	314.6	-0.6912
Au2427_A		-0.3621	ug/L	1.141	315.2	0.9500
B_2089_A		50.19	ug/L	0.1781	0.3549	52.57
Ba4554_R		38.92	ug/L	1.726	4.433	2,741
Be3130_R		-0.03481	ug/L	0.03328	95.62	-6.492
Ca3158_R	W	34,170	ug/L	1,368	4.003	53,220
Cd2265_A		0.001276	ug/L	0.03275	2,567	0.9922
Co2286_A		0.9096	ug/L	0.02540	2.793	7.665
Cr2677_A		2.983	ug/L	0.1202	4.032	67.96
Cu3273_A		2.991	ug/L	0.3760	12.57	94.96
Fe2599_R		431.1	ug/L	14.35	3.328	644.5
K_7664_R		2,478	ug/L	86.57	3.494	2,185
Li6707_R		2.813	ug/L	0.1755	6.239	71.89
Mg2025_A		5,042	ug/L	5.406	0.1072	879.9
Mn2576_R		54.11	ug/L	1.087	2.009	402.4
Mo2020_A		-0.03924	ug/L	0.2049	522.3	2.121
Na5895_R	W	28,290	ug/L	1,227	4.339	76,330
Ni2316_A		0.5817	ug/L	0.06890	11.85	0.8683
Pb2203_A		0.06535	ug/L	0.4584	701.5	-1.379
Sb2068_A		2.070	ug/L	0.3012	14.55	0.3046
Se1960_A		2.072	ug/L	1.671	80.66	1.139
Si2516_R		3,793	ug/L	163.0	4.297	1,396
Sn1899_A		-1.197	ug/L	0.4233	35.37	0.9549
Sr4215_R		163.5	ug/L	7.139	4.366	14,310
Ti3349_A		1.576	ug/L	0.2772	17.59	63.01
Tl1908_A		-0.6918	ug/L	0.1710	24.72	-0.1449
V_2924_A		0.5813	ug/L	0.07218	12.42	1.840
Zn2062_A		16.23	ug/L	0.1301	0.8014	48.30
Y_3600_R		26,901	Cts/S	55.069	0.20471	26,901
Y_2243_A		10,181	Cts/S	9.6182	0.094477	10,181
Y_3600_A		391,040	Cts/S	127.67	0.032650	391,040

SI2069-003

Method Name: K6010-2011 Method Revision: 1,728

SI2069-003

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:14:19PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.5469	ug/L	0.06029	11.02	-15.55
Al3961_R		811.6	ug/L	29.42	3.626	820.5
As1891_A		2.021	ug/L	0.6019	29.79	0.005000
Au2427_A		-0.6792	ug/L	0.1910	28.12	0.1625
B_2089_A		60.01	ug/L	0.8675	1.445	62.98
Ba4554_R		52.73	ug/L	1.788	3.391	3,697
Be3130_R		0.01306	ug/L	0.01951	149.4	-2.706
Ca3158_R		12,250	ug/L	486.5	3.970	19,070
Cd2265_A		-0.04442	ug/L	0.03526	79.39	0.5970
Co2286_A		0.1422	ug/L	0.09755	68.59	4.397
Cr2677_A		27.89	ug/L	0.1836	0.6582	589.2
Cu3273_A		1.770	ug/L	0.1921	10.85	67.05
Fe2599_R		822.2	ug/L	18.74	2.279	1,208
K_7664_R		2,459	ug/L	93.22	3.791	2,167
Li6707_R		2.766	ug/L	1.842	66.59	71.17
Mg2025_A		3,374	ug/L	2.516	0.07456	593.2
Mn2576_R		5.799	ug/L	0.1505	2.596	40.64
Mo2020_A		-0.2699	ug/L	0.1079	39.99	1.725
Na5895_R	W	30,380	ug/L	1,192	3.924	81,900
Ni2316_A		0.2904	ug/L	0.04349	14.98	0.007500
Pb2203_A		0.2551	ug/L	0.1866	73.17	-1.279
Sb2068_A		0.1564	ug/L	1.642	1,050	-0.3634
Se1960_A		0.5806	ug/L	0.5847	100.7	0.8637
Si2516_R		4,531	ug/L	108.0	2.383	1,663
Sn1899_A		-0.5728	ug/L	0.3054	53.32	1.222
Sr4215_R		102.4	ug/L	3.856	3.765	8,950
Ti3349_A		24.58	ug/L	1.634	6.648	1,251
Tl1908_A		-2.264	ug/L	0.3173	14.02	-0.7691
V_2924_A		1.303	ug/L	0.004048	0.3107	19.30
Zn2062_A		15.84	ug/L	0.1382	0.8725	47.37
Y_3600_R		26,883	Cts/S	153.60	0.57135	26,883
Y_2243_A		10,251	Cts/S	4.2077	0.041046	10,251
Y_3600_A		394,460	Cts/S	2,048.2	0.51924	394,460

SI2069-004

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:19:06PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.03887	ug/L	0.1323	340.3	15.20
Al3961_R		77.07	ug/L	12.13	15.73	84.47
As1891_A		-0.6933	ug/L	3.271	471.8	-0.8312
Au2427_A		-0.9116	ug/L	0.5447	59.75	-1.550
B_2089_A		18.67	ug/L	0.1758	0.9413	20.87
Ba4554_R		19.20	ug/L	0.9337	4.862	1,342
Be3130_R		0.009346	ug/L	0.09453	1,011	-1.002
Ca3158_R		13,600	ug/L	547.0	4.021	20,750
Cd2265_A		0.1314	ug/L	0.01194	9.084	2.950
Co2286_A		0.6626	ug/L	0.1143	17.26	6.603
Cr2677_A		0.2746	ug/L	0.1939	70.61	11.90
Cu3273_A		1.493	ug/L	0.008351	0.5594	61.15
Fe2599_R		103.6	ug/L	1.583	1.528	168.4
K_7664_R		890.2	ug/L	2.337	0.2625	742.9
Li6707_R		3.263	ug/L	2.326	71.29	77.31
Mg2025_A		2,128	ug/L	12.53	0.5889	377.6
Mn2576_R		28.70	ug/L	1.144	3.984	207.7
Mo2020_A		-0.8436	ug/L	0.01788	2.120	0.6954

SI2069-004

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:19:06PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		6,836	ug/L	252.2	3.689	18,260
Ni2316_A		0.05333	ug/L	0.05823	109.2	-0.5751
Pb2203_A		0.8004	ug/L	0.6174	77.13	-0.5405
Sb2068_A		1.224	ug/L	0.6394	52.26	-0.03875
Se1960_A		1.243	ug/L	1.084	87.23	0.9925
Si2516_R		1,527	ug/L	86.45	5.662	557.4
Sn1899_A		0.1193	ug/L	0.5604	469.9	1.525
Sr4215_R		86.48	ug/L	3.668	4.241	7,399
Ti3349_A		0.4186	ug/L	0.04644	11.09	3.775
Tl1908_A		-1.082	ug/L	0.05224	4.826	-0.2865
V_2924_A		0.1870	ug/L	0.07273	38.89	-8.020
Zn2062_A		3.769	ug/L	0.1028	2.727	11.13
Y_3600_R		26,336	Cts/S	215.55	0.81847	26,336
Y_2243_A		10,339	Cts/S	2.8474	0.027541	10,339
Y_3600_A		396,730	Cts/S	800.83	0.20186	396,730

SI2069-005

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:23:52PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.7558	ug/L	0.1348	17.83	-194.2
Al3961_R		232.7	ug/L	3.857	1.658	250.1
As1891_A		5.860	ug/L	0.9532	16.26	0.6698
Au2427_A		1.491	ug/L	0.2839	19.04	13.46
B_2089_A		20.82	ug/L	0.3214	1.544	22.71
Ba4554_R		68.85	ug/L	2.193	3.186	4,798
Be3130_R		0.04980	ug/L	0.06372	128.0	3.119
Ca3158_R	W	38,470	ug/L	1,291	3.356	59,670
Cd2265_A		-0.1814	ug/L	0.03644	20.09	9.239
Co2286_A		1.747	ug/L	0.02207	1.264	11.52
Cr2677_A		0.6314	ug/L	0.01279	2.025	21.95
Cu3273_A		2.440	ug/L	0.5004	20.51	80.59
Fe2599_R		12,460	ug/L	484.4	3.887	17,920
K_7664_R		3,765	ug/L	141.3	3.753	3,327
Li6707_R		5.181	ug/L	0.6423	12.40	109.4
Mg2025_A		3,995	ug/L	2.162	0.05412	696.7
Mn2576_R		411.8	ug/L	16.01	3.889	3,068
Mo2020_A		-0.8285	ug/L	0.1177	14.21	0.7147
Na5895_R		16,630	ug/L	564.6	3.395	44,790
Ni2316_A		1.527	ug/L	0.02272	1.488	2.022
Pb2203_A		0.05712	ug/L	0.1702	298.0	-0.5271
Sb2068_A		0.1226	ug/L	0.6180	504.2	-0.3524
Se1960_A		1.363	ug/L	1.902	139.5	1.110
Si2516_R		4,349	ug/L	170.7	3.925	1,591
Sn1899_A		-0.2276	ug/L	0.4500	197.7	1.356
Sr4215_R		541.0	ug/L	20.09	3.715	47,190
Ti3349_A		8.668	ug/L	0.3888	4.486	427.1
Tl1908_A		-1.394	ug/L	1.754	125.9	-0.7602
V_2924_A		3.230	ug/L	0.1836	5.684	72.96
Zn2062_A		10.82	ug/L	0.1006	0.9298	32.04
Y_3600_R		26,783	Cts/S	21.571	0.080538	26,783
Y_2243_A		10,168	Cts/S	7.6249	0.074986	10,168
Y_3600_A		392,060	Cts/S	1,784.8	0.45523	392,060

SI2086-001

Method Name: K6010-2011 Method Revision: 1,728

SI2086-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:28:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2939	ug/L	0.1239	42.17	1.913
Al3961_R		-13.65	ug/L	18.55	135.9	-9.031
As1891_A		-0.8999	ug/L	0.6773	75.27	-0.8822
Au2427_A		-0.8065	ug/L	0.07028	8.714	-0.7000
B_2089_A		1.340	ug/L	0.3828	28.56	2.920
Ba4554_R		1.029	ug/L	0.02720	2.642	108.3
Be3130_R		0.01958	ug/L	0.01496	76.37	0.2248
Ca3158_R		623.8	ug/L	17.56	2.815	969.2
Cd2265_A		-0.03058	ug/L	0.05956	194.8	0.3409
Co2286_A		-0.1465	ug/L	0.2670	182.3	2.688
Cr2677_A		0.007910	ug/L	0.1052	1,330	6.030
Cu3273_A		2.301	ug/L	0.06976	3.031	77.13
Fe2599_R		320.9	ug/L	11.45	3.568	481.7
K_7664_R		95.66	ug/L	40.35	42.17	44.38
Li6707_R		3.350	ug/L	0.2692	8.035	79.94
Mg2025_A		233.3	ug/L	3.864	1.656	40.95
Mn2576_R		4.363	ug/L	0.7085	16.24	29.62
Mo2020_A		-0.9249	ug/L	0.02440	2.638	0.5327
Na5895_R	W	110,900	ug/L	6,445	5.810	296,100
Ni2316_A		0.08269	ug/L	0.1932	233.7	-0.5048
Pb2203_A		-0.4868	ug/L	1.377	282.9	-2.006
Sb2068_A		1.731	ug/L	0.9012	52.06	0.1573
Se1960_A		1.062	ug/L	0.5185	48.84	0.9297
Si2516_R		4,237	ug/L	170.9	4.033	1,545
Sn1899_A		-0.5357	ug/L	0.8986	167.7	1.215
Sr4215_R		3.827	ug/L	0.1317	3.443	311.6
Ti3349_A		-0.1249	ug/L	0.2845	227.7	-23.56
Tl1908_A		-1.656	ug/L	0.9422	56.90	-0.4916
V_2924_A		0.1681	ug/L	0.07127	42.40	-7.890
Zn2062_A		25.42	ug/L	0.09242	0.3636	74.88
Y_3600_R		26,696	Cts/S	428.57	1.6054	26,696
Y_2243_A		10,055	Cts/S	19.759	0.19652	10,055
Y_3600_A		381,880	Cts/S	1,357.5	0.35549	381,880

SI2086-002

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:33:33PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.08012	ug/L	0.1202	150.1	15.26
Al3961_R		-0.04358	ug/L	10.86	24,910	15.81
As1891_A		-0.5965	ug/L	0.8190	137.3	-0.7936
Au2427_A		-1.077	ug/L	0.1426	13.24	-2.287
B_2089_A		8.120	ug/L	0.1182	1.455	9.971
Ba4554_R		0.5705	ug/L	0.05334	9.350	77.05
Be3130_R		-0.01118	ug/L	0.003121	27.93	-3.497
Ca3158_R	W	31,670	ug/L	1,189	3.753	49,220
Cd2265_A		-0.06648	ug/L	0.05280	79.42	-0.5859
Co2286_A		0.03123	ug/L	0.1619	518.4	3.599
Cr2677_A		0.2408	ug/L	0.03213	13.34	11.18
Cu3273_A		2.322	ug/L	0.4760	20.50	80.86
Fe2599_R		-6.614	ug/L	2.777	41.99	13.07
K_7664_R		303.9	ug/L	14.60	4.806	231.5
Li6707_R		5.952	ug/L	1.028	17.27	122.1
Mg2025_A		8,275	ug/L	11.08	0.1339	1,463
Mn2576_R		18.25	ug/L	0.1619	0.8872	133.5
Mo2020_A		-0.8947	ug/L	0.05007	5.596	0.6013

SI2086-002

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:33:33PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		3,374	ug/L	136.6	4.048	9,323
Ni2316_A		0.07224	ug/L	0.1194	165.3	-0.5070
Pb2203_A		-0.7698	ug/L	0.5450	70.80	-2.428
Sb2068_A		0.5546	ug/L	0.06511	11.74	-0.3040
Se1960_A		0.7123	ug/L	0.09914	13.92	0.8861
Si2516_R		4,080	ug/L	148.8	3.646	1,497
Sn1899_A		-0.6239	ug/L	0.7698	123.4	1.209
Sr4215_R		153.5	ug/L	6.399	4.168	13,400
Ti3349_A		-0.1125	ug/L	0.2415	214.7	-23.84
Tl1908_A		-2.616	ug/L	0.6790	25.96	-0.9202
V_2924_A		0.01659	ug/L	0.2131	1,284	-12.48
Zn2062_A		21.78	ug/L	0.1318	0.6051	65.78
Y_3600_R		26,840	Cts/S	192.74	0.71812	26,840
Y_2243_A		10,315	Cts/S	4.7803	0.046341	10,315
Y_3600_A		397,790	Cts/S	1,796.2	0.45155	397,790

LCSWID06ICW1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:38:21PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.44	ug/L	0.1283	0.2544	1,030
Al3961_R		1,800	ug/L	27.18	1.510	912.9
As1891_A		95.04	ug/L	5.636	5.930	14.77
Au2427_A		1.859	ug/L	0.1635	8.797	5.371
B_2089_A		460.9	ug/L	5.827	1.264	244.2
Ba4554_R		1,886	ug/L	74.46	3.948	65,980
Be3130_R		44.48	ug/L	1.361	3.061	2,683
Ca3158_R		2,428	ug/L	76.98	3.171	1,910
Cd2265_A		227.1	ug/L	3.007	1.324	2,000
Co2286_A		494.7	ug/L	3.969	0.8024	1,196
Cr2677_A		187.5	ug/L	0.05346	0.02851	2,043
Cu3273_A		239.3	ug/L	0.5187	0.2168	2,934
Fe2599_R		829.9	ug/L	21.61	2.604	625.6
K_7664_R		8,954	ug/L	273.8	3.058	4,010
Li6707_R		470.5	ug/L	18.67	3.968	3,832
Mg2025_A		5,356	ug/L	31.90	0.5955	491.4
Mn2576_R		483.2	ug/L	14.72	3.047	1,819
Mo2020_A		86.67	ug/L	2.449	2.826	81.90
Na5895_R		7,164	ug/L	236.1	3.296	9,974
Ni2316_A		531.4	ug/L	5.597	1.053	762.9
Pb2203_A		95.59	ug/L	0.6260	0.6549	57.02
Sb2068_A		96.71	ug/L	2.031	2.100	17.88
Se1960_A		91.48	ug/L	4.240	4.636	9.733
Si2516_R		888.9	ug/L	21.28	2.393	176.5
Sn1899_A		526.7	ug/L	3.237	0.6145	114.3
Sr4215_R		479.2	ug/L	16.40	3.422	21,130
Ti3349_A		473.0	ug/L	0.9684	0.2047	12,670
Tl1908_A		97.97	ug/L	0.1280	0.1306	20.03
V_2924_A		484.8	ug/L	2.572	0.5305	6,555
Zn2062_A		492.9	ug/L	4.164	0.8449	760.4
Y_3600_R		27,093	Cts/S	118.15	0.43610	27,093
Y_2243_A		10,494	Cts/S	13.918	0.13263	10,494
Y_3600_A		409,750	Cts/S	2,508.8	0.61228	409,750

PBWID06ICW1

Method Name: K6010-2011 Method Revision: 1,728

PBWID06ICW1

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:43:03PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.2747	ug/L	0.2830	103.0	7.813
Al3961_R		-4.352	ug/L	6.948	159.7	-0.09810
As1891_A		0.3357	ug/L	0.5975	178.0	-0.5124
Au2427_A		-1.599	ug/L	0.1099	6.870	-4.688
B_2089_A	W	25.48	ug/L	0.2480	0.9733	28.68
Ba4554_R		1.693	ug/L	0.1688	9.971	157.2
Be3130_R		0.02767	ug/L	0.02332	84.29	1.210
Ca3158_R		-6.844	ug/L	1.925	28.13	-5.576
Cd2265_A		0.02601	ug/L	0.001951	7.502	1.045
Co2286_A		0.2009	ug/L	0.09885	49.21	4.539
Cr2677_A		0.1129	ug/L	0.0001480	0.1309	8.623
Cu3273_A		1.041	ug/L	0.06155	5.912	51.75
Fe2599_R		-7.293	ug/L	4.367	59.88	12.31
K_7664_R		-4.845	ug/L	3.969	81.93	-45.87
Li6707_R		0.7359	ug/L	0.7281	98.94	38.88
Mg2025_A		-18.27	ug/L	2.384	13.05	-2.510
Mn2576_R		1.399	ug/L	0.3381	24.18	7.788
Mo2020_A		-0.7280	ug/L	0.01257	1.727	0.9297
Na5895_R		66.74	ug/L	2.083	3.120	458.6
Ni2316_A		-0.04688	ug/L	0.01270	27.09	-0.8686
Pb2203_A		-0.2550	ug/L	0.3231	126.7	-1.861
Sb2068_A		-0.1230	ug/L	0.7926	644.5	-0.5865
Se1960_A		-1.575	ug/L	2.680	170.2	0.4587
Si2516_R		-6.442	ug/L	3.143	48.79	10.75
Sn1899_A		-0.7404	ug/L	0.1029	13.89	1.195
Sr4215_R		0.2689	ug/L	0.08417	31.30	2.315
Ti3349_A		0.1618	ug/L	0.1370	84.67	-9.788
Tl1908_A		-0.5440	ug/L	1.244	228.6	-0.03830
V_2924_A		0.5570	ug/L	0.2523	45.29	1.925
Zn2062_A		0.3387	ug/L	0.04889	14.43	0.7144
Y_3600_R		27,227	Cts/S	535.18	1.9656	27,227
Y_2243_A		10,629	Cts/S	21.823	0.20532	10,629
Y_3600_A		406,380	Cts/S	555.22	0.13663	406,380

SI2085-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:47:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-1.221	ug/L	0.2873	23.52	-455.0
Al3961_R		953.3	ug/L	28.01	2.939	950.9
As1891_A		-0.2728	ug/L	0.5957	218.4	-2.014
Au2427_A		1.920	ug/L	0.1547	8.054	26.34
B_2089_A		211.7	ug/L	1.720	0.8124	215.5
Ba4554_R		1.708	ug/L	0.1294	7.578	154.9
Be3130_R		-0.02530	ug/L	0.03796	150.0	-5.148
Ca3158_R		2,054	ug/L	45.06	2.194	3,178
Cd2265_A		-0.4566	ug/L	0.1528	33.46	20.43
Co2286_A		0.09831	ug/L	0.1451	147.6	3.552
Cr2677_A		6.333	ug/L	0.06092	0.9619	141.1
Cu3273_A		6.451	ug/L	0.6384	9.896	169.6
Fe2599_R	W	29,370	ug/L	982.3	3.345	42,030
K_7664_R		2,433	ug/L	123.8	5.088	2,127
Li6707_R		1.755	ug/L	0.8038	45.79	54.44
Mg2025_A		1,212	ug/L	2.318	0.1912	211.2
Mn2576_R		300.8	ug/L	6.553	2.178	2,233
Mo2020_A		-1.092	ug/L	0.06738	6.168	0.2441

SI2085-001

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:47:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	130,600	ug/L	6,233	4.774	348,400
Ni2316_A		2.759	ug/L	0.04696	1.702	3.363
Pb2203_A		-1.310	ug/L	0.2224	16.98	-1.025
Sb2068_A		-0.4411	ug/L	0.4314	97.80	-0.4115
Se1960_A		-2.876	ug/L	0.7706	26.80	0.4011
Si2516_R		2,476	ug/L	84.05	3.394	906.0
Sn1899_A		2.792	ug/L	0.4410	15.80	2.599
Sr4215_R		12.18	ug/L	0.2802	2.301	1,037
Ti3349_A		-0.2212	ug/L	0.1886	85.24	-28.81
Tl1908_A		-0.8371	ug/L	0.09718	11.61	-0.3952
V_2924_A		0.6074	ug/L	0.06370	10.49	11.45
Zn2062_A		76.53	ug/L	0.1546	0.2020	227.8
Y_3600_R		26,675	Cts/S	18.361	0.068833	26,675
Y_2243_A		10,129	Cts/S	21.279	0.21008	10,129
Y_3600_A		387,590	Cts/S	5,750.3	1.4836	387,590

CCV

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:52:42PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		507.1	ug/L	8.988	1.772	19,570
Al3961_R	W	11,730	ug/L	78.74	0.6712	11,290
As1891_A		475.7	ug/L	1.139	0.2393	149.4
Au2427_A		501.1	ug/L	25.22	5.033	2,302
B_2089_A	W	460.0	ug/L	0.4459	0.09693	485.5
Ba4554_R		492.6	ug/L	7.575	1.538	32,880
Be3130_R	W	456.5	ug/L	4.802	1.052	52,860
Ca3158_R		12,620	ug/L	144.0	1.141	18,890
Cd2265_A	W	451.1	ug/L	0.5416	0.1201	7,762
Co2286_A		476.1	ug/L	0.7793	0.1637	2,244
Cr2677_A		477.4	ug/L	9.732	2.039	9,980
Cu3273_A		474.9	ug/L	11.80	2.484	11,120
Fe2599_R	F	11,150	ug/L	127.6	1.144	15,470
K_7664_R	W	11,740	ug/L	196.6	1.675	10,090
Li6707_R		493.8	ug/L	5.096	1.032	7,639
Mg2025_A		13,120	ug/L	20.10	0.1533	2,322
Mn2576_R		494.7	ug/L	4.642	0.9384	3,555
Mo2020_A	W	458.6	ug/L	3.082	0.6721	825.7
Na5895_R		12,310	ug/L	183.0	1.487	32,050
Ni2316_A		512.9	ug/L	0.4256	0.08299	1,438
Pb2203_A	W	461.4	ug/L	0.2910	0.06306	549.7
Sb2068_A		486.1	ug/L	0.7397	0.1522	188.9
Se1960_A	W	449.1	ug/L	4.143	0.9225	86.68
Si2516_R		11,950	ug/L	129.8	1.086	4,198
Sn1899_A		523.3	ug/L	0.2498	0.04774	220.3
Sr4215_R		497.4	ug/L	7.560	1.520	41,840
Ti3349_A		491.9	ug/L	7.455	1.515	25,380
Tl1908_A	W	471.6	ug/L	1.808	0.3834	194.8
V_2924_A		489.2	ug/L	8.968	1.833	12,650
Zn2062_A		480.4	ug/L	0.2010	0.04183	1,447
Y_3600_R		25,825	Cts/S	635.15	2.4594	25,825
Y_2243_A		10,245	Cts/S	17.091	0.16683	10,245
Y_3600_A		394,100	Cts/S	6,254.9	1.5872	394,100

CCB

Method Name: K6010-2011 Method Revision: 1,728

CCB

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 9:57:18PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.05401	ug/L	0.2591	479.8	20.68
Al3961_R		2.890	ug/L	6.900	238.8	6.925
As1891_A		-0.3957	ug/L	1.147	289.7	-0.7412
Au2427_A		2.197	ug/L	0.7143	32.52	13.20
B_2089_A		0.1245	ug/L	0.3147	252.7	1.830
Ba4554_R		0.9445	ug/L	0.1124	11.90	100.2
Be3130_R		0.3962	ug/L	0.01765	4.456	44.31
Ca3158_R		2.943	ug/L	5.402	183.6	9.421
Cd2265_A		0.2012	ug/L	0.03696	18.37	4.125
Co2286_A		0.2902	ug/L	0.04710	16.23	4.908
Cr2677_A		0.2518	ug/L	0.1376	54.63	11.56
Cu3273_A		1.381	ug/L	0.3788	27.43	59.64
Fe2599_R		6.706	ug/L	2.349	35.03	31.36
K_7664_R		30.47	ug/L	34.18	112.2	-13.16
Li6707_R		4.581	ug/L	0.2534	5.532	97.40
Mg2025_A		-14.57	ug/L	2.277	15.63	-1.800
Mn2576_R		0.9232	ug/L	0.6550	70.95	3.989
Mo2020_A		0.8992	ug/L	0.04294	4.776	3.908
Na5895_R		90.30	ug/L	8.489	9.401	501.4
Ni2316_A		0.3149	ug/L	0.1126	35.75	0.1840
Pb2203_A		-0.04388	ug/L	0.2174	495.4	-1.579
Sb2068_A		1.077	ug/L	0.09717	9.025	-0.09999
Se1960_A		1.791	ug/L	1.651	92.17	1.110
Si2516_R		-2.254	ug/L	6.129	271.9	11.81
Sn1899_A		-0.07723	ug/L	0.4573	592.2	1.462
Sr4215_R		0.3305	ug/L	0.1595	48.26	7.385
Ti3349_A		0.3523	ug/L	0.08386	23.81	0.4375
Tl1908_A		0.2053	ug/L	0.1179	57.43	0.2832
V_2924_A		0.5583	ug/L	0.07196	12.89	1.681
Zn2062_A		0.2568	ug/L	0.01196	4.656	0.4512
Y_3600_R		26,125	Cts/S	29.929	0.11456	26,125
Y_2243_A		10,485	Cts/S	9.2807	0.088510	10,485
Y_3600_A		404,330	Cts/S	354.77	0.087743	404,330

SI2085-002

Method Name: K6010-2011 Method Revision: 1,728
Analyst Name: GEJ
Acquire Date: 4/6/2015 10:02:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		34.37	ug/L	1.662	4.836	-73.04
Al3961_R		113,700	ug/L	980.4	0.8624	10,570
As1891_A		-1.014	ug/L	6.588	649.5	-1.185
Au2427_A		17.61	ug/L	0.8097	4.597	16.75
B_2089_A	F	443,900	ug/L	18,950	4.268	38,990
Ba4554_R		12.62	ug/L	0.04079	0.3233	116.3
Be3130_R		0.1178	ug/L	0.08374	71.06	-0.6804
Ca3158_R		13,610	ug/L	8.338	0.06124	1,974
Cd2265_A		-3.837	ug/L	0.1380	3.596	8.176
Co2286_A		0.5601	ug/L	0.2969	53.00	3.030
Cr2677_A		292.4	ug/L	7.308	2.499	508.0
Cu3273_A		2.176	ug/L	3.693	169.7	25.80
Fe2599_R		163,300	ug/L	186.8	0.1144	21,900
K_7664_R	F	9,355,000	ug/L	279,900	2.992	780,600
Li6707_R		170.4	ug/L	45.18	26.51	278.9
Mg2025_A		2,769	ug/L	132.6	4.788	42.49
Mn2576_R		1,460	ug/L	3.372	0.2310	1,014
Mo2020_A		6.771	ug/L	1.300	19.20	2.946

KATAHDIN ANALYTICAL SERVICES
METALS ANALYSIS RUN INFORMATION SHEET

INSTR. ID: I (Thermo iCAP 6500) **ANALYST:** GEJ **ANALYSIS DATE:** 04.08.15

FILE NAME: I I D08A

METHOD: ICP

- ☑ 200.7
- ☑ 6010C
- ☑ DoD
- ☐ _____

REVIEWED
EJ 04-10-15
KATAHDIN ANALYTICAL
METALS SECTION

The pHs of all samples that were tested by direct analysis in this analytical run were checked just prior to analysis and confirmed to be <2. The time of preservation of these samples was checked in the "Measured Turbidity and Preservation of Incoming Samples" logbook to verify that they had been preserved at least 16 hours prior to analysis. These verifications were performed by _____ (initals) on _____ (date).

STANDARDS USED:

Standard Name	Standard ID	Prep. Date	Expiration Date	Standard Conc.
Cal. Blk/ICB/CCB	MW15408	03.25.15	03.25.15	0 ug/L
Standard 1	MW15403	03.23.15	06.23.15	Varies by Element
ICV	MW15401	03.23.15	04.30.15	Varies by Element
PQL	MW15374	03.06.15	05.01.15	Varies by Element
LRS1	MW15430	04.07.15	05.26.15	Varies by Element
LRS2	MW15409	03.25.15	06.25.15	Varies by Element
ICSA	MW15422	04.01.15	07.01.15	Varies by Element
ICSAB	MW15368	03.05.15	05.01.15	Varies by Element
CCV	MW15423	04.01.15	07.01.15	Varies by Element
Internal Standard	MW15416	03.30.15	06.30.15	5.0 mg/L Yttrium

Additional Comments and Notes:

- PQL std analyzed at 10:58 fails high for Mn for DoD samples – accept SE 1907-16 (Mn result >10x PQL)

EJ 04-10-15

0000492

INSTRUMENT RUNLOG

Instrument: ICAP 6500

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
Blank	1.000	IID08A	4/8/2015	10:40	GEJ
Std 1	1.000	IID08A	4/8/2015	10:45	GEJ
ICV	1.000	IID08A	4/8/2015	10:49	GEJ
ICB	1.000	IID08A	4/8/2015	10:54	GEJ
PQL	1.000	IID08A	4/8/2015	10:58	GEJ
LRS1	1.000	IID08A	4/8/2015	11:05	GEJ
LRS2	1.000	IID08A	4/8/2015	11:10	GEJ
ICSA	1.000	IID08A	4/8/2015	11:19	GEJ
ICSAB	1.000	IID08A	4/8/2015	11:23	GEJ
CCV	1.000	IID08A	4/8/2015	11:28	GEJ
CCB	1.000	IID08A	4/8/2015	11:33	GEJ
LCSWID03ICW1	2.000	IID08A	4/8/2015	11:37	GEJ
PBWID03ICW1	1.000	IID08A	4/8/2015	11:42	GEJ
SI2044-001	1.000	IID08A	4/8/2015	11:47	GEJ
SI2044-001L	5.000	IID08A	4/8/2015	11:52	GEJ
SI2044-001P	1.000	IID08A	4/8/2015	11:56	GEJ
SI2044-001S	1.000	IID08A	4/8/2015	12:01	GEJ
SI2053-002	1.000	IID08A	4/8/2015	12:06	GEJ
SI1693-001	1.000	IID08A	4/8/2015	12:11	GEJ
SI1693-001A	1.000	IID08A	4/8/2015	12:15	GEJ
SI1693-001L	3.000	IID08A	4/8/2015	12:20	GEJ
CCV	1.000	IID08A	4/8/2015	12:25	GEJ
CCB	1.000	IID08A	4/8/2015	12:29	GEJ
SI1693-001P	1.000	IID08A	4/8/2015	12:34	GEJ
SI1693-001S	1.000	IID08A	4/8/2015	12:39	GEJ
SI1978-001	1.000	IID08A	4/8/2015	12:44	GEJ
SI1979-001	1.000	IID08A	4/8/2015	12:48	GEJ
LCSWID06ICW1	2.000	IID08A	4/8/2015	12:53	GEJ
PBWID06ICW1	1.000	IID08A	4/8/2015	12:58	GEJ
SI1693-001L	5.000	IID08A	4/8/2015	13:03	GEJ
SI2067-001	1.000	IID08A	4/8/2015	13:07	GEJ
SI2067-001L	5.000	IID08A	4/8/2015	13:12	GEJ
SI2067-001P	1.000	IID08A	4/8/2015	13:17	GEJ
CCV	1.000	IID08A	4/8/2015	13:22	GEJ
CCB	1.000	IID08A	4/8/2015	13:26	GEJ
SI2067-001S	1.000	IID08A	4/8/2015	13:31	GEJ
SI2067-002	1.000	IID08A	4/8/2015	13:36	GEJ
SI2085-002	1.000	IID08A	4/8/2015	13:40	GEJ
RINSE	1.000	IID08A	4/8/2015	13:46	GEJ
LCSWID06ICW2	1.000	IID08A	4/8/2015	13:50	GEJ
PBWID06ICW2	1.000	IID08A	4/8/2015	13:55	GEJ
SI2069-001	1.000	IID08A	4/8/2015	14:00	GEJ
SI2069-001A	1.000	IID08A	4/8/2015	14:05	GEJ
SI2069-001L	5.000	IID08A	4/8/2015	14:09	GEJ

SAMPLE ID	DF	FILE	DATE	TIME	ANALYST
SI2069-001P	1.000	IID08A	4/8/2015	14:14	GEJ
CCV	1.000	IID08A	4/8/2015	14:19	GEJ
CCB	1.000	IID08A	4/8/2015	14:23	GEJ
SI2069-001S	1.000	IID08A	4/8/2015	14:28	GEJ
SI2069-002	1.000	IID08A	4/8/2015	14:33	GEJ
SI2069-003	1.000	IID08A	4/8/2015	14:38	GEJ
SI2069-004	1.000	IID08A	4/8/2015	14:42	GEJ
SI2069-005	1.000	IID08A	4/8/2015	14:47	GEJ
LC2OID03ICS1	1.000	IID08A	4/8/2015	14:52	GEJ
LCSOID03ICS1	1.000	IID08A	4/8/2015	14:57	GEJ
PBSID03ICS1	1.000	IID08A	4/8/2015	15:01	GEJ
SI1906-003	1.000	IID08A	4/8/2015	15:06	GEJ
SI1906-005	1.000	IID08A	4/8/2015	15:11	GEJ
CCV	1.000	IID08A	4/8/2015	15:15	GEJ
CCB	1.000	IID08A	4/8/2015	15:20	GEJ
SI1906-005D	1.000	IID08A	4/8/2015	15:25	GEJ
SI1906-005A	1.000	IID08A	4/8/2015	15:29	GEJ
SI1906-005L	5.000	IID08A	4/8/2015	15:34	GEJ
SI1906-005S	1.000	IID08A	4/8/2015	15:39	GEJ
SI1906-007	1.000	IID08A	4/8/2015	15:43	GEJ
SI1906-009	1.000	IID08A	4/8/2015	15:48	GEJ
SI1906-010	1.000	IID08A	4/8/2015	15:53	GEJ
SI1906-011	1.000	IID08A	4/8/2015	15:57	GEJ
SI1906-013	1.000	IID08A	4/8/2015	16:02	GEJ
SI1906-015	1.000	IID08A	4/8/2015	16:07	GEJ
CCV	1.000	IID08A	4/8/2015	16:11	GEJ
CCB	1.000	IID08A	4/8/2015	16:16	GEJ
SI1906-017	1.000	IID08A	4/8/2015	16:21	GEJ
SI1906-019	1.000	IID08A	4/8/2015	16:25	GEJ
SI1906-021	1.000	IID08A	4/8/2015	16:30	GEJ
SI1906-023	1.000	IID08A	4/8/2015	16:35	GEJ
SI1906-025	1.000	IID08A	4/8/2015	16:39	GEJ
SI1906-027	1.000	IID08A	4/8/2015	16:44	GEJ
SI1906-029	1.000	IID08A	4/8/2015	16:49	GEJ
SI2006-021	1.000	IID08A	4/8/2015	16:53	GEJ
SI2006-022	1.000	IID08A	4/8/2015	16:58	GEJ
SI1946-007	2.000	IID08A	4/8/2015	17:03	GEJ
CCV	1.000	IID08A	4/8/2015	17:08	GEJ
CCB	1.000	IID08A	4/8/2015	17:12	GEJ
SI1946-007A	2.000	IID08A	4/8/2015	17:17	GEJ
SI1946-007L	10.00	IID08A	4/8/2015	17:22	GEJ
SI1946-007P	2.000	IID08A	4/8/2015	17:26	GEJ
SI1946-007S	2.000	IID08A	4/8/2015	17:31	GEJ
SI1946-001	2.000	IID08A	4/8/2015	17:36	GEJ
SI1841-001	1.000	IID08A	4/8/2015	17:41	GEJ
SI1841-002	1.000	IID08A	4/8/2015	17:45	GEJ
SI1841-003	1.000	IID08A	4/8/2015	17:50	GEJ

Intensity Report

Author:

Published: 4/9/2015 9:25:47AM

Notes:

Blank

Method Name: K6010-2011 Method Revision: 1,730

Analyst Name: GEJ

Acquire Date: 4/8/2015 10:40:16AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.00007900	Cts/S	0.000004000	4.661	26.94
Al3961_R		-0.0002360	Cts/S	0.0002230	94.51	-4.696
As1891_A		-0.00009800	Cts/S	0.000005000	4.655	-0.8436
Au2427_A		-0.0008730	Cts/S	0.0001540	17.62	-7.538
B_2089_A		0.0004980	Cts/S	0.00007400	14.78	4.299
Ba4554_R		0.002263	Cts/S	0.0006330	27.96	45.70
Be3130_R		-0.0002410	Cts/S	0.0003350	139.0	-4.758
Ca3158_R		-0.0008880	Cts/S	0.000008000	0.9444	-17.86
Cd2265_A		0.0001420	Cts/S	0.00004800	33.69	1.230
Co2286_A		0.0005000	Cts/S	0.00005900	11.81	4.314
Cr2677_A		0.00002300	Cts/S	0.0000	0.005474	7.905
Cu3273_A		-0.00003100	Cts/S	0.00001300	42.90	-10.46
Fe2599_R		0.0002490	Cts/S	0.0001240	50.09	5.033
K_7664_R		0.004936	Cts/S	0.002101	42.55	98.75
Li6707_R		0.004684	Cts/S	0.0008910	19.02	94.47
Mg2025_A		-0.0003820	Cts/S	0.00003100	8.152	-3.295
Mn2576_R		-0.0001880	Cts/S	0.00007300	39.07	-3.802
Mo2020_A		0.00009900	Cts/S	0.00003400	33.91	0.8560
Na5895_R		0.01103	Cts/S	0.0009640	8.745	221.6
Ni2316_A		-0.0001140	Cts/S	0.00009900	87.16	-0.9767
Pb2203_A		-0.0002710	Cts/S	0.00001900	6.844	-2.337
Sb2068_A		0.00001100	Cts/S	0.000009000	77.63	0.09817
Se1960_A		0.0001050	Cts/S	0.0001260	119.8	0.9037
Si2516_R		0.0005630	Cts/S	0.00007100	12.61	11.32
Sn1899_A		0.0001900	Cts/S	0.000001000	0.4641	1.638
Sr4215_R		-0.002171	Cts/S	0.0003790	17.47	-43.58
Ti3349_A		-0.0001060	Cts/S	0.00001700	16.32	-36.23
Tl1908_A		-0.00009900	Cts/S	0.00001900	19.33	-0.8564
V_2924_A		0.000004000	Cts/S	0.00001700	426.3	-1.476
Zn2062_A		-0.00004000	Cts/S	0.00003100	76.59	-0.3452
Y_3600_R		20,120	Cts/S	535.95	2.6637	20,120
Y_2243_A		8,640.5	Cts/S	84.568	0.97874	8,640.5
Y_3600_A		341,480	Cts/S	9,423.3	2.7595	341,480

Std 1

Method Name: K6010-2011 Method Revision: 1,730

Analyst Name: GEJ

Acquire Date: 4/8/2015 10:45:00AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.09873	Cts/S	0.0005710	0.5778	33,100
Al3961_R		0.9062	Cts/S	0.01614	1.781	17,320
As1891_A		0.03033	Cts/S	0.000004000	0.01155	258.4
Au2427_A		0.4355	Cts/S	0.01609	3.695	3,712
B_2089_A		0.1034	Cts/S	0.0001620	0.1567	880.8
Ba4554_R		2.525	Cts/S	0.02172	0.8601	48,270
Be3130_R		4.178	Cts/S	0.06675	1.598	79,850
Ca3158_R		1.380	Cts/S	0.01644	1.191	26,380
Cd2265_A		1.746	Cts/S	0.001536	0.08796	14,880
Co2286_A		0.4648	Cts/S	0.0001270	0.02740	3,961
Cr2677_A		0.05523	Cts/S	0.00009700	0.1759	18,520
Cu3273_A		0.06138	Cts/S	0.0004310	0.7017	20,580
Fe2599_R		1.249	Cts/S	0.01998	1.600	23,860

Std 1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 10:45:00AM Sample Type: Standard

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
K_7664_R		0.8473	Cts/S	0.01387	1.637	16,190
Li6707_R		0.5717	Cts/S	0.004753	0.8313	10,930
Mg2025_A		0.4353	Cts/S	0.0002920	0.06707	3,710
Mn2576_R		0.2470	Cts/S	0.004749	1.922	4,721
Mo2020_A		0.1775	Cts/S	0.001489	0.8386	1,513
Na5895_R		2.479	Cts/S	0.02200	0.8871	47,390
Ni2316_A		0.2739	Cts/S	0.0005070	0.1850	2,334
Pb2203_A		0.1235	Cts/S	0.00008400	0.06836	1,052
Sb2068_A		0.03738	Cts/S	0.00009000	0.2416	318.6
Se1960_A		0.01875	Cts/S	0.0001630	0.8681	159.8
Si2516_R		0.3047	Cts/S	0.005455	1.790	5,822
Sn1899_A		0.04183	Cts/S	0.00006500	0.1546	356.5
Sr4215_R		3.085	Cts/S	0.03598	1.166	58,960
Ti3349_A		0.1285	Cts/S	0.0002770	0.2159	43,080
Tl1908_A		0.04193	Cts/S	0.0002360	0.5620	357.3
V_2924_A		0.06430	Cts/S	0.0002520	0.3912	21,560
Zn2062_A		0.3113	Cts/S	0.0003850	0.1237	2,653
Y_3600_R		19,112	Cts/S	74.277	0.38864	19,112
Y_2243_A		8,522.4	Cts/S	22.448	0.26340	8,522.4
Y_3600_A		335,270	Cts/S	1,781.0	0.53121	335,270

ICV

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 10:49:33AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		412.4	ug/L	1.173	0.2843	13,490
Al3961_R		10,270	ug/L	282.2	2.748	7,326
As1891_A		395.3	ug/L	2.405	0.6084	102.7
Au2427_A		404.0	ug/L	20.84	5.158	1,510
B_2089_A		409.9	ug/L	0.001463	0.0003570	367.4
Ba4554_R		407.0	ug/L	8.227	2.021	20,260
Be3130_R		405.1	ug/L	10.41	2.570	33,310
Ca3158_R		10,350	ug/L	194.0	1.874	11,240
Cd2265_A		409.2	ug/L	1.558	0.3807	6,153
Co2286_A		415.0	ug/L	1.222	0.2944	1,663
Cr2677_A		418.7	ug/L	1.366	0.3263	7,654
Cu3273_A		413.0	ug/L	1.155	0.2796	8,382
Fe2599_R		10,190	ug/L	225.4	2.212	10,020
K_7664_R		13,760	ug/L	389.4	2.830	9,222
Li6707_R		405.7	ug/L	8.552	2.108	4,620
Mg2025_A		10,460	ug/L	15.58	0.1489	1,566
Mn2576_R		406.4	ug/L	8.609	2.118	1,974
Mo2020_A		412.4	ug/L	1.800	0.4365	630.8
Na5895_R		10,380	ug/L	224.5	2.163	20,390
Ni2316_A		411.9	ug/L	1.249	0.3032	970.7
Pb2203_A		413.0	ug/L	0.4464	0.1081	437.7
Sb2068_A		403.1	ug/L	0.04219	0.01047	129.8
Se1960_A		402.3	ug/L	0.2156	0.05361	65.49
Si2516_R		9,992	ug/L	246.2	2.464	2,404
Sn1899_A		412.9	ug/L	0.5338	0.1293	149.7
Sr4215_R		407.2	ug/L	8.440	2.073	24,700
Ti3349_A		409.4	ug/L	0.9987	0.2440	17,380
Tl1908_A		421.4	ug/L	3.566	0.8462	151.6
V_2924_A	W	421.6	ug/L	0.7858	0.1864	8,969
Zn2062_A		409.1	ug/L	1.011	0.2471	1,096
Y_3600_R		19,682	Cts/S	132.18	0.67155	19,682

ICV

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 10:49:33AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Y_2243_A		8,610.0	Cts/S	26.619	0.30916	8,610.0
Y_3600_A		330,830	Cts/S	1,927.1	0.58249	330,830

ICB

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 10:54:09AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3384	ug/L	0.08450	24.97	38.26
Al3961_R		-0.4135	ug/L	6.017	1,455	-4.610
As1891_A		0.2998	ug/L	0.4953	165.2	-0.7660
Au2427_A		4.791	ug/L	0.2112	4.409	10.54
B_2089_A		0.05297	ug/L	0.3271	617.6	4.438
Ba4554_R		0.3969	ug/L	0.2061	51.94	61.62
Be3130_R		0.09861	ug/L	0.01790	18.15	3.164
Ca3158_R		-0.3461	ug/L	6.061	1,751	-17.18
Cd2265_A		0.01181	ug/L	0.001247	10.56	1.413
Co2286_A		0.01757	ug/L	0.1207	686.6	4.412
Cr2677_A		-0.1031	ug/L	0.1425	138.3	5.957
Cu3273_A		-0.08188	ug/L	0.4361	532.6	-12.26
Fe2599_R		2.004	ug/L	0.2830	14.13	6.567
K_7664_R		-92.12	ug/L	5.716	6.205	34.44
Li6707_R		-0.1539	ug/L	1.513	982.9	86.28
Mg2025_A		-7.460	ug/L	2.732	36.63	-4.415
Mn2576_R		0.7098	ug/L	0.2381	33.54	-0.2177
Mo2020_A		2.776	ug/L	0.4812	17.33	5.133
Na5895_R		-7.057	ug/L	2.686	38.06	194.5
Ni2316_A		0.1692	ug/L	0.2190	129.5	-0.5780
Pb2203_A		0.07154	ug/L	0.7764	1,085	-2.271
Sb2068_A		0.5192	ug/L	1.447	278.6	0.2677
Se1960_A		2.948	ug/L	1.900	64.45	1.390
Si2516_R		-25.93	ug/L	2.176	8.390	4.670
Sn1899_A		-0.2659	ug/L	0.5840	219.6	1.549
Sr4215_R		0.2930	ug/L	0.1639	55.94	-24.00
Ti3349_A		0.7206	ug/L	0.3181	44.14	-4.300
Tl1908_A		2.341	ug/L	0.4130	17.64	0.001344
V_2924_A		0.03710	ug/L	0.3206	864.0	-0.9793
Zn2062_A		0.06018	ug/L	0.04279	71.10	-0.1847
Y_3600_R		18,829	Cts/S	601.71	3.1957	18,829
Y_2243_A		8,676.3	Cts/S	25.181	0.29023	8,676.3
Y_3600_A		340,110	Cts/S	4,550.1	1.3378	340,110

PQL

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 10:58:54AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.94	ug/L	0.8888	8.128	394.5
Al3961_R		316.1	ug/L	25.11	7.943	218.2
As1891_A		7.198	ug/L	1.149	15.96	1.065
Au2427_A		101.8	ug/L	5.348	5.254	379.5
B_2089_A		51.43	ug/L	0.5844	1.136	49.46
Ba4554_R		5.453	ug/L	0.01450	0.2659	311.5
Be3130_R		5.145	ug/L	0.02553	0.4961	412.7
Ca3158_R		113.9	ug/L	3.375	2.962	105.1
Cd2265_A		5.132	ug/L	0.01803	0.3513	79.42
Co2286_A		10.58	ug/L	0.04581	0.4332	47.26

PQL

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 10:58:54AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Cr2677_A		10.25	ug/L	0.3679	3.588	199.9
Cu3273_A		26.39	ug/L	2.099	7.954	538.7
Fe2599_R		108.6	ug/L	0.08865	0.08161	110.3
K_7664_R		1,013	ug/L	26.85	2.651	759.4
Li6707_R		104.2	ug/L	2.350	2.255	1,240
Mg2025_A		101.4	ug/L	1.459	1.439	12.33
Mn2576_R	W	6.509	ug/L	0.6228	9.568	27.63
Mo2020_A		10.94	ug/L	0.02167	0.1981	17.79
Na5895_R		1,073	ug/L	9.662	0.9009	2,273
Ni2316_A		10.69	ug/L	0.03762	0.3520	24.58
Pb2203_A		4.963	ug/L	0.6361	12.82	2.968
Sb2068_A		7.854	ug/L	0.04148	0.5282	2.365
Se1960_A		9.783	ug/L	1.536	15.70	2.510
Si2516_R		206.6	ug/L	7.943	3.845	59.82
Sn1899_A		105.9	ug/L	0.8693	0.8205	40.15
Sr4215_R		10.92	ug/L	0.1511	1.384	613.1
Ti3349_A		15.92	ug/L	0.8218	5.162	658.0
Tl1908_A		17.51	ug/L	0.5571	3.182	5.584
V_2924_A		10.55	ug/L	0.3282	3.111	228.8
Zn2062_A		20.69	ug/L	0.03371	0.1629	55.87
Y_3600_R		19,442	Cts/S	75.874	0.39026	19,442
Y_2243_A		8,725.5	Cts/S	42.614	0.48839	8,725.5
Y_3600_A		339,450	Cts/S	14,675	4.3231	339,450

LRS1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:05:17AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	F	1,684	ug/L	5.157	0.3062	52,100
Al3961_R		60.43	ug/L	15.99	26.46	153.4
As1891_A		21,730	ug/L	44.31	0.2039	5,405
Au2427_A	F	23,440	ug/L	73.46	0.3133	83,560
B_2089_A		20,670	ug/L	29.78	0.1441	17,000
Ba4554_R		20,450	ug/L	597.7	2.923	1,014,000
Be3130_R		19,860	ug/L	940.3	4.734	1,631,000
Ca3158_R		-15.06	ug/L	2.491	16.55	-14.41
Cd2265_A		19,830	ug/L	20.27	0.1022	282,700
Co2286_A		21,390	ug/L	0.2724	0.001273	81,140
Cr2677_A		20,200	ug/L	454.9	2.252	364,900
Cu3273_A		20,500	ug/L	144.3	0.7040	412,000
Fe2599_R		208,800	ug/L	1,644	0.7875	205,000
K_7664_R		-84.48	ug/L	32.48	38.45	41.22
Li6707_R		20,900	ug/L	63.93	0.3059	233,100
Mg2025_A		-3,398	ug/L	5.031	0.1481	147.9
Mn2576_R	F	30.33	ug/L	0.2434	0.8024	150.9
Mo2020_A		5,388	ug/L	13.79	0.2560	7,807
Na5895_R		19.15	ug/L	4.648	24.28	254.1
Ni2316_A		20,930	ug/L	6.283	0.03002	46,850
Pb2203_A		21,220	ug/L	27.82	0.1311	21,510
Sb2068_A		21,140	ug/L	21.73	0.1028	6,459
Se1960_A		21,240	ug/L	20.80	0.09792	3,232
Si2516_R		149.6	ug/L	14.31	9.563	52.46
Sn1899_A		20,760	ug/L	27.99	0.1348	7,064
Sr4215_R		20,120	ug/L	509.4	2.532	1,221,000
Ti3349_A		20,710	ug/L	157.4	0.7599	870,700
Tl1908_A		20,740	ug/L	9.041	0.04360	7,134

LRS1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:05:17AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
V_2924_A		21,020	ug/L	12.29	0.05846	444,500
Zn2062_A		20,050	ug/L	43.92	0.2191	50,980
Y_3600_R		19,663	Cts/S	243.62	1.2390	19,663
Y_2243_A		8,168.9	Cts/S	64.101	0.78469	8,168.9
Y_3600_A		327,260	Cts/S	3,586.0	1.0957	327,260

LRS2

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:10:42AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		10.50	ug/L	1.546	14.73	-2,607
Al3961_R		501,200	ug/L	24,000	4.789	356,400
As1891_A		12.57	ug/L	0.02144	0.1706	-8.465
Au2427_A		17.54	ug/L	2.404	13.70	167.6
B_2089_A		19.48	ug/L	0.8321	4.271	19.69
Ba4554_R		1.562	ug/L	0.03195	2.046	121.8
Be3130_R		0.5163	ug/L	0.0009580	0.1857	36.52
Ca3158_R		489,900	ug/L	19,620	4.005	531,500
Cd2265_A		0.6390	ug/L	0.2639	41.29	158.0
Co2286_A		0.3544	ug/L	0.1152	32.50	3.537
Cr2677_A		-1.812	ug/L	0.3305	18.24	-24.33
Cu3273_A		-2.866	ug/L	0.02919	1.019	9.363
Fe2599_R		246,700	ug/L	3,019	1.224	242,000
K_7664_R		316,600	ug/L	1,585	0.5007	209,600
Li6707_R		36.33	ug/L	4.182	11.51	496.4
Mg2025_A		190,800	ug/L	23.32	0.01222	26,240
Mn2576_R		9.868	ug/L	0.2189	2.218	53.45
Mo2020_A		8.892	ug/L	2.071	23.29	13.36
Na5895_R		207,900	ug/L	2,069	0.9948	403,400
Ni2316_A		3.737	ug/L	0.1531	4.097	-21.99
Pb2203_A		-5.776	ug/L	3.164	54.78	-62.67
Sb2068_A		4.312	ug/L	0.8386	19.45	3.449
Se1960_A		3.340	ug/L	6.080	182.0	3.791
Si2516_R		51,450	ug/L	714.2	1.388	12,290
Sn1899_A		7.266	ug/L	0.5108	7.030	3.921
Sr4215_R		7.683	ug/L	0.08151	1.061	423.2
Ti3349_A		19.08	ug/L	0.3374	1.768	722.7
Tl1908_A		3.587	ug/L	0.6545	18.25	0.4038
V_2924_A		-1.898	ug/L	0.08042	4.238	34.65
Zn2062_A		3.857	ug/L	0.02076	0.5381	9.263
Y_3600_R		19,639	Cts/S	67.716	0.34481	19,639
Y_2243_A		7,966.7	Cts/S	25.792	0.32375	7,966.7
Y_3600_A		307,990	Cts/S	724.65	0.23529	307,990

ICSA

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:19:01AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A	W	6.278	ug/L	1.501	23.90	-2,010
Al3961_R		492,500	ug/L	12,480	2.534	351,700
As1891_A		2.029	ug/L	3.533	174.2	-8.105
Au2427_A		1.099	ug/L	2.057	187.1	82.40
B_2089_A		9.084	ug/L	1.340	14.75	11.09
Ba4554_R		0.1004	ug/L	0.06570	65.41	49.63
Be3130_R		0.07523	ug/L	0.02957	39.31	1.224

ICSA

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:19:01AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ca3158_R		467,100	ug/L	11,460	2.455	508,800
Cd2265_A		0.4327	ug/L	0.1766	40.81	118.0
Co2286_A		0.02551	ug/L	0.02217	86.91	2.619
Cr2677_A		-0.05387	ug/L	0.2404	446.3	5.715
Cu3273_A		-2.315	ug/L	0.1244	5.375	25.39
Fe2599_R		186,400	ug/L	4,236	2.272	183,600
K_7664_R		382.8	ug/L	2.662	0.6955	351.6
Li6707_R		22.12	ug/L	0.2830	1.279	339.7
Mg2025_A		460,300	ug/L	5.845	0.001270	62,780
Mn2576_R		0.1819	ug/L	0.2932	161.2	4.389
Mo2020_A		-0.4331	ug/L	0.5169	119.3	0.1738
Na5895_R		98.10	ug/L	1.122	1.144	408.5
Ni2316_A		0.8431	ug/L	0.1139	13.51	-21.00
Pb2203_A		-1.916	ug/L	2.341	122.2	-59.48
Sb2068_A		-0.1820	ug/L	0.8891	488.4	1.689
Se1960_A		-2.742	ug/L	2.172	79.21	2.679
Si2516_R		30.64	ug/L	1.810	5.908	7.842
Sn1899_A		3.145	ug/L	1.641	52.18	2.531
Sr4215_R	W	5.165	ug/L	0.01030	0.1994	271.6
Ti3349_A		3.496	ug/L	0.1412	4.038	105.5
Tl1908_A		4.074	ug/L	0.5763	14.15	0.6565
V_2924_A		-1.610	ug/L	0.08574	5.326	22.91
Zn2062_A		0.3554	ug/L	0.05218	14.68	0.5580
Y_3600_R		19,717	Cts/S	161.65	0.81981	19,717
Y_2243_A		7,897.9	Cts/S	19.451	0.24629	7,897.9
Y_3600_A		307,370	Cts/S	2,135.4	0.69474	307,370

ICSAB

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:23:50AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		210.9	ug/L	0.1481	0.07020	4,303
Al3961_R		474,500	ug/L	18,800	3.962	339,000
As1891_A		94.38	ug/L	2.823	2.992	14.67
Au2427_A		526.6	ug/L	9.493	1.803	1,888
B_2089_A		484.1	ug/L	1.552	0.3205	397.5
Ba4554_R		492.2	ug/L	13.82	2.807	24,540
Be3130_R		484.6	ug/L	11.99	2.475	39,940
Ca3158_R		447,400	ug/L	19,290	4.312	487,500
Cd2265_A		899.6	ug/L	0.2960	0.03291	12,520
Co2286_A		447.4	ug/L	0.6058	0.1354	1,646
Cr2677_A		465.8	ug/L	4.650	0.9983	7,886
Cu3273_A		492.5	ug/L	4.975	1.010	9,333
Fe2599_R		181,100	ug/L	4,583	2.531	178,400
K_7664_R		20,340	ug/L	440.0	2.163	13,620
Li6707_R		542.5	ug/L	14.17	2.612	6,160
Mg2025_A		446,500	ug/L	294.7	0.06600	60,990
Mn2576_R		460.9	ug/L	8.341	1.810	2,251
Mo2020_A		474.0	ug/L	1.249	0.2635	665.8
Na5895_R		20,560	ug/L	502.0	2.441	40,260
Ni2316_A		880.0	ug/L	0.1205	0.01369	1,886
Pb2203_A		40.27	ug/L	3.529	8.764	-16.29
Sb2068_A		572.4	ug/L	1.533	0.2678	170.8
Se1960_A		44.61	ug/L	3.934	8.819	9.599
Si2516_R	F	209.3	ug/L	20.68	9.880	52.22
Sn1899_A		458.4	ug/L	1.525	0.3327	152.4

ICSAB

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:23:50AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Sr4215_R		505.1	ug/L	11.94	2.363	30,720
Ti3349_A		484.3	ug/L	5.098	1.053	19,050
Tl1908_A		93.82	ug/L	0.06011	0.06406	29.05
V_2924_A		481.5	ug/L	3.156	0.6554	9,538
Zn2062_A		881.6	ug/L	0.1957	0.02219	2,171
Y_3600_R		19,726	Cts/S	88.519	0.44874	19,726
Y_2243_A		7,908.0	Cts/S	9.9267	0.12553	7,908.0
Y_3600_A		306,440	Cts/S	3,304.1	1.0782	306,440

CCV

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:28:34AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		498.1	ug/L	0.4189	0.08410	16,840
Al3961_R		12,560	ug/L	62.33	0.4963	9,052
As1891_A		494.6	ug/L	0.5022	0.1015	130.6
Au2427_A		497.6	ug/L	23.25	4.673	1,889
B_2089_A		501.3	ug/L	0.02669	0.005325	454.9
Ba4554_R		507.5	ug/L	3.223	0.6352	25,520
Be3130_R		501.6	ug/L	4.291	0.8555	41,690
Ca3158_R		12,520	ug/L	81.40	0.6500	13,740
Cd2265_A		496.5	ug/L	0.6275	0.1264	7,575
Co2286_A		501.9	ug/L	0.03582	0.007137	2,040
Cr2677_A		498.5	ug/L	0.8573	0.1720	9,427
Cu3273_A		499.9	ug/L	0.5656	0.1131	10,500
Fe2599_R		12,540	ug/L	95.61	0.7625	12,460
K_7664_R		12,450	ug/L	117.2	0.9420	8,441
Li6707_R		506.9	ug/L	1.884	0.3717	5,810
Mg2025_A		12,510	ug/L	51.06	0.4083	1,901
Mn2576_R		501.5	ug/L	4.379	0.8732	2,463
Mo2020_A		504.1	ug/L	1.994	0.3955	782.1
Na5895_R		12,520	ug/L	72.92	0.5826	24,800
Ni2316_A		502.1	ug/L	0.8962	0.1785	1,201
Pb2203_A		497.2	ug/L	0.6090	0.1225	535.2
Sb2068_A		495.7	ug/L	0.1522	0.03072	161.9
Se1960_A		489.6	ug/L	4.338	0.8859	80.67
Si2516_R		12,480	ug/L	80.57	0.6457	3,031
Sn1899_A		497.1	ug/L	0.9369	0.1885	182.5
Sr4215_R		503.6	ug/L	4.366	0.8671	30,880
Ti3349_A		501.0	ug/L	2.477	0.4945	22,010
Tl1908_A		504.2	ug/L	0.2969	0.05889	184.3
V_2924_A		503.7	ug/L	0.1431	0.02841	11,080
Zn2062_A		494.7	ug/L	0.2893	0.05847	1,345
Y_3600_R		19,891	Cts/S	395.44	1.9880	19,891
Y_2243_A		8,736.1	Cts/S	1.8458	0.021128	8,736.1
Y_3600_A		342,270	Cts/S	197.56	0.057722	342,270

CCB

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:33:10AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.2254	ug/L	0.006679	2.964	34.71
Al3961_R		2.356	ug/L	16.52	701.5	-3.095
As1891_A		0.7667	ug/L	0.8214	107.1	-0.6523
Au2427_A		4.909	ug/L	1.092	22.23	11.15

CCB

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:33:10AM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
B_2089_A		3.663	ug/L	0.6635	18.11	7.673
Ba4554_R		0.1552	ug/L	0.03062	19.73	53.23
Be3130_R		0.008149	ug/L	0.04683	574.7	-4.222
Ca3158_R		1.466	ug/L	6.089	415.3	-16.24
Cd2265_A		-0.001539	ug/L	0.01671	1,086	1.232
Co2286_A		-0.09014	ug/L	0.2098	232.7	4.037
Cr2677_A		-0.2208	ug/L	0.1233	55.85	3.768
Cu3273_A		1.027	ug/L	0.6769	65.94	11.04
Fe2599_R		5.747	ug/L	2.875	50.02	10.70
K_7664_R		-29.82	ug/L	35.13	117.8	79.05
Li6707_R		5.221	ug/L	2.809	53.81	152.9
Mg2025_A		-2.121	ug/L	0.5730	27.01	-3.674
Mn2576_R		1.061	ug/L	0.9322	87.90	1.440
Mo2020_A		2.550	ug/L	0.4091	16.04	4.855
Na5895_R		25.23	ug/L	2.038	8.079	271.0
Ni2316_A		-0.1163	ug/L	0.1039	89.32	-1.276
Pb2203_A		0.1144	ug/L	0.3504	306.3	-2.258
Sb2068_A		-0.9644	ug/L	0.08800	9.125	-0.2219
Se1960_A		3.243	ug/L	1.564	48.22	1.458
Si2516_R		-32.14	ug/L	2.315	7.204	3.461
Sn1899_A		0.2311	ug/L	0.2784	120.4	1.754
Sr4215_R		0.1559	ug/L	0.02877	18.45	-33.88
Ti3349_A		0.6669	ug/L	0.01480	2.220	-6.813
Tl1908_A		2.244	ug/L	0.3900	17.38	-0.03733
V_2924_A		0.5630	ug/L	0.1430	25.40	10.82
Zn2062_A		0.06208	ug/L	0.009775	15.75	-0.1820
Y_3600_R		20,045	Cts/S	407.73	2.0341	20,045
Y_2243_A		8,804.4	Cts/S	19.137	0.21736	8,804.4
Y_3600_A		343,180	Cts/S	1,062.9	0.30971	343,180

LCSWID03ICW1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:37:55AM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.64	ug/L	2.458	4.760	911.1
Al3961_R		1,973	ug/L	68.74	3.483	724.0
As1891_A		102.2	ug/L	0.7701	0.7533	13.01
Au2427_A		8.584	ug/L	2.226	25.94	7.280
B_2089_A		499.7	ug/L	1.596	0.3193	227.7
Ba4554_R		1,964	ug/L	53.12	2.705	50,510
Be3130_R		49.61	ug/L	1.689	3.404	2,093
Ca3158_R		2,458	ug/L	60.55	2.464	1,365
Cd2265_A		253.2	ug/L	0.3398	0.1342	1,965
Co2286_A		520.1	ug/L	0.1209	0.02324	1,078
Cr2677_A		205.1	ug/L	3.389	1.653	1,973
Cu3273_A		259.4	ug/L	4.966	1.914	2,753
Fe2599_R		976.0	ug/L	33.38	3.420	501.3
K_7664_R		9,686	ug/L	206.9	2.136	3,424
Li6707_R		490.8	ug/L	13.22	2.694	2,929
Mg2025_A		5,111	ug/L	17.06	0.3339	397.3
Mn2576_R		498.8	ug/L	19.90	3.989	1,252
Mo2020_A		100.8	ug/L	0.5876	0.5832	80.29
Na5895_R		7,373	ug/L	167.5	2.272	7,638
Ni2316_A		518.2	ug/L	1.864	0.3597	630.5
Pb2203_A		103.8	ug/L	1.463	1.409	54.78
Sb2068_A		99.59	ug/L	3.262	3.276	15.94

LCSWID03ICW1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:37:55AM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Se1960_A		106.1	ug/L	3.157	2.976	9.737
Si2516_R		920.8	ug/L	32.75	3.557	125.7
Sn1899_A		507.3	ug/L	1.143	0.2253	95.60
Sr4215_R		496.4	ug/L	14.34	2.889	15,560
Ti3349_A		507.4	ug/L	13.81	2.722	11,270
Tl1908_A		111.4	ug/L	2.266	2.035	19.11
V_2924_A		520.9	ug/L	11.91	2.286	5,853
Zn2062_A		505.3	ug/L	1.704	0.3373	699.4
Y_3600_R		20,370	Cts/S	335.45	1.6468	20,370
Y_2243_A		8,891.5	Cts/S	28.964	0.32575	8,891.5
Y_3600_A		347,160	Cts/S	6,573.3	1.8935	347,160

PBWID03ICW1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:42:37AM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1067	ug/L	0.02339	21.92	31.70
Al3961_R		-11.38	ug/L	7.939	69.79	-13.43
As1891_A		0.4083	ug/L	0.5535	135.6	-0.7647
Au2427_A		2.908	ug/L	0.5429	18.67	3.538
B_2089_A		1.161	ug/L	0.9233	79.51	5.530
Ba4554_R		0.1654	ug/L	0.04017	24.29	55.69
Be3130_R		0.02315	ug/L	0.06438	278.2	-3.012
Ca3158_R		3.695	ug/L	6.573	177.9	-14.18
Cd2265_A		-0.02887	ug/L	0.008773	30.39	0.8244
Co2286_A		0.07445	ug/L	0.01617	21.72	4.802
Cr2677_A		-0.1829	ug/L	0.2659	145.4	4.636
Cu3273_A		0.4070	ug/L	0.4180	102.7	-2.050
Fe2599_R		0.9914	ug/L	3.327	335.6	6.204
K_7664_R		-114.2	ug/L	5.121	4.484	22.60
Li6707_R		-2.958	ug/L	1.166	39.44	62.42
Mg2025_A		4.900	ug/L	2.841	57.97	-2.661
Mn2576_R		1.231	ug/L	0.6823	55.44	2.428
Mo2020_A		0.5970	ug/L	0.01467	2.457	1.839
Na5895_R		19.11	ug/L	7.926	41.48	268.3
Ni2316_A		0.2943	ug/L	0.1320	44.83	-0.2929
Pb2203_A		1.742	ug/L	0.1436	8.244	-0.4871
Sb2068_A		-0.9112	ug/L	0.6034	66.22	-0.2007
Se1960_A		2.256	ug/L	0.8682	38.49	1.322
Si2516_R		-21.21	ug/L	9.180	43.29	6.358
Sn1899_A		-1.625	ug/L	0.9446	58.14	1.096
Sr4215_R		0.2676	ug/L	0.3992	149.2	-27.85
Ti3349_A		0.6287	ug/L	0.1368	21.75	-8.875
Tl1908_A		1.549	ug/L	0.2525	16.30	-0.3015
V_2924_A		0.2104	ug/L	0.1317	62.59	3.334
Zn2062_A		0.4311	ug/L	0.05882	13.64	0.8471
Y_3600_R		20,776	Cts/S	148.16	0.71312	20,776
Y_2243_A		8,977.3	Cts/S	46.226	0.51492	8,977.3
Y_3600_A		354,130	Cts/S	1,545.2	0.43635	354,130

SI2044-001

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:47:23AM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04187	ug/L	0.3493	834.4	25.54

SI2044-001

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:47:23AM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Al3961_R		27.97	ug/L	14.59	52.17	26.20
As1891_A		2.329	ug/L	0.4239	18.21	-0.2375
Au2427_A		2.492	ug/L	1.489	59.75	1.912
B_2089_A		6.728	ug/L	0.3096	4.601	10.35
Ba4554_R		7.323	ug/L	0.1446	1.974	428.3
Be3130_R		-0.02629	ug/L	0.03662	139.3	-7.485
Ca3158_R	W	36,900	ug/L	795.4	2.155	42,080
Cd2265_A		0.01843	ug/L	0.03732	202.5	1.576
Co2286_A		-0.02136	ug/L	0.1166	546.1	4.374
Cr2677_A		0.2370	ug/L	0.02896	12.22	12.76
Cu3273_A		2.043	ug/L	0.1879	9.196	33.30
Fe2599_R		50.28	ug/L	0.5114	1.017	56.99
K_7664_R		1,696	ug/L	4.673	0.2755	1,282
Li6707_R		-0.9703	ug/L	0.7783	80.22	85.37
Mg2025_A		2,734	ug/L	5.185	0.1896	414.1
Mn2576_R		1.384	ug/L	0.2061	14.89	3.186
Mo2020_A		0.3046	ug/L	0.07743	25.41	1.352
Na5895_R		8,492	ug/L	178.8	2.106	17,540
Ni2316_A		1.045	ug/L	0.2371	22.68	1.525
Pb2203_A		0.2007	ug/L	0.3010	150.0	-2.174
Sb2068_A		-2.669	ug/L	0.7042	26.38	-0.7859
Se1960_A		1.403	ug/L	1.012	72.08	1.161
Si2516_R		5,062	ug/L	122.1	2.412	1,283
Sn1899_A		-0.04615	ug/L	0.2951	639.4	1.660
Sr4215_R		138.5	ug/L	3.430	2.477	8,783
Ti3349_A		3.983	ug/L	0.2950	7.407	142.8
Tl1908_A		2.385	ug/L	0.6196	25.98	0.01510
V_2924_A		0.4468	ug/L	0.1109	24.81	8.822
Zn2062_A		4.103	ug/L	0.1065	2.596	10.95
Y_3600_R		20,651	Cts/S	52.882	0.25607	20,651
Y_2243_A		8,841.4	Cts/S	42.712	0.48309	8,841.4
Y_3600_A		352,020	Cts/S	3,019.7	0.85782	352,020

SI2044-001L

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:52:09AM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5259	ug/L	0.2626	49.94	31.49
Al3961_R		38.68	ug/L	26.02	67.26	2.715
As1891_A		5.776	ug/L	2.479	42.92	-0.5524
Au2427_A		11.26	ug/L	5.089	45.20	0.9500
B_2089_A		7.177	ug/L	0.3717	5.179	5.672
Ba4554_R		8.224	ug/L	0.5180	6.298	129.3
Be3130_R		-0.07315	ug/L	0.5102	697.6	-6.087
Ca3158_R		33,720	ug/L	695.7	2.063	7,493
Cd2265_A		-0.08185	ug/L	0.1101	134.6	1.013
Co2286_A		-0.6526	ug/L	0.6340	97.14	3.891
Cr2677_A		-0.4296	ug/L	0.1643	38.23	6.525
Cu3273_A		4.307	ug/L	1.126	26.14	7.838
Fe2599_R		65.55	ug/L	12.75	19.45	18.22
K_7664_R		1,128	ug/L	68.31	6.056	252.7
Li6707_R		5.998	ug/L	6.554	109.3	108.1
Mg2025_A		2,545	ug/L	75.55	2.969	74.33
Mn2576_R		7.780	ug/L	1.860	23.91	3.955
Mo2020_A		0.2456	ug/L	1.564	636.7	0.9520
Na5895_R		7,613	ug/L	54.73	0.7189	3,253

SI2044-001L

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:52:09AM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ni2316_A		1.234	ug/L	1.132	91.74	-0.4066
Pb2203_A		0.7646	ug/L	0.7960	104.1	-2.225
Sb2068_A		-0.1479	ug/L	0.4739	320.4	0.09124
Se1960_A		7.773	ug/L	6.668	85.78	1.186
Si2516_R		4,450	ug/L	204.7	4.599	229.5
Sn1899_A		-1.379	ug/L	3.351	243.0	1.575
Sr4215_R		127.5	ug/L	1.824	1.431	1,543
Ti3349_A		3.860	ug/L	1.053	27.29	-2.325
Tl1908_A		0.5913	ug/L	2.288	386.9	-0.8358
V_2924_A		1.661	ug/L	0.7010	42.20	6.191
Zn2062_A		4.538	ug/L	0.01656	0.3649	2.147
Y_3600_R		20,161	Cts/S	226.03	1.1211	20,161
Y_2243_A		8,842.0	Cts/S	16.612	0.18787	8,842.0
Y_3600_A		354,160	Cts/S	3,229.3	0.91182	354,160

SI2044-001P

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 11:56:57AM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.84	ug/L	0.5020	0.9874	1,765
Al3961_R		2,019	ug/L	57.97	2.871	1,535
As1891_A		104.2	ug/L	1.382	1.326	27.19
Au2427_A		4.432	ug/L	0.5809	13.11	6.282
B_2089_A		519.1	ug/L	1.505	0.2899	464.0
Ba4554_R	W	1,938	ug/L	60.61	3.127	102,300
Be3130_R		50.32	ug/L	1.247	2.478	4,365
Ca3158_R	W	36,970	ug/L	986.8	2.669	42,680
Cd2265_A		250.8	ug/L	0.8213	0.3274	3,860
Co2286_A		515.4	ug/L	1.226	0.2379	2,115
Cr2677_A		205.3	ug/L	3.434	1.673	3,936
Cu3273_A		256.6	ug/L	2.829	1.102	5,450
Fe2599_R		999.9	ug/L	29.68	2.969	1,049
K_7664_R		11,200	ug/L	326.0	2.912	7,989
Li6707_R		489.3	ug/L	12.38	2.529	5,897
Mg2025_A		7,610	ug/L	2.443	0.03210	1,172
Mn2576_R		489.4	ug/L	10.76	2.198	2,525
Mo2020_A		86.75	ug/L	4.337	5.000	136.5
Na5895_R		15,150	ug/L	449.1	2.965	31,500
Ni2316_A		512.3	ug/L	0.05472	0.01068	1,237
Pb2203_A		100.7	ug/L	0.4973	0.4937	107.7
Sb2068_A		103.1	ug/L	2.598	2.520	32.77
Se1960_A		98.68	ug/L	0.6621	0.6710	17.17
Si2516_R		5,800	ug/L	131.1	2.260	1,487
Sn1899_A		482.6	ug/L	9.675	2.005	178.9
Sr4215_R		624.5	ug/L	15.48	2.479	40,260
Ti3349_A		505.8	ug/L	8.526	1.685	22,480
Tl1908_A		109.5	ug/L	1.256	1.147	38.11
V_2924_A		516.6	ug/L	6.738	1.304	11,600
Zn2062_A		512.0	ug/L	0.9058	0.1769	1,406
Y_3600_R		20,909	Cts/S	380.55	1.8201	20,909
Y_2243_A		8,819.0	Cts/S	25.423	0.28828	8,819.0
Y_3600_A		346,570	Cts/S	4,815.4	1.3894	346,570

SI2044-001S

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ

SI2044-001S

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:01:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.24	ug/L	0.4134	0.8068	1,774
Al3961_R		2,087	ug/L	20.17	0.9665	1,572
As1891_A		108.2	ug/L	0.9989	0.9231	28.16
Au2427_A		3.530	ug/L	0.2861	8.103	2.710
B_2089_A		523.0	ug/L	0.1773	0.03389	465.9
Ba4554_R	W	2,001	ug/L	40.17	2.007	104,600
Be3130_R		51.84	ug/L	0.5268	1.016	4,455
Ca3158_R	W	38,190	ug/L	506.4	1.326	43,670
Cd2265_A		258.5	ug/L	0.1052	0.04067	3,964
Co2286_A		519.6	ug/L	0.2825	0.05436	2,124
Cr2677_A		207.4	ug/L	2.447	1.180	3,969
Cu3273_A		258.9	ug/L	3.186	1.231	5,486
Fe2599_R		1,029	ug/L	10.76	1.045	1,069
K_7664_R		11,790	ug/L	78.35	0.6644	8,330
Li6707_R		505.1	ug/L	7.808	1.546	6,027
Mg2025_A		7,783	ug/L	7.233	0.09294	1,194
Mn2576_R		504.2	ug/L	6.784	1.345	2,577
Mo2020_A		91.94	ug/L	3.642	3.961	144.1
Na5895_R		15,790	ug/L	173.5	1.099	32,500
Ni2316_A		517.4	ug/L	0.8633	0.1669	1,245
Pb2203_A		104.7	ug/L	0.7527	0.7191	111.6
Sb2068_A		104.6	ug/L	1.091	1.043	33.12
Se1960_A		102.4	ug/L	3.445	3.366	17.71
Si2516_R		6,021	ug/L	79.59	1.322	1,528
Sn1899_A		494.4	ug/L	6.195	1.253	182.6
Sr4215_R		644.6	ug/L	9.609	1.491	41,170
Ti3349_A		511.4	ug/L	0.9466	0.1851	22,680
Tl1908_A		112.4	ug/L	1.107	0.9846	39.03
V_2924_A		519.5	ug/L	3.706	0.7134	11,640
Zn2062_A		517.1	ug/L	1.121	0.2168	1,415
Y_3600_R		20,706	Cts/S	224.01	1.0819	20,706
Y_2243_A		8,786.5	Cts/S	31.002	0.35284	8,786.5
Y_3600_A		345,850	Cts/S	3,746.7	1.0833	345,850

SI2053-002

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:06:18PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5077	ug/L	0.1583	31.17	-75.91
Al3961_R		5,871	ug/L	111.1	1.893	4,439
As1891_A		-5.080	ug/L	0.4870	9.587	-0.2924
Au2427_A		0.05417	ug/L	1.441	2,660	-2.387
B_2089_A	W	13,720	ug/L	39.35	0.2869	10,400
Ba4554_R		218.0	ug/L	3.358	1.541	10,890
Be3130_R		-0.09961	ug/L	0.05902	59.25	-13.24
Ca3158_R	F	618,500	ug/L	26,420	4.272	673,500
Cd2265_A		-0.1145	ug/L	0.002998	2.620	5.143
Co2286_A		28.58	ug/L	0.3063	1.072	103.2
Cr2677_A		3.204	ug/L	0.1397	4.361	59.12
Cu3273_A		45.00	ug/L	0.2118	0.4708	806.9
Fe2599_R		9,944	ug/L	276.3	2.778	9,793
K_7664_R	W	96,320	ug/L	1,008	1.046	64,070
Li6707_R		273.2	ug/L	9.567	3.502	3,146
Mg2025_A		797.5	ug/L	9.522	1.194	116.8
Mn2576_R		45.66	ug/L	1.574	3.446	219.2
Mo2020_A	W	4,308	ug/L	103.9	2.413	5,744

SI2053-002

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:06:18PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	963,000	ug/L	32,240	3.348	1,875,000
Ni2316_A		50.66	ug/L	0.6287	1.241	110.1
Pb2203_A		38.53	ug/L	1.225	3.180	31.23
Sb2068_A		40.72	ug/L	1.549	3.804	9.341
Se1960_A		24.74	ug/L	1.321	5.342	4.299
Si2516_R		1,971	ug/L	38.36	1.946	493.0
Sn1899_A		7.477	ug/L	0.2408	3.221	3.764
Sr4215_R	W	1,397	ug/L	19.76	1.415	84,960
Ti3349_A		4.460	ug/L	0.3602	8.076	308.6
Tl1908_A		-3.849	ug/L	0.5986	15.55	-2.043
V_2924_A		-3.482	ug/L	1.201	34.49	-583.6
Zn2062_A		44.73	ug/L	0.3058	0.6837	104.4
Y_3600_R		19,712	Cts/S	11.607	0.058881	19,712
Y_2243_A		7,513.7	Cts/S	1.4412	0.019181	7,513.7
Y_3600_A		295,270	Cts/S	3,628.3	1.2288	295,270

SI1693-001

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:11:04PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1200	ug/L	0.1275	106.3	21.85
Al3961_R	W	32,780	ug/L	717.1	2.187	23,880
As1891_A		-1.599	ug/L	1.185	74.10	-1.170
Au2427_A		3.222	ug/L	0.4003	12.42	-4.132
B_2089_A		47.28	ug/L	0.5406	1.143	44.96
Ba4554_R		139.3	ug/L	3.513	2.522	7,119
Be3130_R		0.05863	ug/L	0.06063	103.4	-0.8960
Ca3158_R		1,008	ug/L	26.82	2.660	1,103
Cd2265_A		6.512	ug/L	0.03588	0.5510	97.90
Co2286_A		7.387	ug/L	0.008120	0.1099	33.40
Cr2677_A		116.3	ug/L	0.2877	0.2475	2,132
Cu3273_A	W	2,333	ug/L	9.300	0.3987	47,380
Fe2599_R		623.9	ug/L	11.08	1.777	632.0
K_7664_R		8,271	ug/L	184.3	2.229	5,708
Li6707_R		42.49	ug/L	0.3906	0.9191	579.1
Mg2025_A		9,320	ug/L	10.65	0.1143	1,362
Mn2576_R	W	1,292	ug/L	20.07	1.553	6,424
Mo2020_A		27.45	ug/L	6.173	22.49	42.17
Na5895_R	F	332,100	ug/L	5,451	1.641	660,100
Ni2316_A		11.29	ug/L	0.06343	0.5619	25.25
Pb2203_A		12.08	ug/L	0.4347	3.599	6.233
Sb2068_A		-0.4078	ug/L	0.7287	178.7	0.1169
Se1960_A		1.124	ug/L	3.047	271.1	1.297
Si2516_R		205.7	ug/L	4.743	2.305	61.71
Sn1899_A		1.746	ug/L	1.496	85.67	2.224
Sr4215_R		5.459	ug/L	0.1521	2.786	295.5
Ti3349_A		17.16	ug/L	0.07719	0.4498	695.7
Tl1908_A		2.935	ug/L	1.599	54.50	-0.7791
V_2924_A		1.877	ug/L	0.3101	16.53	16.69
Zn2062_A	W	1,228	ug/L	2.919	0.2377	3,243
Y_3600_R		20,121	Cts/S	318.28	1.5818	20,121
Y_2243_A		8,478.4	Cts/S	6.4862	0.076503	8,478.4
Y_3600_A		330,700	Cts/S	3,680.0	1.1128	330,700

SI1693-001A

Method Name: K6010-2011 Method Revision: 1,730

SI1693-001A

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:15:51PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		542.2	ug/L	8.598	1.586	17,860
Al3961_R	W	43,490	ug/L	883.4	2.031	33,090
As1891_A		565.8	ug/L	1.730	0.3057	146.8
Au2427_A		4.725	ug/L	0.5949	12.59	0.5999
B_2089_A		607.3	ug/L	1.472	0.2424	537.6
Ba4554_R		693.3	ug/L	18.65	2.691	36,800
Be3130_R		579.3	ug/L	11.66	2.013	50,850
Ca3158_R		6,797	ug/L	132.6	1.952	7,871
Cd2265_A		574.0	ug/L	1.252	0.2182	8,567
Co2286_A		572.2	ug/L	0.5425	0.09481	2,276
Cr2677_A		676.2	ug/L	10.81	1.598	12,390
Cu3273_A	W	2,864	ug/L	52.62	1.837	58,360
Fe2599_R		6,391	ug/L	145.0	2.269	6,710
K_7664_R		18,890	ug/L	483.0	2.557	13,480
Li6707_R		608.6	ug/L	17.86	2.934	7,349
Mg2025_A		14,540	ug/L	1.422	0.009778	2,164
Mn2576_R	W	1,814	ug/L	29.61	1.633	9,416
Mo2020_A		573.8	ug/L	0.2187	0.03811	871.4
Na5895_R	F	331,800	ug/L	8,135	2.452	688,500
Ni2316_A		575.3	ug/L	0.6974	0.1212	1,348
Pb2203_A		547.6	ug/L	0.6484	0.1184	573.1
Sb2068_A		560.7	ug/L	0.1946	0.03471	181.0
Se1960_A		576.6	ug/L	0.5760	0.09989	93.02
Si2516_R		482.8	ug/L	6.166	1.277	136.4
Sn1899_A		0.4893	ug/L	0.5957	121.8	1.796
Sr4215_R		564.6	ug/L	13.20	2.339	36,580
Ti3349_A		572.5	ug/L	11.27	1.968	24,390
Tl1908_A		553.0	ug/L	1.062	0.1921	196.8
V_2924_A		584.0	ug/L	8.863	1.518	12,440
Zn2062_A	W	1,801	ug/L	1.443	0.08015	4,796
Y_3600_R		21,009	Cts/S	131.61	0.62648	21,009
Y_2243_A		8,551.4	Cts/S	23.867	0.27910	8,551.4
Y_3600_A		331,810	Cts/S	4,615.6	1.3910	331,810

SI1693-001L

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:20:31PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.09270	ug/L	1.283	1,384	22.93
Al3961_R		32,210	ug/L	661.3	2.053	7,912
As1891_A		0.9843	ug/L	5.392	547.8	-0.7449
Au2427_A		9.484	ug/L	2.140	22.57	1.500
B_2089_A		45.57	ug/L	4.444	9.752	17.80
Ba4554_R		136.6	ug/L	4.186	3.064	2,387
Be3130_R		0.2140	ug/L	0.08935	41.75	0.7838
Ca3158_R		992.8	ug/L	13.91	1.402	354.3
Cd2265_A		5.603	ug/L	0.3646	6.507	29.90
Co2286_A		6.872	ug/L	0.1171	1.704	13.72
Cr2677_A		116.4	ug/L	0.8693	0.7467	733.0
Cu3273_A		2,334	ug/L	8.816	0.3777	16,150
Fe2599_R		616.5	ug/L	2.032	0.3295	214.1
K_7664_R		8,195	ug/L	32.64	0.3983	1,975
Li6707_R		55.00	ug/L	4.844	8.808	306.9
Mg2025_A		8,773	ug/L	617.0	7.033	439.0
Mn2576_R		1,268	ug/L	30.50	2.406	2,124
Mo2020_A		18.03	ug/L	2.346	13.01	10.21

SI1693-001L

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:20:31PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	342,700	ug/L	8,863	2.586	230,000
Ni2316_A		9.895	ug/L	0.7481	7.560	6.907
Pb2203_A		10.69	ug/L	1.589	14.87	0.08958
Sb2068_A		5.082	ug/L	7.180	141.3	0.7136
Se1960_A		6.310	ug/L	3.216	50.96	1.341
Si2516_R		153.1	ug/L	8.782	5.737	24.12
Sn1899_A		3.216	ug/L	1.647	51.21	2.051
Sr4215_R		5.316	ug/L	0.3787	7.124	67.29
Ti3349_A		17.72	ug/L	0.6646	3.751	221.2
Tl1908_A		4.908	ug/L	5.773	117.6	-0.5957
V_2924_A		1.891	ug/L	0.4074	21.54	5.340
Zn2062_A		1,116	ug/L	76.75	6.878	1,014
Y_3600_R		20,365	Cts/S	449.57	2.2075	20,365
Y_2243_A		8,755.3	Cts/S	13.373	0.15274	8,755.3
Y_3600_A		338,130	Cts/S	1,614.6	0.47750	338,130

CCV

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:25:15PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		503.8	ug/L	11.13	2.210	17,710
Al3961_R		12,440	ug/L	153.2	1.232	9,595
As1891_A		493.2	ug/L	1.163	0.2359	134.0
Au2427_A		507.9	ug/L	20.81	4.096	1,985
B_2089_A		498.8	ug/L	1.366	0.2739	465.9
Ba4554_R		505.8	ug/L	5.383	1.064	27,210
Be3130_R		500.3	ug/L	5.782	1.156	44,490
Ca3158_R		12,440	ug/L	153.8	1.237	14,610
Cd2265_A		493.1	ug/L	1.074	0.2177	7,741
Co2286_A		501.1	ug/L	0.3379	0.06744	2,096
Cr2677_A		498.6	ug/L	9.355	1.876	9,800
Cu3273_A		507.9	ug/L	11.31	2.227	11,080
Fe2599_R		12,420	ug/L	158.4	1.276	13,200
K_7664_R		12,430	ug/L	211.7	1.702	9,023
Li6707_R		506.2	ug/L	3.397	0.6712	6,208
Mg2025_A		12,490	ug/L	1.419	0.01136	1,954
Mn2576_R		502.4	ug/L	7.490	1.491	2,640
Mo2020_A		505.6	ug/L	1.290	0.2552	807.2
Na5895_R		12,390	ug/L	183.2	1.479	26,270
Ni2316_A		501.7	ug/L	0.4418	0.08805	1,235
Pb2203_A		495.4	ug/L	0.9990	0.2016	548.7
Sb2068_A		494.8	ug/L	0.8407	0.1699	166.3
Se1960_A		490.8	ug/L	4.705	0.9585	83.22
Si2516_R		12,250	ug/L	165.0	1.348	3,183
Sn1899_A		494.9	ug/L	0.003330	0.0006730	187.0
Sr4215_R		506.3	ug/L	6.407	1.265	33,220
Ti3349_A		505.6	ug/L	10.69	2.114	23,090
Tl1908_A		498.6	ug/L	0.4772	0.09573	187.4
V_2924_A		506.6	ug/L	11.67	2.304	11,590
Zn2062_A		490.0	ug/L	0.5069	0.1035	1,371
Y_3600_R		21,284	Cts/S	17.788	0.083575	21,284
Y_2243_A		8,989.4	Cts/S	26.111	0.29047	8,989.4
Y_3600_A		355,810	Cts/S	6,542.6	1.8388	355,810

CCB

Method Name: K6010-2011 Method Revision: 1,730

CCB

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:29:50PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.01701	ug/L	0.08868	521.3	27.74
Al3961_R		-3.149	ug/L	8.195	260.2	-7.310
As1891_A		1.211	ug/L	0.9130	75.38	-0.5486
Au2427_A		3.129	ug/L	0.3931	12.56	4.450
B_2089_A		1.267	ug/L	0.08621	6.804	5.775
Ba4554_R		0.1329	ug/L	0.6040	454.4	54.94
Be3130_R		0.07611	ug/L	0.01502	19.73	1.598
Ca3158_R		-1.931	ug/L	6.287	325.6	-21.09
Cd2265_A		0.05213	ug/L	0.07323	140.5	2.117
Co2286_A		-0.1255	ug/L	0.1175	93.64	4.015
Cr2677_A		0.06554	ug/L	0.2177	332.1	9.649
Cu3273_A		0.9594	ug/L	0.6340	66.08	10.16
Fe2599_R		2.019	ug/L	3.080	152.5	7.390
K_7664_R		44.63	ug/L	2.752	6.167	136.5
Li6707_R		7.074	ug/L	0.9737	13.76	184.3
Mg2025_A		-0.5149	ug/L	1.745	338.9	-3.531
Mn2576_R		0.5830	ug/L	0.3354	57.52	-0.9353
Mo2020_A		3.968	ug/L	0.5693	14.35	7.289
Na5895_R		93.85	ug/L	7.715	8.221	430.1
Ni2316_A		0.06583	ug/L	0.2221	337.3	-0.8585
Pb2203_A		0.1681	ug/L	0.3570	212.4	-2.269
Sb2068_A		-0.5570	ug/L	0.4346	78.03	-0.08681
Se1960_A		2.868	ug/L	3.452	120.4	1.440
Si2516_R		-10.20	ug/L	3.144	30.81	9.317
Sn1899_A		-0.7316	ug/L	0.5979	81.73	1.445
Sr4215_R		0.3296	ug/L	0.07577	22.99	-24.45
Ti3349_A		0.7299	ug/L	0.1853	25.39	-4.125
Tl1908_A		1.557	ug/L	1.122	72.10	-0.3021
V_2924_A		0.2518	ug/L	0.2084	82.75	3.817
Zn2062_A		-0.07903	ug/L	0.2871	363.3	-0.5879
Y_3600_R		21,188	Cts/S	152.75	0.72094	21,188
Y_2243_A		9,077.2	Cts/S	3.1325	0.034510	9,077.2
Y_3600_A		359,750	Cts/S	3,064.8	0.85194	359,750

SI1693-001P

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:34:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.16	ug/L	0.1844	0.3604	1,672
Al3961_R	W	36,080	ug/L	197.1	0.5463	26,910
As1891_A		106.3	ug/L	1.435	1.350	26.99
Au2427_A		7.539	ug/L	1.747	23.18	8.599
B_2089_A		535.0	ug/L	0.1464	0.02736	464.1
Ba4554_R	W	2,232	ug/L	12.95	0.5804	116,100
Be3130_R		53.66	ug/L	0.06708	0.1250	4,588
Ca3158_R		3,611	ug/L	15.59	0.4318	4,092
Cd2265_A		257.1	ug/L	0.4784	0.1861	3,838
Co2286_A		505.9	ug/L	0.1716	0.03392	2,014
Cr2677_A		321.6	ug/L	0.9738	0.3028	5,834
Cu3273_A	W	2,599	ug/L	6.236	0.2399	52,360
Fe2599_R		1,654	ug/L	3.713	0.2244	1,707
K_7664_R		18,370	ug/L	50.87	0.2769	12,860
Li6707_R		545.1	ug/L	6.509	1.194	6,465
Mg2025_A		13,840	ug/L	43.83	0.3166	2,058
Mn2576_R	W	1,835	ug/L	3.316	0.1808	9,340
Mo2020_A		103.8	ug/L	0.1976	0.1903	158.4

SI1693-001P

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:34:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	341,400	ug/L	23,520	6.887	694,900
Ni2316_A		506.6	ug/L	0.3521	0.06950	1,187
Pb2203_A		108.7	ug/L	0.4218	0.3880	108.5
Sb2068_A		103.6	ug/L	0.2231	0.2154	32.08
Se1960_A		106.0	ug/L	0.1247	0.1177	18.06
Si2516_R		1,248	ug/L	3.225	0.2585	324.5
Sn1899_A		491.5	ug/L	1.884	0.3833	176.7
Sr4215_R		536.3	ug/L	3.497	0.6520	34,070
Ti3349_A		536.4	ug/L	1.466	0.2733	22,570
Tl1908_A		102.1	ug/L	0.008338	0.008168	33.16
V_2924_A		529.2	ug/L	0.5495	0.1038	11,220
Zn2062_A	W	1,714	ug/L	1.078	0.06289	4,569
Y_3600_R		20,603	Cts/S	43.829	0.21273	20,603
Y_2243_A		8,555.3	Cts/S	20.474	0.23931	8,555.3
Y_3600_A		328,060	Cts/S	1,594.5	0.48604	328,060

SI1693-001S

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:39:19PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.12	ug/L	0.2903	0.5792	1,703
Al3961_R	W	33,600	ug/L	1,039	3.093	26,210
As1891_A		103.5	ug/L	0.08590	0.08301	26.39
Au2427_A		6.681	ug/L	0.6210	9.295	6.130
B_2089_A		531.1	ug/L	0.8035	0.1513	463.2
Ba4554_R	W	2,155	ug/L	59.12	2.743	117,200
Be3130_R		51.16	ug/L	1.642	3.210	4,575
Ca3158_R		3,461	ug/L	67.67	1.955	4,101
Cd2265_A		257.6	ug/L	0.9359	0.3634	3,866
Co2286_A		503.1	ug/L	0.8666	0.1722	2,014
Cr2677_A		313.6	ug/L	1.289	0.4111	5,912
Cu3273_A	W	2,525	ug/L	23.49	0.9303	52,850
Fe2599_R		1,584	ug/L	47.74	3.013	1,710
K_7664_R		17,860	ug/L	436.8	2.446	13,070
Li6707_R		532.3	ug/L	14.07	2.644	6,605
Mg2025_A		13,640	ug/L	34.65	0.2540	2,039
Mn2576_R	W	1,732	ug/L	44.44	2.566	9,220
Mo2020_A		103.9	ug/L	0.1521	0.1464	159.3
Na5895_R	F	327,900	ug/L	6,717	2.048	698,000
Ni2316_A		506.0	ug/L	0.2586	0.05110	1,192
Pb2203_A		109.4	ug/L	0.2175	0.1988	110.2
Sb2068_A		105.3	ug/L	0.02013	0.01912	32.80
Se1960_A		106.9	ug/L	1.690	1.582	18.28
Si2516_R		1,183	ug/L	25.15	2.126	322.4
Sn1899_A		492.6	ug/L	0.6411	0.1302	178.0
Sr4215_R		513.5	ug/L	14.16	2.757	34,110
Ti3349_A		520.8	ug/L	2.947	0.5659	22,770
Tl1908_A		101.7	ug/L	0.8852	0.8706	33.32
V_2924_A		513.9	ug/L	3.996	0.7777	11,320
Zn2062_A	W	1,696	ug/L	0.05478	0.003229	4,546
Y_3600_R		21,545	Cts/S	229.65	1.0659	21,545
Y_2243_A		8,599.9	Cts/S	26.298	0.30579	8,599.9
Y_3600_A		340,810	Cts/S	754.20	0.22130	340,810

SI1978-001

Method Name: K6010-2011 Method Revision: 1,730

SI1978-001

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:44:00PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1270	ug/L	0.2448	192.8	30.95
Al3961_R		468.0	ug/L	6.147	1.313	355.1
As1891_A		1.408	ug/L	1.612	114.5	-0.4774
Au2427_A		1.789	ug/L	0.8382	46.84	-1.100
B_2089_A		21.51	ug/L	0.8770	4.077	22.46
Ba4554_R		83.93	ug/L	1.858	2.214	4,514
Be3130_R		0.1367	ug/L	0.1047	76.61	6.916
Ca3158_R		10,870	ug/L	209.3	1.924	12,650
Cd2265_A		1.865	ug/L	0.1106	5.932	29.26
Co2286_A		0.03423	ug/L	0.1433	418.6	4.450
Cr2677_A		2.484	ug/L	0.2509	10.10	55.06
Cu3273_A		45.90	ug/L	0.2838	0.6182	956.7
Fe2599_R		33.56	ug/L	0.4262	1.270	40.59
K_7664_R		1,626	ug/L	94.38	5.803	1,260
Li6707_R		21.77	ug/L	2.549	11.71	359.1
Mg2025_A		1,061	ug/L	4.145	0.3908	193.6
Mn2576_R		42.88	ug/L	0.8130	1.896	219.6
Mo2020_A	F	-13.51	ug/L	0.4187	3.100	-19.78
Na5895_R	F	271,300	ug/L	4,273	1.575	565,100
Ni2316_A		5.653	ug/L	0.06161	1.090	12.33
Pb2203_A		309.9	ug/L	1.096	0.3539	328.9
Sb2068_A		23.03	ug/L	0.8517	3.698	-6.327
Se1960_A		1.931	ug/L	0.3423	17.73	1.221
Si2516_R		1,323	ug/L	46.12	3.485	351.3
Sn1899_A		0.1173	ug/L	0.6879	586.7	1.675
Sr4215_R		93.66	ug/L	2.116	2.259	6,053
Ti3349_A		0.7608	ug/L	0.1078	14.17	-3.388
Tl1908_A		0.2314	ug/L	0.1201	51.91	-0.8047
V_2924_A		0.3114	ug/L	0.01001	3.215	6.915
Zn2062_A	F	113,700	ug/L	645.9	0.5679	305,300
Y_3600_R		21,090	Cts/S	37.956	0.17997	21,090
Y_2243_A		8,613.2	Cts/S	50.537	0.58674	8,613.2
Y_3600_A		343,040	Cts/S	1,148.6	0.33484	343,040

SI1979-001

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:48:47PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1276	ug/L	0.3226	252.8	9.154
Al3961_R		418.5	ug/L	6.003	1.434	311.7
As1891_A		-0.6537	ug/L	0.2997	45.85	-1.025
Au2427_A		2.683	ug/L	0.3894	14.51	2.948
B_2089_A		5.539	ug/L	1.309	23.63	9.290
Ba4554_R		579.2	ug/L	13.09	2.261	30,530
Be3130_R		-0.03198	ug/L	0.01844	57.64	-7.853
Ca3158_R		1,693	ug/L	48.99	2.894	1,932
Cd2265_A		6.527	ug/L	0.03604	0.5522	101.8
Co2286_A		0.04508	ug/L	0.1560	346.1	4.505
Cr2677_A		351.5	ug/L	8.017	2.281	6,516
Cu3273_A		322.5	ug/L	9.445	2.929	6,633
Fe2599_R		1,012	ug/L	23.28	2.300	1,059
K_7664_R		610.7	ug/L	10.70	1.753	532.2
Li6707_R		18.05	ug/L	1.403	7.773	311.3
Mg2025_A		296.1	ug/L	5.688	1.921	41.66
Mn2576_R		22.22	ug/L	0.3433	1.545	110.7
Mo2020_A		2.452	ug/L	0.1757	7.164	4.745

SI1979-001

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:48:47PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	F	286,300	ug/L	7,075	2.471	589,900
Ni2316_A		7.611	ug/L	0.2915	3.830	17.18
Pb2203_A		19.63	ug/L	0.1907	0.9711	18.82
Sb2068_A		1.240	ug/L	1.034	83.34	1.371
Se1960_A		2.310	ug/L	2.325	100.6	1.307
Si2516_R		131.5	ug/L	16.55	12.58	45.02
Sn1899_A		0.6648	ug/L	0.6017	90.52	1.907
Sr4215_R		698.3	ug/L	14.85	2.127	44,920
Ti3349_A		0.4649	ug/L	0.1157	24.89	-13.35
Tl1908_A		-0.2303	ug/L	0.6621	287.5	-0.9779
V_2924_A		0.8596	ug/L	0.09624	11.20	-14.25
Zn2062_A		402.6	ug/L	1.206	0.2994	1,100
Y_3600_R		20,861	Cts/S	387.15	1.8559	20,861
Y_2243_A		8,775.4	Cts/S	15.104	0.17212	8,775.4
Y_3600_A		335,560	Cts/S	8,846.1	2.6363	335,560

LCSWID06ICW1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:53:37PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.41	ug/L	0.2054	0.4158	958.6
Al3961_R		1,971	ug/L	51.90	2.633	820.6
As1891_A		101.8	ug/L	6.092	5.984	13.65
Au2427_A		6.823	ug/L	1.268	18.58	4.118
B_2089_A		501.8	ug/L	1.318	0.2627	241.1
Ba4554_R		1,964	ug/L	57.15	2.910	57,300
Be3130_R		48.80	ug/L	1.181	2.420	2,337
Ca3158_R		2,407	ug/L	76.57	3.181	1,516
Cd2265_A		247.9	ug/L	0.6542	0.2639	2,028
Co2286_A		520.1	ug/L	2.374	0.4565	1,137
Cr2677_A		196.0	ug/L	3.234	1.650	2,071
Cu3273_A		250.9	ug/L	2.715	1.082	2,923
Fe2599_R		947.4	ug/L	16.23	1.714	552.3
K_7664_R		9,624	ug/L	244.3	2.539	3,861
Li6707_R		488.9	ug/L	13.89	2.842	3,311
Mg2025_A		5,072	ug/L	7.911	0.1560	415.8
Mn2576_R		490.2	ug/L	11.88	2.423	1,396
Mo2020_A		98.34	ug/L	0.7833	0.7965	82.66
Na5895_R		7,393	ug/L	168.7	2.282	8,688
Ni2316_A		519.3	ug/L	2.190	0.4217	666.2
Pb2203_A		99.67	ug/L	1.815	1.821	55.36
Sb2068_A		99.87	ug/L	1.863	1.866	16.87
Se1960_A		100.0	ug/L	1.386	1.386	9.736
Si2516_R		869.4	ug/L	12.28	1.412	135.3
Sn1899_A		495.9	ug/L	0.3352	0.06760	98.57
Sr4215_R		489.8	ug/L	13.64	2.784	17,420
Ti3349_A		484.7	ug/L	3.094	0.6383	11,820
Tl1908_A		110.4	ug/L	2.013	1.823	19.99
V_2924_A		502.7	ug/L	4.382	0.8718	6,201
Zn2062_A		497.9	ug/L	1.933	0.3883	726.7
Y_3600_R		23,104	Cts/S	228.96	0.99101	23,104
Y_2243_A		9,375.7	Cts/S	35.777	0.38159	9,375.7
Y_3600_A		381,090	Cts/S	5,410.6	1.4198	381,090

PBWID06ICW1

Method Name: K6010-2011 Method Revision: 1,730

PBWID06ICW1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 12:58:19PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1738	ug/L	0.4257	245.0	23.14
Al3961_R		-3.618	ug/L	9.405	259.9	-8.265
As1891_A		2.629	ug/L	0.5744	21.85	-0.1637
Au2427_A		2.055	ug/L	0.6400	31.15	0.2000
B_2089_A	W	27.09	ug/L	0.7734	2.854	30.07
Ba4554_R		0.2409	ug/L	0.09429	39.13	64.97
Be3130_R		0.06858	ug/L	0.04957	72.28	1.044
Ca3158_R		3.152	ug/L	0.4875	15.47	-16.15
Cd2265_A		0.006971	ug/L	0.04624	663.4	1.447
Co2286_A		-0.0006290	ug/L	0.05818	9,254	4.685
Cr2677_A		-0.4732	ug/L	0.1933	40.86	-1.133
Cu3273_A		0.4714	ug/L	0.05410	11.48	-0.7125
Fe2599_R		0.1583	ug/L	2.110	1,333	5.794
K_7664_R		-42.37	ug/L	19.50	46.02	79.50
Li6707_R		-2.509	ug/L	0.8041	32.05	73.87
Mg2025_A		4.378	ug/L	1.106	25.26	-2.866
Mn2576_R		0.9833	ug/L	0.03371	3.428	1.246
Mo2020_A		0.5565	ug/L	0.06804	12.23	1.853
Na5895_R		85.64	ug/L	0.2221	0.2594	441.1
Ni2316_A		0.01285	ug/L	0.1848	1,438	-1.031
Pb2203_A		-0.1542	ug/L	0.1986	128.8	-2.716
Sb2068_A		-0.5255	ug/L	0.5079	96.65	-0.07885
Se1960_A		-0.7204	ug/L	1.805	250.5	0.8610
Si2516_R		-17.61	ug/L	4.516	25.64	7.914
Sn1899_A		-0.3745	ug/L	0.5373	143.5	1.632
Sr4215_R		0.4656	ug/L	0.2227	47.84	-16.53
Ti3349_A		0.2303	ug/L	0.05519	23.96	-28.69
Tl1908_A		2.188	ug/L	0.9922	45.34	-0.05986
V_2924_A		0.06710	ug/L	0.07125	106.2	0.07120
Zn2062_A		0.3846	ug/L	0.02059	5.352	0.7496
Y_3600_R		22,639	Cts/S	213.36	0.94244	22,639
Y_2243_A		9,377.6	Cts/S	11.999	0.12796	9,377.6
Y_3600_A		376,670	Cts/S	3,197.2	0.84880	376,670

SI1693-001L

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:03:07PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.5437	ug/L	0.1061	19.51	29.39
Al3961_R		40,530	ug/L	1,023	2.524	6,233
As1891_A		-1.170	ug/L	2.144	183.3	-0.9299
Au2427_A		10.18	ug/L	0.9405	9.236	-2.123
B_2089_A		35.51	ug/L	1.411	3.974	10.91
Ba4554_R		169.4	ug/L	4.773	2.818	1,866
Be3130_R		0.3372	ug/L	0.09125	27.06	0.5577
Ca3158_R		1,208	ug/L	12.85	1.064	264.9
Cd2265_A		7.301	ug/L	0.1574	2.156	24.36
Co2286_A		8.000	ug/L	0.2553	3.192	11.24
Cr2677_A		141.4	ug/L	2.682	1.896	557.0
Cu3273_A		2,871	ug/L	55.56	1.935	12,380
Fe2599_R		768.1	ug/L	2.859	0.3722	168.4
K_7664_R		9,103	ug/L	227.8	2.503	1,409
Li6707_R		20.05	ug/L	4.714	23.51	147.9
Mg2025_A		11,570	ug/L	422.1	3.647	357.3
Mn2576_R		1,584	ug/L	43.96	2.775	1,661
Mo2020_A		3.307	ug/L	0.09112	2.755	1.959

SI1693-001L

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:03:07PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	428,900	ug/L	10,210	2.382	180,300
Ni2316_A		13.08	ug/L	2.231	17.06	5.423
Pb2203_A		18.19	ug/L	0.4133	2.272	0.5365
Sb2068_A		-2.109	ug/L	3.423	162.3	0.006600
Se1960_A		-2.509	ug/L	7.658	305.3	0.9249
Si2516_R		131.4	ug/L	33.06	25.16	18.77
Sn1899_A		-0.7499	ug/L	6.159	821.3	1.653
Sr4215_R		7.149	ug/L	0.3502	4.898	47.70
Ti3349_A		25.06	ug/L	6.183	24.67	188.6
Tl1908_A		2.026	ug/L	0.4525	22.34	-0.9999
V_2924_A		2.601	ug/L	0.07429	2.856	5.535
Zn2062_A		1,423	ug/L	49.94	3.509	799.7
Y_3600_R		21,261	Cts/S	8.5403	0.040170	21,261
Y_2243_A		9,020.7	Cts/S	27.651	0.30653	9,020.7
Y_3600_A		351,220	Cts/S	6,644.6	1.8919	351,220

SI2067-001

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:07:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.04653	ug/L	0.1799	386.7	10.73
Al3961_R		8.854	ug/L	2.785	31.46	12.61
As1891_A		15.36	ug/L	0.2944	1.917	3.382
Au2427_A		4.545	ug/L	0.2702	5.944	-1.138
B_2089_A		1.899	ug/L	0.1265	6.657	6.402
Ba4554_R		13.34	ug/L	0.3524	2.641	823.2
Be3130_R		0.02461	ug/L	0.01650	67.04	-3.198
Ca3158_R	W	34,940	ug/L	724.1	2.073	44,200
Cd2265_A		-0.02870	ug/L	0.08054	280.6	1.685
Co2286_A		0.2520	ug/L	0.08204	32.55	5.728
Cr2677_A		0.09001	ug/L	0.08532	94.80	14.20
Cu3273_A		4.891	ug/L	0.4834	9.883	101.3
Fe2599_R		1,181	ug/L	25.57	2.166	1,356
K_7664_R		1,144	ug/L	13.89	1.214	996.5
Li6707_R		1.813	ug/L	0.5190	28.62	130.9
Mg2025_A		6,910	ug/L	21.31	0.3083	1,107
Mn2576_R	W	1,571	ug/L	32.13	2.045	8,894
Mo2020_A		0.1422	ug/L	0.001674	1.177	1.173
Na5895_R		5,807	ug/L	112.8	1.942	13,390
Ni2316_A		0.5004	ug/L	0.2526	50.49	0.05730
Pb2203_A		1.255	ug/L	0.6409	51.07	-1.018
Sb2068_A		-2.074	ug/L	0.6005	28.96	-0.6081
Se1960_A		0.6913	ug/L	1.704	246.5	1.234
Si2516_R		6,841	ug/L	167.2	2.444	1,919
Sn1899_A		-1.359	ug/L	1.194	87.86	1.237
Sr4215_R		173.3	ug/L	4.191	2.419	12,210
Ti3349_A		0.4511	ug/L	0.1986	44.03	-17.95
Tl1908_A		3.431	ug/L	0.6718	19.58	-0.9301
V_2924_A		0.03876	ug/L	0.04925	127.1	-12.54
Zn2062_A		13.45	ug/L	0.04456	0.3312	38.63
Y_3600_R		22,908	Cts/S	170.28	0.74330	22,908
Y_2243_A		9,303.5	Cts/S	22.526	0.24212	9,303.5
Y_3600_A		376,060	Cts/S	4,685.7	1.2460	376,060

SI2067-001L

Method Name: K6010-2011 Method Revision: 1,730

SI2067-001L

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:12:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1306	ug/L	0.9084	695.7	26.56
Al3961_R		-10.32	ug/L	83.28	807.2	-4.891
As1891_A		13.22	ug/L	2.320	17.54	-0.1700
Au2427_A		11.18	ug/L	3.520	31.49	-1.237
B_2089_A		-3.872	ug/L	1.138	29.39	3.918
Ba4554_R		13.13	ug/L	0.2841	2.164	197.8
Be3130_R		0.4772	ug/L	0.3621	75.88	3.473
Ca3158_R		32,920	ug/L	645.9	1.962	8,077
Cd2265_A		-0.4041	ug/L	0.4049	100.2	0.1709
Co2286_A		-0.2446	ug/L	0.4954	202.5	4.425
Cr2677_A		0.005589	ug/L	0.6057	10,840	9.173
Cu3273_A		7.670	ug/L	1.546	20.15	23.21
Fe2599_R		1,160	ug/L	15.52	1.337	263.4
K_7664_R		1,049	ug/L	16.19	1.543	267.2
Li6707_R		12.15	ug/L	2.270	18.68	135.0
Mg2025_A		6,683	ug/L	71.19	1.065	210.6
Mn2576_R		1,498	ug/L	25.43	1.698	1,644
Mo2020_A		3.086	ug/L	1.589	51.48	1.936
Na5895_R		5,689	ug/L	76.67	1.348	2,746
Ni2316_A		0.8880	ug/L	0.6507	73.27	-0.6325
Pb2203_A		3.101	ug/L	1.260	40.65	-1.786
Sb2068_A		-3.629	ug/L	10.53	290.2	-0.1446
Se1960_A		1.720	ug/L	4.497	261.5	1.061
Si2516_R		6,198	ug/L	116.0	1.872	348.1
Sn1899_A		-1.576	ug/L	2.608	165.5	1.637
Sr4215_R		166.2	ug/L	3.481	2.094	2,236
Ti3349_A		1.040	ug/L	0.2380	22.89	-28.98
Tl1908_A		4.893	ug/L	1.364	27.88	-0.7934
V_2924_A		-0.3477	ug/L	0.6278	180.6	-5.454
Zn2062_A		13.61	ug/L	0.3689	2.710	7.499
Y_3600_R		22,261	Cts/S	216.60	0.97302	22,261
Y_2243_A		9,275.7	Cts/S	19.795	0.21341	9,275.7
Y_3600_A		366,480	Cts/S	1,419.9	0.38743	366,480

SI2067-001P

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:17:24PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		52.04	ug/L	0.5685	1.092	1,863
Al3961_R		2,022	ug/L	45.84	2.267	1,638
As1891_A		117.1	ug/L	1.462	1.249	31.92
Au2427_A		6.247	ug/L	0.7470	11.96	3.119
B_2089_A		508.1	ug/L	1.862	0.3665	474.0
Ba4554_R	W	1,985	ug/L	61.92	3.120	111,600
Be3130_R		51.03	ug/L	1.421	2.785	4,718
Ca3158_R	W	36,030	ug/L	1,024	2.841	44,320
Cd2265_A		246.3	ug/L	0.1511	0.06136	3,955
Co2286_A		515.7	ug/L	0.5494	0.1065	2,208
Cr2677_A		204.3	ug/L	2.229	1.091	4,076
Cu3273_A		263.8	ug/L	1.200	0.4550	5,824
Fe2599_R		2,096	ug/L	65.35	3.118	2,337
K_7664_R		10,710	ug/L	269.4	2.515	8,150
Li6707_R		485.4	ug/L	15.32	3.156	6,234
Mg2025_A		11,630	ug/L	21.41	0.1841	1,862
Mn2576_R	W	1,975	ug/L	54.38	2.754	10,870
Mo2020_A		84.08	ug/L	4.031	4.794	138.1

SI2067-001P

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:17:24PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		12,790	ug/L	350.8	2.744	28,360
Ni2316_A		514.3	ug/L	0.5830	0.1134	1,296
Pb2203_A		100.0	ug/L	0.02736	0.02735	111.6
Sb2068_A		102.4	ug/L	0.3768	0.3680	33.99
Se1960_A		95.22	ug/L	4.494	4.720	17.45
Si2516_R		7,645	ug/L	208.2	2.723	2,084
Sn1899_A		466.8	ug/L	6.992	1.498	180.6
Sr4215_R		661.9	ug/L	18.66	2.819	45,470
Ti3349_A		504.3	ug/L	11.13	2.207	23,310
Tl1908_A		109.5	ug/L	1.930	1.763	38.42
V_2924_A		527.8	ug/L	7.491	1.419	12,310
Zn2062_A		511.7	ug/L	0.1301	0.02542	1,466
Y_3600_R		22,278	Cts/S	229.07	1.0283	22,278
Y_2243_A		9,202.3	Cts/S	15.944	0.17327	9,202.3
Y_3600_A		360,330	Cts/S	3,988.6	1.1069	360,330

CCV

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:22:03PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		501.2	ug/L	2.480	0.4947	17,700
Al3961_R		12,700	ug/L	29.21	0.2300	9,934
As1891_A		496.0	ug/L	1.666	0.3359	135.1
Au2427_A		505.7	ug/L	18.61	3.680	1,981
B_2089_A		495.3	ug/L	2.271	0.4585	463.8
Ba4554_R		510.4	ug/L	0.7271	0.1425	27,850
Be3130_R		509.1	ug/L	0.7390	0.1451	45,910
Ca3158_R		12,510	ug/L	1.401	0.01120	14,890
Cd2265_A		491.4	ug/L	0.06205	0.01263	7,734
Co2286_A		501.2	ug/L	0.3346	0.06676	2,102
Cr2677_A		492.9	ug/L	6.197	1.257	9,733
Cu3273_A		502.4	ug/L	2.720	0.5414	11,020
Fe2599_R		12,580	ug/L	55.83	0.4440	13,560
K_7664_R		12,360	ug/L	97.41	0.7883	9,095
Li6707_R		503.0	ug/L	1.861	0.3700	6,257
Mg2025_A		12,500	ug/L	15.14	0.1211	1,959
Mn2576_R		505.3	ug/L	2.165	0.4285	2,692
Mo2020_A		503.0	ug/L	2.856	0.5678	805.1
Na5895_R		12,410	ug/L	46.16	0.3719	26,690
Ni2316_A		500.4	ug/L	0.2038	0.04072	1,235
Pb2203_A		493.5	ug/L	0.1076	0.02180	547.9
Sb2068_A		497.4	ug/L	2.703	0.5433	167.6
Se1960_A		495.2	ug/L	1.782	0.3599	84.16
Si2516_R		12,400	ug/L	62.06	0.5006	3,267
Sn1899_A		497.3	ug/L	1.130	0.2272	188.3
Sr4215_R		513.0	ug/L	1.106	0.2157	34,140
Ti3349_A		509.1	ug/L	2.335	0.4587	23,360
Tl1908_A		498.4	ug/L	4.077	0.8182	187.8
V_2924_A		506.6	ug/L	4.818	0.9511	11,640
Zn2062_A		486.9	ug/L	0.8263	0.1697	1,366
Y_3600_R		21,585	Cts/S	450.63	2.0877	21,585
Y_2243_A		9,011.9	Cts/S	17.326	0.19226	9,011.9
Y_3600_A		357,420	Cts/S	5,296.8	1.4820	357,420

CCB

Method Name: K6010-2011 Method Revision: 1,730

CCB

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:26:38PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3106	ug/L	0.07586	24.42	39.46
Al3961_R		-2.366	ug/L	8.016	338.8	-6.872
As1891_A		1.209	ug/L	0.3979	32.91	-0.5598
Au2427_A		4.739	ug/L	0.6238	13.16	11.01
B_2089_A		-0.7341	ug/L	0.7150	97.41	3.980
Ba4554_R		0.2370	ug/L	0.08251	34.82	61.23
Be3130_R		0.1536	ug/L	0.004354	2.835	8.534
Ca3158_R		3.759	ug/L	5.068	134.8	-14.51
Cd2265_A		0.04573	ug/L	0.01563	34.17	2.050
Co2286_A		-0.09903	ug/L	0.07537	76.11	4.191
Cr2677_A		-0.1064	ug/L	0.03526	33.14	6.206
Cu3273_A		0.8512	ug/L	0.2138	25.11	7.738
Fe2599_R		2.951	ug/L	1.948	66.01	8.454
K_7664_R		-53.51	ug/L	4.512	8.431	67.04
Li6707_R		0.3500	ug/L	1.324	378.3	104.5
Mg2025_A		-4.108	ug/L	2.134	51.96	-4.167
Mn2576_R		0.6640	ug/L	0.5735	86.37	-0.5308
Mo2020_A		2.528	ug/L	0.3219	12.73	5.053
Na5895_R		54.65	ug/L	8.079	14.78	351.4
Ni2316_A		0.0008930	ug/L	0.1179	13,200	-1.037
Pb2203_A		0.8494	ug/L	0.1567	18.45	-1.526
Sb2068_A		-0.4520	ug/L	1.015	224.6	-0.05384
Se1960_A		4.732	ug/L	1.731	36.58	1.781
Si2516_R		-20.17	ug/L	5.586	27.69	6.821
Sn1899_A		0.9027	ug/L	1.317	145.9	2.099
Sr4215_R		0.3262	ug/L	0.1939	59.43	-24.98
Ti3349_A		0.7789	ug/L	0.08106	10.41	-1.938
Tl1908_A		1.762	ug/L	0.7217	40.96	-0.2282
V_2924_A		0.1170	ug/L	0.04190	35.81	0.9109
Zn2062_A		0.1150	ug/L	0.1080	93.90	-0.04124
Y_3600_R		21,390	Cts/S	298.60	1.3959	21,390
Y_2243_A		9,222.7	Cts/S	138.75	1.5044	9,222.7
Y_3600_A		359,410	Cts/S	4,976.3	1.3846	359,410

SI2067-001S

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:31:24PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		51.79	ug/L	0.5261	1.016	1,869
Al3961_R		2,046	ug/L	77.54	3.790	1,655
As1891_A		119.2	ug/L	1.021	0.8563	32.32
Au2427_A		7.995	ug/L	0.2382	2.980	9.767
B_2089_A		512.9	ug/L	1.737	0.3387	475.4
Ba4554_R	W	2,003	ug/L	67.01	3.345	112,500
Be3130_R		51.15	ug/L	1.631	3.189	4,723
Ca3158_R	W	36,910	ug/L	899.2	2.436	45,330
Cd2265_A		248.9	ug/L	1.087	0.4368	3,972
Co2286_A		518.7	ug/L	0.1156	0.02228	2,207
Cr2677_A		201.3	ug/L	2.045	1.016	4,051
Cu3273_A		260.0	ug/L	3.241	1.247	5,789
Fe2599_R		2,121	ug/L	69.10	3.258	2,361
K_7664_R		10,880	ug/L	348.9	3.207	8,264
Li6707_R		489.2	ug/L	14.43	2.950	6,274
Mg2025_A		11,860	ug/L	27.84	0.2347	1,887
Mn2576_R	W	2,016	ug/L	56.15	2.785	11,080
Mo2020_A		87.68	ug/L	4.302	4.906	143.0

SI2067-001S

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:31:24PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		13,020	ug/L	332.5	2.554	28,840
Ni2316_A		517.3	ug/L	0.4237	0.08190	1,295
Pb2203_A		100.1	ug/L	0.6444	0.6438	111.0
Sb2068_A		101.3	ug/L	1.573	1.552	33.39
Se1960_A		99.18	ug/L	6.593	6.647	18.02
Si2516_R		7,837	ug/L	231.2	2.950	2,133
Sn1899_A		473.3	ug/L	9.420	1.990	182.0
Sr4215_R		665.8	ug/L	19.99	3.002	45,680
Ti3349_A		499.9	ug/L	7.227	1.446	23,290
Tl1908_A		110.3	ug/L	1.356	1.230	38.47
V_2924_A		523.3	ug/L	5.565	1.063	12,310
Zn2062_A		516.9	ug/L	0.5317	0.1029	1,472
Y_3600_R		22,240	Cts/S	249.32	1.1210	22,240
Y_2243_A		9,144.0	Cts/S	29.693	0.32472	9,144.0
Y_3600_A		363,360	Cts/S	1,439.2	0.39607	363,360

SI2067-002

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:36:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.01261	ug/L	0.1250	991.5	16.24
Al3961_R		9.675	ug/L	9.261	95.72	12.89
As1891_A		13.28	ug/L	1.089	8.204	2.791
Au2427_A		3.967	ug/L	0.4849	12.22	1.025
B_2089_A		3.624	ug/L	0.6287	17.35	8.004
Ba4554_R		8.205	ug/L	0.06880	0.8385	518.6
Be3130_R		0.07256	ug/L	0.007635	10.52	1.362
Ca3158_R	W	33,890	ug/L	967.8	2.855	42,260
Cd2265_A		0.02018	ug/L	0.02709	134.3	2.250
Co2286_A		0.3549	ug/L	0.003112	0.8769	6.132
Cr2677_A		0.3481	ug/L	0.03978	11.43	18.02
Cu3273_A		1.415	ug/L	0.1790	12.65	20.83
Fe2599_R		879.8	ug/L	26.60	3.023	997.5
K_7664_R		977.6	ug/L	23.51	2.405	855.2
Li6707_R		-0.9006	ug/L	0.2020	22.43	94.22
Mg2025_A		6,824	ug/L	1.599	0.02343	1,085
Mn2576_R		963.4	ug/L	32.81	3.405	5,373
Mo2020_A		2.212	ug/L	0.7702	34.81	4.552
Na5895_R		2,325	ug/L	45.16	1.942	5,433
Ni2316_A		0.6369	ug/L	0.1253	19.67	0.4483
Pb2203_A		0.5045	ug/L	0.4476	88.71	-1.884
Sb2068_A		-0.9290	ug/L	1.504	161.9	-0.2170
Se1960_A		1.443	ug/L	0.8160	56.56	1.302
Si2516_R		6,972	ug/L	245.7	3.524	1,927
Sn1899_A		1.909	ug/L	0.3830	20.06	2.486
Sr4215_R		167.5	ug/L	5.050	3.015	11,620
Ti3349_A		0.6658	ug/L	0.09471	14.22	-7.475
Tl1908_A		2.171	ug/L	1.028	47.34	-0.8949
V_2924_A		0.3820	ug/L	0.05253	13.75	0.1772
Zn2062_A		1.892	ug/L	0.2001	10.57	5.077
Y_3600_R		22,583	Cts/S	372.00	1.6472	22,583
Y_2243_A		9,235.8	Cts/S	36.758	0.39800	9,235.8
Y_3600_A		373,460	Cts/S	685.46	0.18354	373,460

SI2085-002

Method Name: K6010-2011 Method Revision: 1,730

SI2085-002

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:40:49PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		39.68	ug/L	2.019	5.088	-368.2
Al3961_R	W	99,160	ug/L	3,332	3.360	69,460
As1891_A		-5.706	ug/L	0.001793	0.03143	-6.692
Au2427_A		7.250	ug/L	2.129	29.36	58.07
B_2089_A	F	428,600	ug/L	661.8	0.1544	261,000
Ba4554_R		9.958	ug/L	0.05434	0.5457	530.1
Be3130_R		0.1002	ug/L	0.03812	38.03	3.479
Ca3158_R		11,050	ug/L	304.2	2.753	11,790
Cd2265_A		0.7197	ug/L	0.2304	32.02	74.35
Co2286_A		-0.6437	ug/L	0.1173	18.23	0.3337
Cr2677_A		253.3	ug/L	0.9935	0.3923	3,345
Cu3273_A		5.911	ug/L	0.1104	1.867	81.72
Fe2599_R	W	143,400	ug/L	5,363	3.739	138,600
K_7664_R	F	1,936,000	ug/L	159,900	8.260	1,264,000
Li6707_R		95.70	ug/L	3.838	4.010	1,141
Mg2025_A		2,952	ug/L	12.37	0.4190	307.3
Mn2576_R	W	1,186	ug/L	47.78	4.029	5,674
Mo2020_A		16.83	ug/L	1.166	6.927	18.84
Na5895_R	F	1,172,000	ug/L	31,150	2.659	2,240,000
Ni2316_A		16.54	ug/L	0.7394	4.470	13.95
Pb2203_A		62.03	ug/L	1.825	2.942	39.59
Sb2068_A		21.71	ug/L	1.495	6.888	6.215
Se1960_A		28.69	ug/L	6.325	22.04	4.519
Si2516_R		3,476	ug/L	95.95	2.760	821.1
Sn1899_A		32.75	ug/L	0.3857	1.178	9.468
Sr4215_R		24.73	ug/L	0.5864	2.371	1,436
Ti3349_A		-0.4873	ug/L	0.2396	49.18	-38.68
Tl1908_A		-14.92	ug/L	1.565	10.49	-5.257
V_2924_A		3.802	ug/L	0.5786	15.22	67.82
Zn2062_A		195.7	ug/L	0.01724	0.008808	371.0
Y_3600_R		19,355	Cts/S	293.12	1.5144	19,355
Y_2243_A		6,094.8	Cts/S	10.572	0.17345	6,094.8
Y_3600_A		238,800	Cts/S	240.75	0.10081	238,800

RINSE

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:46:12PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.06052	ug/L	0.2617	432.4	27.21
Al3961_R		76.23	ug/L	10.61	13.92	56.09
As1891_A		0.1923	ug/L	0.2351	122.2	-0.8523
Au2427_A		2.241	ug/L	0.7283	32.49	0.9625
B_2089_A		224.6	ug/L	15.86	7.062	213.1
Ba4554_R		0.03707	ug/L	0.1754	473.3	52.25
Be3130_R		0.05720	ug/L	0.03988	69.71	-0.09978
Ca3158_R		6.954	ug/L	7.638	109.8	-11.24
Cd2265_A		-0.01597	ug/L	0.01767	110.6	1.072
Co2286_A		-0.1934	ug/L	0.3341	172.7	3.814
Cr2677_A		0.1068	ug/L	0.1337	125.2	10.93
Cu3273_A		0.7084	ug/L	0.002321	0.3276	4.788
Fe2599_R		14.92	ug/L	5.466	36.65	22.01
K_7664_R		8,017	ug/L	311.3	3.883	6,105
Li6707_R		30.83	ug/L	1.105	3.584	492.0
Mg2025_A		-4.445	ug/L	1.196	26.90	-4.259
Mn2576_R		1.089	ug/L	0.1882	17.29	1.808
Mo2020_A		0.7460	ug/L	0.08701	11.66	2.148

RINSE

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:46:12PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		1,128	ug/L	23.90	2.119	2,716
Ni2316_A		-0.02641	ug/L	0.1348	510.3	-1.122
Pb2203_A		0.3278	ug/L	0.2729	83.26	-2.147
Sb2068_A		0.3286	ug/L	0.00005300	0.01617	0.2160
Se1960_A		5.274	ug/L	1.762	33.41	1.890
Si2516_R		-11.86	ug/L	9.143	77.09	9.325
Sn1899_A		1.434	ug/L	0.2763	19.27	2.316
Sr4215_R		0.2558	ug/L	0.1533	59.94	-30.73
Ti3349_A		0.5598	ug/L	0.2813	50.26	-12.74
Tl1908_A		1.071	ug/L	1.176	109.8	-0.5004
V_2924_A		0.1040	ug/L	0.01054	10.13	0.8908
Zn2062_A		0.08870	ug/L	0.06017	67.83	-0.1160
Y_3600_R		22,200	Cts/S	292.10	1.3158	22,200
Y_2243_A		9,287.8	Cts/S	1.0229	0.011014	9,287.8
Y_3600_A		376,340	Cts/S	31.911	0.0084790	376,340

LCSWID06ICW2

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:50:59PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.14	ug/L	0.02720	0.05425	1,835
Al3961_R		2,119	ug/L	53.80	2.538	1,724
As1891_A		99.55	ug/L	1.021	1.026	26.91
Au2427_A		5.021	ug/L	0.8711	17.35	8.731
B_2089_A	F	619.7	ug/L	7.019	1.133	573.4
Ba4554_R		2,055	ug/L	59.96	2.918	116,700
Be3130_R		51.27	ug/L	1.392	2.715	4,791
Ca3158_R		2,480	ug/L	75.27	3.035	3,063
Cd2265_A		247.5	ug/L	0.4365	0.1763	3,951
Co2286_A		521.6	ug/L	0.1747	0.03349	2,220
Cr2677_A		204.1	ug/L	1.092	0.5352	4,125
Cu3273_A		259.4	ug/L	0.4772	0.1840	5,806
Fe2599_R		1,018	ug/L	26.01	2.556	1,149
K_7664_R		11,470	ug/L	195.9	1.708	8,806
Li6707_R		479.1	ug/L	14.18	2.960	6,217
Mg2025_A		5,041	ug/L	6.561	0.1301	810.0
Mn2576_R		508.3	ug/L	15.39	3.028	2,823
Mo2020_A		94.73	ug/L	0.3904	0.4121	154.5
Na5895_R		7,468	ug/L	198.4	2.656	16,840
Ni2316_A		518.5	ug/L	0.1183	0.02282	1,299
Pb2203_A		100.9	ug/L	0.2255	0.2235	111.9
Sb2068_A		102.5	ug/L	1.057	1.032	33.82
Se1960_A		101.1	ug/L	1.155	1.142	18.23
Si2516_R		909.7	ug/L	22.79	2.505	261.9
Sn1899_A		466.8	ug/L	0.1582	0.03390	179.5
Sr4215_R		473.7	ug/L	14.78	3.120	32,860
Ti3349_A		471.9	ug/L	0.4683	0.09924	22,110
Tl1908_A		91.11	ug/L	7.617	8.360	32.36
V_2924_A		521.0	ug/L	0.1980	0.03800	12,320
Zn2062_A		499.3	ug/L	0.04143	0.008296	1,422
Y_3600_R		22,502	Cts/S	193.27	0.85890	22,502
Y_2243_A		9,147.2	Cts/S	3.9484	0.043165	9,147.2
Y_3600_A		365,280	Cts/S	546.60	0.14964	365,280

PBWID06ICW2

Method Name: K6010-2011 Method Revision: 1,730

PBWID06ICW2

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 1:55:39PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1662	ug/L	0.1231	74.11	23.23
Al3961_R		6.005	ug/L	7.747	129.0	-0.3843
As1891_A		0.6692	ug/L	0.6533	97.62	-0.7173
Au2427_A		2.434	ug/L	0.08850	3.635	1.738
B_2089_A	F	113.3	ug/L	3.704	3.269	109.9
Ba4554_R		0.3167	ug/L	0.04720	14.91	67.60
Be3130_R		0.09370	ug/L	0.02178	23.24	3.288
Ca3158_R		10.48	ug/L	10.21	97.38	-6.836
Cd2265_A		-0.06102	ug/L	0.02715	44.50	0.3353
Co2286_A		-0.1864	ug/L	0.04273	22.93	3.849
Cr2677_A		0.1713	ug/L	0.2029	118.4	12.19
Cu3273_A		0.8636	ug/L	0.2044	23.67	8.300
Fe2599_R		4.665	ug/L	4.433	95.03	10.62
K_7664_R	F	1,861	ug/L	44.67	2.400	1,494
Li6707_R		11.52	ug/L	0.9850	8.553	247.5
Mg2025_A		-0.1296	ug/L	1.192	919.5	-3.570
Mn2576_R		1.520	ug/L	0.8962	58.96	4.155
Mo2020_A		0.7944	ug/L	0.4500	56.65	2.231
Na5895_R		282.6	ug/L	0.4900	0.1734	859.6
Ni2316_A		0.1550	ug/L	0.02925	18.87	-0.6593
Pb2203_A		0.2682	ug/L	0.9952	371.1	-2.209
Sb2068_A		1.508	ug/L	0.03029	2.008	0.6315
Se1960_A		4.096	ug/L	0.8949	21.85	1.687
Si2516_R		2.354	ug/L	6.485	275.5	13.07
Sn1899_A		0.4493	ug/L	0.8676	193.1	1.937
Sr4215_R		0.2861	ug/L	0.08201	28.67	-28.42
Ti3349_A		0.6015	ug/L	0.0003820	0.06343	-10.64
Tl1908_A		6.198	ug/L	0.003187	0.05141	1.524
V_2924_A		0.09635	ug/L	0.09554	99.16	0.6777
Zn2062_A		0.4784	ug/L	0.1521	31.80	1.012
Y_3600_R		22,077	Cts/S	86.737	0.39288	22,077
Y_2243_A		9,296.7	Cts/S	18.497	0.19896	9,296.7
Y_3600_A		373,570	Cts/S	470.75	0.12602	373,570

SI2069-001

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:00:26PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.02267	ug/L	0.05957	262.8	18.74
Al3961_R		928.6	ug/L	9.231	0.9941	746.5
As1891_A		2.414	ug/L	0.7900	32.73	-0.2462
Au2427_A		2.242	ug/L	0.7881	35.16	1.125
B_2089_A		119.0	ug/L	2.569	2.159	112.4
Ba4554_R		25.87	ug/L	1.088	4.205	1,498
Be3130_R		0.01696	ug/L	0.04024	237.3	-5.921
Ca3158_R		20,480	ug/L	602.1	2.941	25,070
Cd2265_A		0.1007	ug/L	0.005499	5.459	3.314
Co2286_A		0.1004	ug/L	0.04774	47.54	5.323
Cr2677_A		10.49	ug/L	0.2847	2.714	217.1
Cu3273_A		3.922	ug/L	0.3576	9.116	75.53
Fe2599_R		610.4	ug/L	19.26	3.156	681.5
K_7664_R		2,262	ug/L	35.61	1.574	1,800
Li6707_R		11.40	ug/L	3.191	27.99	247.0
Mg2025_A		1,625	ug/L	10.92	0.6723	251.2
Mn2576_R		18.06	ug/L	0.6661	3.688	94.86
Mo2020_A		1.617	ug/L	0.03385	2.094	3.501

SI2069-001

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:00:26PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		20,800	ug/L	667.2	3.208	45,780
Ni2316_A		0.7792	ug/L	0.1117	14.33	0.8288
Pb2203_A		2.056	ug/L	0.4527	22.01	-0.2521
Sb2068_A		-0.01603	ug/L	0.01788	111.5	0.1250
Se1960_A		1.409	ug/L	2.675	189.9	1.200
Si2516_R		3,926	ug/L	102.8	2.617	1,071
Sn1899_A		0.5924	ug/L	0.2326	39.26	1.945
Sr4215_R		102.4	ug/L	2.592	2.533	6,960
Ti3349_A		33.04	ug/L	0.4377	1.325	1,492
Tl1908_A		1.981	ug/L	0.2857	14.42	-0.1765
V_2924_A		3.042	ug/L	0.07818	2.570	69.35
Zn2062_A		13.42	ug/L	0.1065	0.7938	37.55
Y_3600_R		22,182	Cts/S	264.07	1.1905	22,182
Y_2243_A		9,074.4	Cts/S	4.4577	0.049124	9,074.4
Y_3600_A		360,460	Cts/S	3,929.6	1.0902	360,460

SI2069-001A

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:05:12PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		533.9	ug/L	5.240	0.9816	19,060
Al3961_R		12,310	ug/L	469.5	3.814	10,030
As1891_A		552.7	ug/L	1.311	0.2372	152.0
Au2427_A		2.107	ug/L	0.2559	12.15	-0.5870
B_2089_A		668.3	ug/L	0.6200	0.09277	625.3
Ba4554_R		571.9	ug/L	21.06	3.683	32,460
Be3130_R		565.6	ug/L	18.73	3.311	53,080
Ca3158_R	W	25,550	ug/L	925.7	3.623	31,680
Cd2265_A		563.1	ug/L	0.4285	0.07611	8,915
Co2286_A		577.8	ug/L	0.1020	0.01766	2,438
Cr2677_A		566.3	ug/L	4.981	0.8795	11,250
Cu3273_A		572.8	ug/L	6.684	1.167	12,640
Fe2599_R		6,286	ug/L	275.4	4.381	7,055
K_7664_R		12,160	ug/L	399.3	3.285	9,311
Li6707_R		564.1	ug/L	20.27	3.593	7,289
Mg2025_A		7,496	ug/L	18.61	0.2483	1,191
Mn2576_R		573.2	ug/L	18.71	3.265	3,178
Mo2020_A		564.7	ug/L	4.688	0.8303	909.6
Na5895_R	W	25,860	ug/L	952.2	3.682	57,600
Ni2316_A		577.1	ug/L	0.6619	0.1147	1,434
Pb2203_A		550.4	ug/L	1.508	0.2739	615.3
Sb2068_A		565.5	ug/L	0.7748	0.1370	193.5
Se1960_A		555.9	ug/L	7.637	1.374	94.94
Si2516_R		4,321	ug/L	178.8	4.139	1,194
Sn1899_A		-0.09916	ug/L	0.3448	347.8	1.682
Sr4215_R		649.4	ug/L	22.25	3.426	44,980
Ti3349_A		598.7	ug/L	1.113	0.1859	27,650
Tl1908_A		579.6	ug/L	2.846	0.4910	220.1
V_2924_A		586.5	ug/L	6.736	1.149	13,560
Zn2062_A		598.8	ug/L	1.278	0.2134	1,691
Y_3600_R		22,467	Cts/S	426.60	1.8987	22,467
Y_2243_A		9,070.9	Cts/S	15.724	0.17334	9,070.9
Y_3600_A		359,610	Cts/S	2,165.6	0.60222	359,610

SI2069-001L

Method Name: K6010-2011 Method Revision: 1,730

SI2069-001L

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:09:51PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.4504	ug/L	0.3403	75.57	23.54
Al3961_R		1,009	ug/L	91.52	9.070	158.0
As1891_A		13.28	ug/L	8.481	63.84	-0.1587
Au2427_A		5.614	ug/L	2.170	38.65	-3.513
B_2089_A		368.2	ug/L	9.518	2.585	72.75
Ba4554_R		27.29	ug/L	1.828	6.700	355.2
Be3130_R		0.2020	ug/L	0.1853	91.73	-2.133
Ca3158_R		21,180	ug/L	337.7	1.594	5,164
Cd2265_A		0.2281	ug/L	0.09356	41.02	2.146
Co2286_A		0.01853	ug/L	0.8226	4,439	4.730
Cr2677_A		9.926	ug/L	0.5115	5.153	48.41
Cu3273_A		4.538	ug/L	2.230	49.15	9.075
Fe2599_R		660.7	ug/L	21.92	3.318	151.7
K_7664_R		5,159	ug/L	203.9	3.953	879.6
Li6707_R		31.68	ug/L	0.06174	0.1949	183.4
Mg2025_A		1,634	ug/L	1.292	0.07905	48.71
Mn2576_R		21.19	ug/L	0.3958	1.868	19.05
Mo2020_A		13.24	ug/L	2.314	17.48	5.261
Na5895_R		22,050	ug/L	187.2	0.8490	9,892
Ni2316_A		0.5656	ug/L	1.421	251.2	-0.7757
Pb2203_A		1.492	ug/L	0.6698	44.88	-2.187
Sb2068_A		1.077	ug/L	1.416	131.5	0.1891
Se1960_A		17.27	ug/L	5.147	29.80	1.570
Si2516_R		4,043	ug/L	130.2	3.221	230.4
Sn1899_A		-7.212	ug/L	1.681	23.30	1.199
Sr4215_R		106.8	ug/L	1.688	1.580	1,413
Ti3349_A		40.33	ug/L	4.836	11.99	339.5
Tl1908_A		10.98	ug/L	3.198	29.14	-0.06439
V_2924_A		3.043	ug/L	0.4198	13.80	12.54
Zn2062_A		13.38	ug/L	0.5010	3.744	7.338
Y_3600_R		22,155	Cts/S	79.063	0.35686	22,155
Y_2243_A		9,252.2	Cts/S	3.4813	0.037626	9,252.2
Y_3600_A		364,580	Cts/S	3,815.8	1.0466	364,580

SI2069-001P

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:14:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.84	ug/L	0.06386	0.1281	1,785
Al3961_R		3,122	ug/L	51.24	1.641	2,515
As1891_A		102.1	ug/L	0.1584	0.1552	27.29
Au2427_A		4.859	ug/L	0.7201	14.82	8.268
B_2089_A		569.3	ug/L	0.1438	0.02525	521.8
Ba4554_R	W	2,033	ug/L	73.65	3.623	114,000
Be3130_R		51.01	ug/L	1.491	2.923	4,701
Ca3158_R		22,950	ug/L	709.2	3.090	28,150
Cd2265_A		245.2	ug/L	0.09417	0.03841	3,871
Co2286_A		514.3	ug/L	0.4602	0.08947	2,166
Cr2677_A		211.3	ug/L	2.482	1.174	4,202
Cu3273_A		259.6	ug/L	2.489	0.9589	5,718
Fe2599_R		1,630	ug/L	54.66	3.354	1,814
K_7664_R		10,980	ug/L	340.6	3.102	8,330
Li6707_R		493.3	ug/L	19.68	3.990	6,319
Mg2025_A		6,551	ug/L	23.91	0.3650	1,037
Mn2576_R		514.3	ug/L	12.58	2.446	2,821
Mo2020_A		102.6	ug/L	0.1586	0.1545	165.5

SI2069-001P

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:14:38PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	28,120	ug/L	1,050	3.734	61,940
Ni2316_A		513.1	ug/L	0.08248	0.01607	1,272
Pb2203_A		98.01	ug/L	0.9538	0.9731	107.3
Sb2068_A		101.8	ug/L	0.5233	0.5139	33.18
Se1960_A		100.9	ug/L	0.5766	0.5712	18.01
Si2516_R		5,274	ug/L	64.30	1.219	1,438
Sn1899_A		489.3	ug/L	0.7489	0.1531	186.1
Sr4215_R		596.0	ug/L	18.26	3.064	40,840
Ti3349_A		545.6	ug/L	0.03241	0.005939	25,160
Tl1908_A		99.21	ug/L	4.304	4.338	35.06
V_2924_A		525.2	ug/L	2.526	0.4808	12,230
Zn2062_A		510.1	ug/L	0.3878	0.07604	1,437
Y_3600_R		22,221	Cts/S	123.90	0.55758	22,221
Y_2243_A		9,048.0	Cts/S	9.1389	0.10101	9,048.0
Y_3600_A		359,440	Cts/S	2,401.4	0.66809	359,440

CCV

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:19:18PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		498.7	ug/L	8.686	1.742	17,980
Al3961_R	W	13,520	ug/L	774.8	5.730	10,230
As1891_A		491.3	ug/L	2.198	0.4474	135.9
Au2427_A		501.1	ug/L	21.73	4.337	1,994
B_2089_A	W	547.6	ug/L	3.527	0.6441	518.9
Ba4554_R	W	545.1	ug/L	28.38	5.206	28,750
Be3130_R	W	539.1	ug/L	29.41	5.457	47,010
Ca3158_R	W	13,380	ug/L	681.6	5.093	15,410
Cd2265_A		488.7	ug/L	0.9400	0.1923	7,815
Co2286_A		498.2	ug/L	2.052	0.4118	2,122
Cr2677_A		487.7	ug/L	6.206	1.273	9,839
Cu3273_A		498.4	ug/L	6.573	1.319	11,160
Fe2599_R	W	13,310	ug/L	718.2	5.397	13,870
K_7664_R	W	13,460	ug/L	545.0	4.050	9,569
Li6707_R	W	537.0	ug/L	25.64	4.774	6,454
Mg2025_A		12,550	ug/L	85.88	0.6843	1,999
Mn2576_R	W	541.6	ug/L	28.39	5.242	2,791
Mo2020_A		496.4	ug/L	2.229	0.4491	807.1
Na5895_R		13,150	ug/L	632.9	4.813	27,330
Ni2316_A		499.9	ug/L	1.319	0.2639	1,253
Pb2203_A		489.4	ug/L	2.449	0.5003	551.9
Sb2068_A		498.3	ug/L	0.4537	0.09104	170.6
Se1960_A		487.0	ug/L	0.8521	0.1750	84.11
Si2516_R	W	13,260	ug/L	652.2	4.918	3,379
Sn1899_A		488.7	ug/L	1.990	0.4073	188.0
Sr4215_R	W	542.5	ug/L	29.11	5.365	34,910
Ti3349_A		498.7	ug/L	8.300	1.664	23,370
Tl1908_A		492.6	ug/L	2.325	0.4721	188.5
V_2924_A		500.8	ug/L	8.187	1.635	11,760
Zn2062_A		483.7	ug/L	1.437	0.2971	1,378
Y_3600_R		20,899	Cts/S	1,065.5	5.0984	20,899
Y_2243_A		9,154.9	Cts/S	5.3806	0.058773	9,154.9
Y_3600_A		365,160	Cts/S	5,680.1	1.5555	365,160

CCB

Method Name: K6010-2011 Method Revision: 1,730

CCB

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:23:53PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.07898	ug/L	0.05542	70.17	26.09
Al3961_R		0.4744	ug/L	13.22	2,787	-4.798
As1891_A		1.855	ug/L	0.2190	11.81	-0.3786
Au2427_A		4.545	ug/L	0.2396	5.272	10.24
B_2089_A	W	43.51	ug/L	1.547	3.555	44.84
Ba4554_R		0.07537	ug/L	0.01898	25.18	50.68
Be3130_R		0.07136	ug/L	0.1022	143.2	0.8374
Ca3158_R		7.943	ug/L	1.670	21.02	-9.340
Cd2265_A		0.03490	ug/L	0.008936	25.61	1.880
Co2286_A		-0.1811	ug/L	0.09775	53.97	3.855
Cr2677_A		0.09688	ug/L	0.2957	305.3	10.52
Cu3273_A		1.026	ug/L	0.2403	23.43	11.83
Fe2599_R		5.427	ug/L	3.868	71.27	10.61
K_7664_R		398.2	ug/L	54.22	13.61	378.2
Li6707_R		3.581	ug/L	0.9211	25.72	139.1
Mg2025_A		1.402	ug/L	0.2011	14.34	-3.299
Mn2576_R		0.3965	ug/L	0.1356	34.20	-1.837
Mo2020_A		2.111	ug/L	0.3955	18.74	4.376
Na5895_R		77.74	ug/L	16.75	21.55	385.5
Ni2316_A		0.009070	ug/L	0.03543	390.6	-1.022
Pb2203_A		0.2082	ug/L	0.4226	203.0	-2.263
Sb2068_A		-0.4806	ug/L	0.07355	15.31	-0.06077
Se1960_A		2.938	ug/L	3.354	114.2	1.478
Si2516_R		-10.37	ug/L	13.36	128.8	8.937
Sn1899_A		-0.6514	ug/L	0.3016	46.30	1.502
Sr4215_R		0.4084	ug/L	0.06188	15.15	-18.94
Ti3349_A		1.103	ug/L	0.1589	14.41	13.31
Tl1908_A		3.436	ug/L	0.7017	20.42	0.4308
V_2924_A		0.1938	ug/L	0.4683	241.6	2.797
Zn2062_A		0.2303	ug/L	0.04387	19.05	0.2924
Y_3600_R		20,670	Cts/S	1,324.3	6.4067	20,670
Y_2243_A		9,243.1	Cts/S	3.5160	0.038039	9,243.1
Y_3600_A		368,440	Cts/S	2,259.9	0.61339	368,440

SI2069-001S

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:28:41PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.44	ug/L	0.5722	1.134	1,805
Al3961_R		3,145	ug/L	57.18	1.818	2,535
As1891_A		105.0	ug/L	1.836	1.748	28.04
Au2427_A		5.302	ug/L	0.7578	14.29	9.951
B_2089_A		553.4	ug/L	0.6756	0.1221	506.3
Ba4554_R	W	2,057	ug/L	59.51	2.894	115,400
Be3130_R		51.80	ug/L	1.277	2.465	4,777
Ca3158_R		23,390	ug/L	800.1	3.420	28,710
Cd2265_A		249.0	ug/L	0.4628	0.1859	3,922
Co2286_A		519.9	ug/L	0.4329	0.08326	2,184
Cr2677_A		215.1	ug/L	0.7900	0.3673	4,275
Cu3273_A		264.1	ug/L	2.572	0.9738	5,813
Fe2599_R		1,654	ug/L	47.16	2.852	1,841
K_7664_R		10,880	ug/L	304.5	2.799	8,259
Li6707_R		497.7	ug/L	16.12	3.239	6,377
Mg2025_A		6,653	ug/L	17.09	0.2569	1,051
Mn2576_R		522.2	ug/L	15.62	2.991	2,866
Mo2020_A		104.5	ug/L	1.262	1.208	168.2

SI2069-001S

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:28:41PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	28,700	ug/L	873.7	3.044	63,240
Ni2316_A		520.6	ug/L	0.8164	0.1568	1,287
Pb2203_A		101.4	ug/L	0.4563	0.4498	110.9
Sb2068_A		102.7	ug/L	2.179	2.122	33.37
Se1960_A		104.6	ug/L	2.269	2.170	18.57
Si2516_R		5,347	ug/L	164.0	3.066	1,458
Sn1899_A		497.2	ug/L	0.06397	0.01287	188.6
Sr4215_R		608.6	ug/L	16.49	2.710	41,720
Ti3349_A		552.7	ug/L	6.400	1.158	25,470
Tl1908_A		104.8	ug/L	4.094	3.908	37.09
V_2924_A		528.3	ug/L	3.331	0.6305	12,290
Zn2062_A		516.5	ug/L	1.446	0.2799	1,452
Y_3600_R		22,234	Cts/S	206.95	0.93080	22,234
Y_2243_A		9,026.8	Cts/S	21.233	0.23523	9,026.8
Y_3600_A		359,160	Cts/S	1,097.5	0.30558	359,160

SI2069-002

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:33:21PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1849	ug/L	0.1476	79.84	27.89
Al3961_R		56.87	ug/L	24.86	43.72	50.34
As1891_A		1.102	ug/L	0.6662	60.44	-0.6048
Au2427_A		1.515	ug/L	0.4447	29.34	-2.087
B_2089_A		91.17	ug/L	0.1030	0.1129	86.87
Ba4554_R		40.06	ug/L	1.315	3.283	2,284
Be3130_R		0.05589	ug/L	0.03490	62.45	-0.2689
Ca3158_R	W	34,280	ug/L	1,054	3.074	41,830
Cd2265_A		-0.05288	ug/L	0.02284	43.20	0.7899
Co2286_A		0.5430	ug/L	0.02217	4.084	6.806
Cr2677_A		2.687	ug/L	0.3106	11.56	61.50
Cu3273_A		2.017	ug/L	0.2572	12.76	33.23
Fe2599_R		499.0	ug/L	22.90	4.590	556.2
K_7664_R		3,020	ug/L	67.73	2.243	2,358
Li6707_R		4.095	ug/L	0.7632	18.64	154.8
Mg2025_A		4,943	ug/L	8.474	0.1715	768.3
Mn2576_R		56.87	ug/L	1.944	3.417	306.6
Mo2020_A		0.7758	ug/L	0.2167	27.93	2.140
Na5895_R	W	29,160	ug/L	906.1	3.107	63,890
Ni2316_A		0.6943	ug/L	0.01149	1.655	0.6286
Pb2203_A		0.4432	ug/L	0.4749	107.2	-1.938
Sb2068_A		1.378	ug/L	0.08303	6.026	0.5815
Se1960_A		4.634	ug/L	2.777	59.92	1.738
Si2516_R		3,994	ug/L	119.7	2.997	1,086
Sn1899_A		-0.7169	ug/L	0.1779	24.82	1.445
Sr4215_R		168.7	ug/L	5.374	3.185	11,460
Ti3349_A		1.791	ug/L	0.08693	4.852	44.54
Tl1908_A		3.059	ug/L	0.4895	16.00	0.2280
V_2924_A		0.3566	ug/L	0.1567	43.95	6.267
Zn2062_A		16.68	ug/L	0.1925	1.154	46.63
Y_3600_R		22,100	Cts/S	98.891	0.44746	22,100
Y_2243_A		9,041.1	Cts/S	21.117	0.23356	9,041.1
Y_3600_A		358,170	Cts/S	2,945.2	0.82231	358,170

SI2069-003

Method Name: K6010-2011 Method Revision: 1,730

SI2069-003

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:38:07PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1724	ug/L	0.07100	41.18	8.225
Al3961_R		997.8	ug/L	26.02	2.608	761.4
As1891_A		4.213	ug/L	1.343	31.87	0.2338
Au2427_A		1.268	ug/L	0.1756	13.85	-2.450
B_2089_A		99.19	ug/L	0.3294	0.3320	94.66
Ba4554_R		58.63	ug/L	1.180	2.012	3,172
Be3130_R		0.07109	ug/L	0.08014	112.7	-0.2130
Ca3158_R		13,030	ug/L	223.0	1.711	15,190
Cd2265_A		-0.07540	ug/L	0.08036	106.6	0.7818
Co2286_A		-0.1746	ug/L	0.05110	29.26	4.063
Cr2677_A		28.47	ug/L	0.03022	0.1061	577.6
Cu3273_A		1.319	ug/L	0.1608	12.19	17.99
Fe2599_R		988.2	ug/L	15.16	1.534	1,047
K_7664_R		3,123	ug/L	26.65	0.8535	2,326
Li6707_R		3.354	ug/L	0.3686	10.99	139.0
Mg2025_A		3,287	ug/L	7.873	0.2395	512.8
Mn2576_R		7.068	ug/L	0.6882	9.736	33.01
Mo2020_A		0.1375	ug/L	0.1371	99.68	1.126
Na5895_R	W	33,070	ug/L	529.7	1.602	69,180
Ni2316_A		0.3939	ug/L	0.1088	27.62	-0.1841
Pb2203_A		1.133	ug/L	0.1709	15.08	-1.301
Sb2068_A		-0.1917	ug/L	1.488	776.0	0.1217
Se1960_A		0.8075	ug/L	0.9368	116.0	1.101
Si2516_R		5,075	ug/L	121.9	2.403	1,315
Sn1899_A		-0.4655	ug/L	0.4387	94.25	1.548
Sr4215_R		112.0	ug/L	2.457	2.194	7,255
Ti3349_A		23.65	ug/L	0.6590	2.786	1,062
Tl1908_A		1.075	ug/L	1.170	108.8	-0.5078
V_2924_A		1.302	ug/L	0.006743	0.5180	27.26
Zn2062_A		16.03	ug/L	0.05738	0.3579	44.99
Y_3600_R		21,122	Cts/S	500.10	2.3677	21,122
Y_2243_A		9,095.3	Cts/S	7.8601	0.086419	9,095.3
Y_3600_A		362,250	Cts/S	2,712.1	0.74867	362,250

SI2069-004

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:42:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.1029	ug/L	0.04499	43.72	22.96
Al3961_R		110.0	ug/L	7.403	6.731	87.76
As1891_A		0.7659	ug/L	2.427	316.9	-0.6872
Au2427_A		1.557	ug/L	0.7738	49.70	-1.938
B_2089_A		51.11	ug/L	0.5886	1.152	51.37
Ba4554_R		19.91	ug/L	0.7342	3.687	1,174
Be3130_R		0.07574	ug/L	0.003110	4.107	1.636
Ca3158_R		13,550	ug/L	361.7	2.669	16,720
Cd2265_A		0.1379	ug/L	0.02473	17.94	3.593
Co2286_A		0.3240	ug/L	0.08401	25.93	5.963
Cr2677_A		0.05532	ug/L	0.04813	87.00	9.497
Cu3273_A		1.626	ug/L	0.07885	4.848	24.89
Fe2599_R		125.6	ug/L	1.442	1.148	145.8
K_7664_R		1,251	ug/L	4.435	0.3544	1,053
Li6707_R		0.9103	ug/L	1.513	166.2	116.3
Mg2025_A		2,062	ug/L	8.139	0.3946	322.9
Mn2576_R		28.93	ug/L	0.3270	1.130	155.7
Mo2020_A		0.3208	ug/L	0.1631	50.84	1.428

SI2069-004

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:42:53PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		6,981	ug/L	170.3	2.439	15,660
Ni2316_A		0.3768	ug/L	0.07711	20.46	-0.1102
Pb2203_A		0.3971	ug/L	0.4941	124.4	-2.039
Sb2068_A		0.4462	ug/L	2.683	601.3	0.2592
Se1960_A		1.982	ug/L	1.641	82.78	1.306
Si2516_R		1,562	ug/L	48.27	3.090	437.3
Sn1899_A		-0.3236	ug/L	0.2285	70.59	1.614
Sr4215_R		88.90	ug/L	2.288	2.574	6,088
Ti3349_A		0.8869	ug/L	0.1054	11.89	2.900
Tl1908_A		1.077	ug/L	0.3852	35.77	-0.5155
V_2924_A		0.1784	ug/L	0.01271	7.120	2.496
Zn2062_A		3.777	ug/L	0.1333	3.528	10.42
Y_3600_R		22,356	Cts/S	112.80	0.50455	22,356
Y_2243_A		9,164.9	Cts/S	6.4463	0.070337	9,164.9
Y_3600_A		360,180	Cts/S	3,165.4	0.87885	360,180

SI2069-005

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:47:40PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.3610	ug/L	0.1658	45.92	-149.8
Al3961_R		247.9	ug/L	21.29	8.589	205.1
As1891_A		7.556	ug/L	1.417	18.75	0.4548
Au2427_A		3.007	ug/L	0.1699	5.649	8.013
B_2089_A		49.32	ug/L	0.8958	1.816	49.28
Ba4554_R		71.87	ug/L	2.456	3.418	4,071
Be3130_R		0.07594	ug/L	0.02406	31.69	1.125
Ca3158_R	W	38,310	ug/L	1,354	3.535	46,910
Cd2265_A		-0.02568	ug/L	0.04232	164.8	10.36
Co2286_A		1.684	ug/L	0.09785	5.809	11.60
Cr2677_A		0.8576	ug/L	0.05091	5.936	25.79
Cu3273_A		2.340	ug/L	0.1287	5.500	37.98
Fe2599_R		13,860	ug/L	472.3	3.409	15,350
K_7664_R		4,234	ug/L	117.5	2.774	3,273
Li6707_R		3.228	ug/L	1.213	37.59	144.4
Mg2025_A		3,921	ug/L	9.442	0.2408	611.5
Mn2576_R		418.4	ug/L	13.39	3.199	2,290
Mo2020_A		0.01580	ug/L	0.1092	691.3	0.9276
Na5895_R		17,010	ug/L	575.2	3.382	37,480
Ni2316_A		1.323	ug/L	0.03699	2.795	0.3894
Pb2203_A		0.5107	ug/L	0.01166	2.282	-1.323
Sb2068_A		-1.270	ug/L	0.4317	33.99	-0.2204
Se1960_A		5.161	ug/L	2.764	53.56	1.904
Si2516_R		4,548	ug/L	210.9	4.638	1,238
Sn1899_A		-0.8862	ug/L	0.6982	78.79	1.387
Sr4215_R		552.6	ug/L	19.39	3.510	37,780
Ti3349_A		9.008	ug/L	0.1376	1.528	371.5
Tl1908_A		0.8182	ug/L	0.9689	118.4	-0.9751
V_2924_A		3.070	ug/L	0.1091	3.554	70.81
Zn2062_A		10.97	ug/L	0.03704	0.3376	30.69
Y_3600_R		22,174	Cts/S	26.300	0.11861	22,174
Y_2243_A		9,083.3	Cts/S	17.541	0.19311	9,083.3
Y_3600_A		353,500	Cts/S	5,813.5	1.6445	353,500

LC2OID03ICS1

Method Name: K6010-2011 Method Revision: 1,730

LC2OID03ICS1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:52:24PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		50.17	ug/L	0.3724	0.7422	1,826
Al3961_R		2,007	ug/L	74.80	3.727	1,631
As1891_A		103.2	ug/L	1.037	1.005	27.84
Au2427_A		3.379	ug/L	0.4342	12.85	2.209
B_2089_A		516.1	ug/L	0.7858	0.1522	477.7
Ba4554_R		2,040	ug/L	88.45	4.336	115,800
Be3130_R		50.50	ug/L	2.461	4.873	4,711
Ca3158_R		2,513	ug/L	104.5	4.160	3,100
Cd2265_A		255.3	ug/L	0.05357	0.02098	4,064
Co2286_A		530.2	ug/L	0.1459	0.02753	2,250
Cr2677_A		207.9	ug/L	2.020	0.9718	4,181
Cu3273_A		263.6	ug/L	3.963	1.503	5,871
Fe2599_R		1,006	ug/L	43.38	4.312	1,135
K_7664_R		10,110	ug/L	349.7	3.458	7,772
Li6707_R		497.0	ug/L	21.06	4.237	6,440
Mg2025_A		5,210	ug/L	15.42	0.2960	834.7
Mn2576_R		503.1	ug/L	24.02	4.773	2,791
Mo2020_A		103.6	ug/L	0.07989	0.07713	168.4
Na5895_R		7,537	ug/L	283.6	3.763	16,980
Ni2316_A		527.5	ug/L	0.3044	0.05770	1,318
Pb2203_A		103.0	ug/L	1.157	1.124	114.0
Sb2068_A		102.8	ug/L	0.3973	0.3865	33.63
Se1960_A		103.7	ug/L	2.034	1.961	18.62
Si2516_R		929.3	ug/L	49.07	5.280	267.1
Sn1899_A		529.4	ug/L	1.434	0.2709	202.8
Sr4215_R		500.2	ug/L	22.54	4.505	34,670
Ti3349_A		509.9	ug/L	9.158	1.796	23,770
Tl1908_A		110.4	ug/L	0.3253	0.2948	39.71
V_2924_A		525.6	ug/L	6.602	1.256	12,370
Zn2062_A		506.3	ug/L	0.3784	0.07475	1,438
Y_3600_R		22,481	Cts/S	173.33	0.77099	22,481
Y_2243_A		9,122.5	Cts/S	5.6475	0.061908	9,122.5
Y_3600_A		363,480	Cts/S	2,262.5	0.62245	363,480

LCSOID03ICS1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:57:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		49.72	ug/L	0.5777	1.162	1,832
Al3961_R		2,085	ug/L	32.55	1.561	1,643
As1891_A		101.1	ug/L	2.094	2.071	27.48
Au2427_A		4.880	ug/L	0.5269	10.80	8.119
B_2089_A		514.8	ug/L	3.205	0.6225	480.3
Ba4554_R		2,100	ug/L	26.38	1.256	115,500
Be3130_R		52.38	ug/L	0.8297	1.584	4,738
Ca3158_R		2,614	ug/L	19.99	0.7647	3,127
Cd2265_A		252.2	ug/L	2.915	1.156	4,047
Co2286_A		519.2	ug/L	6.273	1.208	2,221
Cr2677_A		203.5	ug/L	3.051	1.500	4,141
Cu3273_A		258.7	ug/L	3.695	1.428	5,832
Fe2599_R		1,032	ug/L	18.48	1.791	1,128
K_7664_R		10,390	ug/L	187.6	1.806	7,733
Li6707_R		520.7	ug/L	5.730	1.100	6,535
Mg2025_A		5,131	ug/L	42.32	0.8248	828.4
Mn2576_R		520.0	ug/L	9.934	1.910	2,797
Mo2020_A		104.0	ug/L	1.521	1.463	170.4

LCSOID03ICS1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 2:57:02PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R		7,786	ug/L	92.41	1.187	16,990
Ni2316_A		518.5	ug/L	5.256	1.014	1,306
Pb2203_A		102.4	ug/L	1.184	1.157	114.1
Sb2068_A		102.4	ug/L	1.361	1.329	33.75
Se1960_A		103.7	ug/L	0.4416	0.4260	18.76
Si2516_R		961.4	ug/L	13.15	1.368	267.4
Sn1899_A		529.8	ug/L	5.376	1.015	204.6
Sr4215_R		527.2	ug/L	6.579	1.248	35,420
Ti3349_A		512.4	ug/L	8.214	1.603	24,170
Tl1908_A		108.1	ug/L	1.259	1.164	39.14
V_2924_A		515.6	ug/L	7.527	1.460	12,280
Zn2062_A		497.5	ug/L	6.930	1.393	1,425
Y_3600_R		21,793	Cts/S	187.57	0.86071	21,793
Y_2243_A		9,194.8	Cts/S	76.342	0.83028	9,194.8
Y_3600_A		367,840	Cts/S	4,395.3	1.1949	367,840

PBSID03ICS1

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 3:01:40PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		-0.02236	ug/L	0.1705	762.6	28.41
Al3961_R		12.82	ug/L	11.27	87.90	4.981
As1891_A		1.939	ug/L	0.1839	9.484	-0.3624
Au2427_A		1.954	ug/L	0.3363	17.21	-0.2000
B_2089_A		20.74	ug/L	1.003	4.838	24.13
Ba4554_R		0.6090	ug/L	0.2394	39.30	78.64
Be3130_R		0.04122	ug/L	0.03944	95.69	-1.575
Ca3158_R		31.12	ug/L	9.405	30.22	16.99
Cd2265_A		-0.004346	ug/L	0.06499	1,495	1.278
Co2286_A		-0.06477	ug/L	0.02710	41.83	4.419
Cr2677_A		0.3946	ug/L	0.3053	77.36	16.82
Cu3273_A		0.6403	ug/L	0.7503	117.2	3.150
Fe2599_R		21.66	ug/L	2.453	11.33	27.57
K_7664_R		203.6	ug/L	45.14	22.17	244.4
Li6707_R		0.7777	ug/L	1.526	196.3	106.0
Mg2025_A		9.980	ug/L	3.215	32.22	-1.964
Mn2576_R		1.248	ug/L	0.5242	42.02	2.430
Mo2020_A		0.3326	ug/L	0.06368	19.15	1.482
Na5895_R		83.89	ug/L	15.92	18.98	400.5
Ni2316_A		0.5143	ug/L	0.1153	22.43	0.2551
Pb2203_A		0.9715	ug/L	0.1782	18.34	-1.409
Sb2068_A		-0.9547	ug/L	0.5582	58.47	-0.3025
Se1960_A		1.198	ug/L	1.148	95.87	1.197
Si2516_R		-18.80	ug/L	1.949	10.37	6.974
Sn1899_A		22.60	ug/L	0.1188	0.5256	10.62
Sr4215_R		0.3964	ug/L	0.2265	57.14	-19.29
Ti3349_A		0.9269	ug/L	0.02939	3.171	4.963
Tl1908_A		1.154	ug/L	0.5264	45.62	-0.4738
V_2924_A		0.3258	ug/L	0.2362	72.51	6.314
Zn2062_A		0.7880	ug/L	0.009708	1.232	1.928
Y_3600_R		20,786	Cts/S	1,140.7	5.4876	20,786
Y_2243_A		9,387.7	Cts/S	4.3260	0.046081	9,387.7
Y_3600_A		374,510	Cts/S	1,185.8	0.31662	374,510

SI1906-003

Method Name: K6010-2011 Method Revision: 1,730

SI1906-003

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 3:06:25PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		20.66	ug/L	1.204	5.829	-1,669
Al3961_R	W	103,200	ug/L	3,328	3.224	85,770
As1891_A		75.21	ug/L	1.533	2.038	10.81
Au2427_A		7.938	ug/L	0.3205	4.037	94.13
B_2089_A		279.0	ug/L	0.8225	0.2948	257.9
Ba4554_R		547.7	ug/L	21.72	3.965	31,760
Be3130_R		5.444	ug/L	0.2276	4.182	333.1
Ca3158_R	W	45,000	ug/L	1,808	4.017	57,030
Cd2265_A		10.96	ug/L	0.2099	1.915	294.8
Co2286_A		57.49	ug/L	0.1147	0.1996	275.5
Cr2677_A		419.7	ug/L	10.41	2.481	8,248
Cu3273_A		867.6	ug/L	23.91	2.756	18,900
Fe2599_R	W	173,900	ug/L	6,501	3.739	199,200
K_7664_R	W	28,870	ug/L	961.4	3.331	22,440
Li6707_R		189.9	ug/L	9.565	5.036	2,579
Mg2025_A	W	56,330	ug/L	109.3	0.1939	8,836
Mn2576_R	W	2,642	ug/L	96.29	3.645	14,990
Mo2020_A		7.303	ug/L	0.3200	4.382	12.69
Na5895_R	W	100,900	ug/L	3,710	3.676	229,000
Ni2316_A		203.4	ug/L	0.2316	0.1139	482.1
Pb2203_A		707.0	ug/L	3.895	0.5510	787.4
Sb2068_A		0.6531	ug/L	1.412	216.1	2.164
Se1960_A		5.639	ug/L	0.003951	0.07007	3.050
Si2516_R		3,716	ug/L	133.1	3.582	1,039
Sn1899_A		95.73	ug/L	0.009230	0.009642	37.94
Sr4215_R		402.8	ug/L	14.50	3.599	28,490
Ti3349_A	W	2,703	ug/L	77.25	2.858	123,300
Tl1908_A		7.576	ug/L	0.2071	2.733	-2.424
V_2924_A		264.6	ug/L	8.151	3.080	6,171
Zn2062_A	W	1,662	ug/L	1.771	0.1066	4,706
Y_3600_R		22,952	Cts/S	196.45	0.85591	22,952
Y_2243_A		9,085.6	Cts/S	13.986	0.15394	9,085.6
Y_3600_A		355,550	Cts/S	7,668.3	2.1568	355,550

SI1906-005

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 3:11:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		31.18	ug/L	2.452	7.864	-1,183
Al3961_R	W	106,200	ug/L	4,019	3.784	89,410
As1891_A		57.82	ug/L	0.9784	1.692	6.451
Au2427_A		8.876	ug/L	0.1110	1.250	98.84
B_2089_A		274.4	ug/L	0.9375	0.3417	253.8
Ba4554_R		577.7	ug/L	20.95	3.626	33,940
Be3130_R		5.513	ug/L	0.1304	2.365	313.0
Ca3158_R	W	44,190	ug/L	1,792	4.056	56,730
Cd2265_A		15.76	ug/L	0.3650	2.316	364.8
Co2286_A		58.44	ug/L	0.04349	0.07442	284.1
Cr2677_A		450.7	ug/L	5.733	1.272	8,815
Cu3273_A	W	1,122	ug/L	11.88	1.059	24,340
Fe2599_R	W	165,700	ug/L	6,533	3.942	192,400
K_7664_R	W	28,950	ug/L	993.6	3.433	22,790
Li6707_R		185.2	ug/L	6.177	3.335	2,550
Mg2025_A	W	62,880	ug/L	149.0	0.2370	9,844
Mn2576_R	W	1,924	ug/L	83.27	4.327	11,060
Mo2020_A		28.18	ug/L	0.1422	0.5046	46.25

SI1906-005

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 3:11:05PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Na5895_R	W	105,500	ug/L	3,554	3.368	242,400
Ni2316_A		218.0	ug/L	0.3343	0.1533	518.5
Pb2203_A		954.1	ug/L	2.342	0.2454	1,063
Sb2068_A		3.385	ug/L	0.8838	26.11	2.944
Se1960_A		3.350	ug/L	2.699	80.57	2.587
Si2516_R		3,795	ug/L	131.8	3.473	1,076
Sn1899_A		104.6	ug/L	1.196	1.143	41.20
Sr4215_R		310.5	ug/L	11.96	3.854	22,230
Ti3349_A	W	3,154	ug/L	20.40	0.6468	143,300
Tl1908_A		7.408	ug/L	2.987	40.32	-2.162
V_2924_A		297.5	ug/L	1.681	0.5650	6,907
Zn2062_A	W	2,475	ug/L	1.467	0.05925	6,993
Y_3600_R		23,248	Cts/S	20.116	0.086526	23,248
Y_2243_A		9,067.8	Cts/S	1.8729	0.020654	9,067.8
Y_3600_A		353,870	Cts/S	3,214.4	0.90834	353,870

CCV

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 3:15:45PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		498.7	ug/L	5.905	1.184	17,800
Al3961_R		12,840	ug/L	126.5	0.9849	9,960
As1891_A		492.2	ug/L	3.625	0.7365	135.7
Au2427_A		500.6	ug/L	22.06	4.408	1,986
B_2089_A		511.0	ug/L	0.7516	0.1471	483.9
Ba4554_R		519.3	ug/L	8.129	1.565	28,090
Be3130_R		515.8	ug/L	5.282	1.024	46,120
Ca3158_R		12,750	ug/L	206.3	1.618	15,050
Cd2265_A		489.5	ug/L	0.8770	0.1791	7,803
Co2286_A		499.6	ug/L	0.1753	0.03509	2,122
Cr2677_A		492.6	ug/L	4.401	0.8934	9,832
Cu3273_A		499.9	ug/L	3.464	0.6930	11,080
Fe2599_R		12,740	ug/L	124.3	0.9758	13,610
K_7664_R		12,630	ug/L	121.6	0.9627	9,211
Li6707_R		511.5	ug/L	7.245	1.416	6,306
Mg2025_A		12,610	ug/L	7.216	0.05720	2,003
Mn2576_R		513.6	ug/L	7.010	1.365	2,713
Mo2020_A		498.6	ug/L	4.389	0.8802	808.1
Na5895_R		12,640	ug/L	174.3	1.379	26,940
Ni2316_A		501.1	ug/L	0.6082	0.1214	1,252
Pb2203_A		492.8	ug/L	0.5443	0.1104	554.1
Sb2068_A		496.6	ug/L	0.08724	0.01757	169.5
Se1960_A		485.9	ug/L	4.460	0.9179	83.65
Si2516_R		12,570	ug/L	46.61	0.3709	3,283
Sn1899_A		490.6	ug/L	1.343	0.2738	188.2
Sr4215_R		522.0	ug/L	7.983	1.529	34,440
Ti3349_A		502.5	ug/L	8.686	1.728	23,310
Tl1908_A		497.3	ug/L	3.165	0.6363	189.8
V_2924_A		501.2	ug/L	6.466	1.290	11,640
Zn2062_A		485.3	ug/L	1.186	0.2443	1,378
Y_3600_R		21,401	Cts/S	468.73	2.1902	21,401
Y_2243_A		9,125.9	Cts/S	18.444	0.20210	9,125.9
Y_3600_A		361,290	Cts/S	4,453.6	1.2327	361,290

CCB

Method Name: K6010-2011 Method Revision: 1,730

CCB

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 3:20:20PM Sample Type: QC

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		0.1980	ug/L	0.1533	77.43	36.81
Al3961_R		-1.670	ug/L	1.973	118.1	-6.108
As1891_A		0.7564	ug/L	0.4671	61.75	-0.6886
Au2427_A		3.605	ug/L	0.1457	4.042	6.450
B_2089_A	W	14.35	ug/L	0.2970	2.069	17.91
Ba4554_R		0.3532	ug/L	0.5543	156.9	64.14
Be3130_R		0.1155	ug/L	0.07599	65.81	4.738
Ca3158_R		5.578	ug/L	4.136	74.14	-12.06
Cd2265_A		0.1563	ug/L	0.01173	7.505	3.838
Co2286_A		-0.1607	ug/L	0.1673	104.1	3.943
Cr2677_A		0.01986	ug/L	0.1314	661.8	9.080
Cu3273_A		0.7806	ug/L	0.2107	26.99	6.413
Fe2599_R		6.788	ug/L	3.895	57.37	11.98
K_7664_R		142.4	ug/L	9.090	6.384	200.2
Li6707_R		0.9248	ug/L	1.219	131.8	106.8
Mg2025_A		1.190	ug/L	3.652	307.0	-3.335
Mn2576_R		0.6022	ug/L	0.1736	28.83	-0.7805
Mo2020_A		1.764	ug/L	0.5371	30.45	3.808
Na5895_R		60.17	ug/L	2.798	4.650	349.4
Ni2316_A		0.2019	ug/L	0.1118	55.39	-0.5347
Pb2203_A		0.4542	ug/L	0.5757	126.7	-1.981
Sb2068_A		0.6352	ug/L	1.502	236.4	0.3277
Se1960_A		2.948	ug/L	2.559	86.81	1.480
Si2516_R		-29.37	ug/L	14.51	49.42	4.152
Sn1899_A		-0.7359	ug/L	0.1781	24.19	1.470
Sr4215_R		0.4033	ug/L	0.08065	19.99	-18.91
Ti3349_A		1.041	ug/L	0.09562	9.188	10.48
Tl1908_A		2.755	ug/L	0.4850	17.60	0.1634
V_2924_A		0.1310	ug/L	0.1884	143.8	1.387
Zn2062_A		0.09483	ug/L	0.1352	142.6	-0.09786
Y_3600_R		20,582	Cts/S	1,121.2	5.4477	20,582
Y_2243_A		9,244.4	Cts/S	15.340	0.16594	9,244.4
Y_3600_A		373,950	Cts/S	3,329.8	0.89043	373,950

SI1906-005D

Method Name: K6010-2011 Method Revision: 1,730
Analyst Name: GEJ
Acquire Date: 4/8/2015 3:25:06PM Sample Type: Unknown

Elem	Flags	Avg	Units	Stddev	%RSD	Intensity Ratio
Ag3280_A		38.44	ug/L	0.8189	2.130	-1,123
Al3961_R	W	108,600	ug/L	532.6	0.4905	89,090
As1891_A		66.89	ug/L	0.2264	0.3385	8.312
Au2427_A		9.389	ug/L	0.4804	5.116	107.6
B_2089_A		254.6	ug/L	1.159	0.4551	237.8
Ba4554_R		649.7	ug/L	8.020	1.234	37,200
Be3130_R		5.681	ug/L	0.01304	0.2296	330.2
Ca3158_R	W	54,760	ug/L	643.3	1.175	68,520
Cd2265_A		17.69	ug/L	0.03298	0.1865	406.9
Co2286_A		63.93	ug/L	0.03537	0.05532	307.6
Cr2677_A		475.4	ug/L	2.814	0.5919	9,422
Cu3273_A	W	1,291	ug/L	6.435	0.4985	28,380
Fe2599_R	W	179,000	ug/L	1,945	1.087	202,500
K_7664_R	W	27,880	ug/L	410.3	1.472	21,400
Li6707_R		193.3	ug/L	1.817	0.9402	2,589
Mg2025_A	W	68,640	ug/L	53.27	0.07761	10,820
Mn2576_R	W	2,037	ug/L	21.19	1.040	11,410
Mo2020_A		39.04	ug/L	0.06052	0.1550	64.14

Logbooks and Supporting Documents

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 102053 HCL: N/A H2SO4: 71333 Method: 7470

KMNO4: MR1495 K2S2O8: MR1447 NH2OH-HCl: ~~N/A~~ RS 4/7/15 MR1441

Standards/Spiking Information:

1ppm A : MW15942

1ppm B : MW15390

LCSW = 125uL of 1ppm A to 25mL

Spike(S/P) = 25uL of 1ppm A to 25mL

ICV = 600uL of 1ppm A to 100 mL

S0.2 = 20uL of 1ppm B to 100 mL

S0.5 = 50uL of 1ppm B to 100 mL

S1.0 = 100uL of 1ppm B to 100 mL

S5.0 = 500uL of 1ppm B to 100 mL

S10.0 = 1000uL of 1ppm B to 100 mL

REVIEWED
GAN 04-10-15
KATAHDIN ANALYTICAL METALS SECTION

Water Bath ID : A RS 4/6/15

Thermometer ID : N/A

Digestion Start Time (@ ~~90~~ 12:18 °C): 90

Digestion End Time(@ 14:18 °C): 95°

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWID06HGW2	ID06HGW2	0.025	L	0.025	L	AQ	HG	TCS	04/06/2015	N/A	N/A	N/A	N/A		
PBWID06HGW2	ID06HGW2		L		L	AQ	HG	TCS	04/06/2015	N/A	N/A	N/A	N/A		
SI2069-001	ID06HGW2		L		L	AQ	HG	TCS	04/06/2015						A
SI2069-002	ID06HGW2		L		L	AQ	HG	TCS	04/06/2015						A
SI2069-002P	ID06HGW2		L		L	AQ	HG	TCS	04/06/2015						A
SI2069-002S	ID06HGW2		L		L	AQ	HG	TCS	04/06/2015						A
SI2069-003	ID06HGW2		L		L	AQ	HG	TCS	04/06/2015						A
SI2069-004	ID06HGW2		L		L	AQ	HG	TCS	04/06/2015						A
SI2069-005	ID06HGW2		L		L	AQ	HG	TCS	04/06/2015						A

TRS 4/7/15

Digestion performed by: RS On: 4/6/15

0000536

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 102053 **HCL:** 93325 **H2O2:** N/A **Method:** 3010

LCS / Spike **LCS/Spiking Information:**

- [x] [x] **CLPP-SPK-1 (ID/Vol):** MS1428 / 0.05 **mL**
- [x] [x] **CLPP-SPK-INT1 (ID/Vol):** MW15424 / 0.5 **mL**
- [x] [x] **CLPP-SPK-INT2 (ID/Vol):** MW15407 / 0.5 **mL**
- [ ] [ ] **Gold Spike ID/Vol):** N/A / _____ **mL**
- [ ] [ ] **CLPP-SPK-4 (ID/Vol):** N/A / _____ **mL**

Hot Plate/Block ID : A
Start Time: 9:15 **/Temp.(90-95°C) :** 95°
End Time: 15:04 **/Temp.(90-95°C) :** 95°
Thermometer ID/Pos.: ALK 11 / 3:9

Filter Paper: N/A

REVIEWED
ga 04-06-15
KATAHDIN ANALYTICAL
METALS SECTION

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWID06ICW2	ID06ICW2	0.05	L	0.05	L	AQ	IC	TCS	04/06/2015	N/A	N/A	N/A	N/A		
PBWID06ICW2	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015	N/A	N/A	N/A	N/A		
SI1847-001R	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015						F
SI2069-001	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015						D
SI2069-001P	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015						D
SI2069-001S	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015						D
SI2069-002	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015						D
SI2069-003	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015						D
SI2069-004	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015						D
SI2069-005	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015						D
SI2086-001	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015						D
SI2086-002	ID06ICW2		L		L	AQ	IC	TCS	04/06/2015						D

TRS 4/6/15

Digestion performed by: TRS **On:** 4/6/15

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Blank Sample Summary Report

Alkalinity

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG160727	SM2320B	03-APR-15	N/A	J 0.79 mg/L	5.0 mg/L	4.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

Alkalinity

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG160727-2	LCS	WG160727	03-APR-15	N/A	mg/L	120	130	109	80-120	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfide H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI2069-4
Report Date: 16-APR-15
Client PO: 16518
Project: Navy Clean WE15-03-0
SDG: SI2069

Sample Description	Matrix	Date Sampled	Date Received
MW-04-GW-040115	AQ	01-APR-15 14:40:00	03-APR-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	J4.4 mg/L	5.0	0.23	N/A	STDM 2320B	WG160727	03-APR-15 13:36:23	N/A	N/A	

200 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Raw Data Section

WET CHEMISTRY BATCH REPORT
Apr 06 2015, 02:45 pm
Batch: WG160727

Parameter: Alkalinity

Date Analyzed: 03-APR-15

Analyst Initials: RO

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SI1907-18	SAMP	STDM 2320B	50.0mL	50.0mL	1	171.902	170 mg/L	NA	5	0.23	5.0		
SI1972-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	25.775	26. mg/L	NA	5	0.23	5.0		
SI2002-1	SAMP	STDM 2320B	50.0mL	50.0mL	1	473.028	470 mg/L	NA	5	0.23	5.0		
SI2002-2	SAMP	STDM 2320B	50.0mL	50.0mL	1	27.518	28. mg/L	NA	5	0.23	5.0		
SI2002-3	SAMP	STDM 2320B	50.0mL	50.0mL	1	264.151	260 mg/L	NA	5	0.23	5.0		
SI2002-4	SAMP	STDM 2320B	50.0mL	50.0mL	1	11.139	11. mg/L	NA	5	0.23	5.0		
SI2002-5	SAMP	STDM 2320B	50.0mL	50.0mL	1	223.48	220 mg/L	NA	5	0.23	5.0		
SI2069-4	SAMP	STDM 2320B	50.0mL	50.0mL	1	4.456	J4.4 mg/L	NA	5	0.23	5.0		
WG160727-1	MBLANK	STDM 2320B	50.0mL	50.0mL	1	.787	J0.79 mg/L	NA	5	0.23	5.0		
WG160727-2	LCS	STDM 2320B	50.0mL	50.0mL	1	130.447	130 mg/L	NA	5	0.23	5.0		109
WG160727-3	MS	STDM 2320B	50.0mL	50.0mL	1	282.119	280 mg/L	NA	5	0.23	5.0		109
WG160727-4	MSD	STDM 2320B	50.0mL	50.0mL	1	281.973	280 mg/L	NA	5	0.23	5.0	0	109

Comments:

SI1907-18	MS/MSD
WG160727-1	SI1907-18
WG160727-2	SI1907-18
WG160727-3	SI1907-18
WG160727-4	SI1907-18

Entered by: RO Date: 4/6/15 Accepted by: [signature] Date: 04/07/15

0000545

WET CHEMISTRY BATCH REPORT
Apr 06 2015, 03:09 pm
Batch: WG160729

Parameter: Bicarbonate (As CaCO3)

Date Analyzed: 03-APR-15

Analyst Initials: RO

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Alkalinity	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SI1907-18	SAMP	SM2320B	172.mg/L	6.25pH	1	171.87218	170 mg/L	NA	5	.497	5		
WG160729-1	MBLANK	SM2320B	0.787mg/L	5.55pH	1	.78679	U5.0 mg/L	NA	5	.497	5		

Comments:

SI1907-18 MS/MSD
WG160729-1 SI1907-18

Entered by: RO Date: 4/6/15 Accepted by: [signature] Date: 04/07/15

0000546

WET CHEMISTRY BATCH REPORT
Apr 06 2015, 03:14 pm
Batch: WG160730

Parameter: Carbonate (As CaCO3)

Date Analyzed: 03-APR-15

Analyst Initials: RO

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Bicarb	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SI1907-18	SAMP	SM2320B	172.mg/L	6.25pH	1	.02873	U5.0 mg/L	NA	5	.497	5		
WG160730-1	MBLANK	SM2320B	0.787mg/L	5.55pH	1	.00003	U5.0 mg/L	NA	5	.497	5		

Comments:

SI1907-18	MS/MSD
WG160730-1	SI1907-18

Entered by: RO Date: 4/6/15 Accepted by: [signature] Date: 04/07/15

0000547

Start time: 4/3/2015 12:28
Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/3	CCV	4/3/2015 12:29:29 PM	R1 =	34.926	mg/L	P Alkalinity- pH8.2	
			R2 =	137.762	mg/L	Total Alkalinity	110.21%
			R3 =	9.504	pH	pH	
2/3	CCB	4/3/2015 12:32:39 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	0.787	mg/L	Total Alkalinity	
			R3 =	5.554	pH	pH	
3/3	LCS	4/3/2015 12:34:39 PM	R1 =	52.309	mg/L	P Alkalinity- pH8.2	
			R2 =	130.447	mg/L	Total Alkalinity	
			R3 =	9.99	pH	pH	
1/14	SI1907-18	4/3/2015 1:02:02 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	171.902	mg/L	Total Alkalinity	
			R3 =	6.253	pH	pH	
2/14	SI1907-18 MS	4/3/2015 1:04:59 PM	R1 =	43.597	mg/L	P Alkalinity- pH8.2	
			R2 =	282.119	mg/L	Total Alkalinity	
			R3 =	8.972	pH	pH	
3/14	SI1907-18 MSD	4/3/2015 1:08:53 PM	R1 =	43.318	mg/L	P Alkalinity- pH8.2	
			R2 =	281.973	mg/L	Total Alkalinity	
			R3 =	9.004	pH	pH	
4/14	SI1972-1	4/3/2015 1:12:47 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	25.775	mg/L	Total Alkalinity	
			R3 =	5.554	pH	pH	
5/14	SI2002-1	4/3/2015 1:15:03 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	473.028	mg/L	Total Alkalinity	
			R3 =	7.475	pH	pH	
6/14	SI2002-2	4/3/2015 1:20:00 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	27.518	mg/L	Total Alkalinity	
			R3 =	6.007	pH	pH	
7/14	SI2002-3	4/3/2015 1:22:15 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	264.151	mg/L	Total Alkalinity	
			R3 =	7.19	pH	pH	
8/14	SI2002-4	4/3/2015 1:26:07 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	11.139	mg/L	Total Alkalinity	
			R3 =	5.568	pH	pH	
9/14	SI2002-5	4/3/2015 1:28:14 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	223.48	mg/L	Total Alkalinity	
			R3 =	6.944	pH	pH	
10/14	CCV	4/3/2015 1:31:20 PM	R1 =	36.415	mg/L	P Alkalinity- pH8.2	
			R2 =	137.295	mg/L	Total Alkalinity	109.84%
			R3 =	9.54	pH	pH	
11/14	CCB	4/3/2015 1:34:19 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	0.825	mg/L	Total Alkalinity	
			R3 =	5.539	pH	pH	
12/14	SI2069-4	4/3/2015 1:36:23 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	4.456	mg/L	Total Alkalinity	
			R3 =	5.188	pH	pH	
13/14	CCV	4/3/2015 1:38:15 PM	R1 =	34.979	mg/L	P Alkalinity- pH8.2	
			R2 =	138.692	mg/L	Total Alkalinity	110.95%
			R3 =	9.529	pH	pH	
14/14	CCB	4/3/2015 1:41:19 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	

R2 =	0.785	mg/L	Total Alkalinity
R3 =	5.492	pH	pH

WG160727 WG160729 WG160730
R312645 R312646 R312845
SM2320B Alk SM Bicarb SM Carb

KATAHDIN ANALYTICAL SERVICES, INC.

ALKALINITY, BICARBONATE, CARBONATE, FREE CO2 - DL 25 AUTOTITRATOR

Analysis: EPA 310.1 / SM2320B **Calculations:** SM 4500-CO2 D

pH Probe ID: DGI 111-5c

Alkalinity Acid Reagent:	W12613	**Buffer pH 4 ID:**	Sea 3712
Acid Concentration:	0.0266N	**Buffer pH 7 ID:**	3744
Alkalinity Check Standard:	W12874 TV=125mg/L	**Buffer pH 10 ID:**	3745
Alkalinity MS:	W12875 TV=120mg/L		

Sample ID	Analysis Time	Run #	Alkalinity (mg/L as CaCO3)	~~Volume (mL)~~	Volume Acid ~~pH Start~~	Comments
ECV		1			50	110% recovery
ECB		2				
LCS		3				
SI 1907-18		1				
-18-S		2			44	
-18-SD		3				
SI 1972-1		4			50	
SI 2002-1		5				
-2		6				
-3		7				
-4		8				
-5		9				
CCV		10				110%
CCB		11				
SI 2069-4		12				
CCV		13				111%
CCB		14				

Analyst: [illegible] **Date:** 4/3/15

Checked By: [illegible] **Date:** 04/07/15

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, Maine

CASE NO. WE08 SDG NO. S13862 SDG NOS. TO FOLLOW
SAS NO.

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. **Inventory Sheet** (Form DC-2) (Do not Number)	0000001	0000012	✓	
2. **SDG Case Narrative**	0000015	0000029	✓	
3. **SDG Cover Sheet/Traffic Report**	0000013	0000014	✓	
4. **Volatiles Data**				
a. QC Summary				
System Monitoring Compound Summary (Form II	0000036	0000039	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	0000057	0000059	✓	
Method Blank Summary (Form IV VOA)	0000040	0000041	✓	
GC/MS Instrument Performance Check (Form V VOA)	0000060	0000062	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	0000063	0000066	✓	
b. Sample Data	0000067	0000087		
TCL Results - (Form I VOA-1, VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	0000088	0000104		
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB	NA	NA	NA	
Blank Data	0000042	0000050	✓	
Martix Spike/Matrix Spike Duplicate Data	0000051	0000056	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, Maine

CASE NO. WE08 SDG NO. 913862 SDG NOS. TO FOLLOW
SAS NO.

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. Inventory Sheet (Form DC-2) (Do not Number)	NA	NA	NA	
2. SDG Case Narrative	↓	↓	↓	
3. SDG Cover Sheet/Traffic Report				
4. Volatiles Data – ~~SPP~~ SPLP				
a. QC Summary				
System Monitoring Compound Summary (Form II	0000110	0000112	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	0000125	0000126	✓	
Method Blank Summary (Form IV VOA)	0000113	0000114	✓	
GC/MS Instrument Performance Check (Form V VOA)	0000127	0000129	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	0000130	0000131	✓	
b. Sample Data	0000132	0000138	✓	
TCL Results - (Form I VOA-1, VOA-2)				
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	0000139	0000148		
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB	NA	NA	NA	
Blank Data	0000115	0000120	✓	
Martix Spike/Matrix Spike Duplicate Data	0000121	0000124	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE08 SDG NO. S13882 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** SIM				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000156	0000159	✓	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000160	0000161	✓	
GC/MS Instrument Performance Check (Form V SV)	0000166	0000167	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000168	0000169	✓	
b. Sample Data	0000170	0000175		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000176	0000180		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	NA	NA	NA	
Blank Data	0000162	0000163	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000164	0000165	✓	
e. ~~Raw GPC Data~~ Logbooks	0000181	0000185	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)	↓	↓	↓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE08 SDG NO. S13862 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000186	0000189	✓	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000196	0000191	✓	
GC/MS Instrument Performance Check (Form V SV)	0000200	0000201	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000202	0000203	✓	
b. Sample Data	0000204	0000212		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			—	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000213	0000220		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	NA	NA	NA	
Blank Data	0000192	0000195	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000196	0000199	✓	
e. ~~Raw GPC Data~~ Logbooks	0000221	0000225	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. LUE08 SDG NO. S13862 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** SIMSPLP				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000226	0000228	✓	
MS/MSD Summary (Form III SV)	0000241	0000242	✓	
Method Blank Summary (Form IV SV)	0000229	0000230	✓	
GC/MS Instrument Performance Check (Form V SV)	0000243	0000246	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000247	0000250	✓	
b. Sample Data	0000251	0000257		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000258	0000270		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	NA	NA	NA	
Blank Data	0000231	0000236	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000237	0000240	✓	
e. ~~Raw GPC Data~~ Logbooks	0000271	0000279	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)	↓	↓	↓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE08 SDG NO. 313862 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** SPLP				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000280	0000282	✓	
MS/MSD Summary (Form III SV)	0000290	0000290	✓	
Method Blank Summary (Form IV SV)	0000283	0000284	✓	
GC/MS Instrument Performance Check (Form V SV)	0000291	0000294	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000295	0000298	✓	
b. Sample Data	0000299	0000303		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000304	0000314		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	NA	NA	NA	
Blank Data	0000285	0000287	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000288	0000289	✓	
e. ~~Raw GPC Data~~ Logbooks	0000315	0000322	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)	↓	↓	↓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE 68 SDG NO. S13862 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. ~~Pesticides Data~~ (Cont.) VOA SPLP				
e. ~~Raw GPC Data~~ Logbook Pages	0000149	0000155	✓	
f. Raw Florisil Data	NA	NA	NA	
7. **Miscellaneous Data**				
Original preparation and analysis forms or of preparation and analysis logbook pages – VOA	0000104	0000109	✓	
Internal sample and sample extract transfer chain-of-custody records	0000032	0000035	✓	
Screening records	NA	NA	NA	
All instrument output, including strip charts from screening activities (describe or list)				
8. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments _____)	NA	NA	NA	
Chain-of-Custody Records	0000027	0000027	✓	
Sample Tags				
Sample Log-in Sheet (Lab & DC1)	NA	NA	NA	
Miscellaneous Shipping/Receiving Records (describe or list)				
Sample Receipt Condition Report	0000026	0000026	—	
Login Chain of Custody	0000028	0000031	—	
9. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
	NA	NA	NA	
10. **Other Records** (describe or list)				
Telephone Communication Log				

11. **Comments:**

FORM DC-2-4 OLM04.2

0000007

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE08 SDG NO. S13862 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

Completed by: (CLP Lab)	[signature] (Signature)	Heather Manz (Printed Name/Title)	7-1-15 (Date)
Verified by: (CLP Lab)	(Signature)	(Printed Name/Title)	(Date)
Audited by: (EPA)	(Signature)	(Printed Name/Title)	(Date)

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, ME
CASE NO. _____ SDG NO. _____ SDG NOS. TO FOLLOW _____

CONTRACT NO. _____
SOW NO. _____

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - ILM05.4, Exhibit B Section 2.6)

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1. Cover Page	0000013	0000014	—	
2. SDG Narrative	0000015	0000024	✓	
3. Sample Log-In Sheet (DC-1)	—	—	—	
4. Inventory Sheet (DC-2))	0000001	0000012	✓	
5. Traffic Report/Chain of Custody Record(s)	0000027	0000027	✓	
Inorganic Analysis - metals				
6. Data Sheet (Form I-IN)	0000323	0000331	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	0000332	0000367	✓	
8. CRQL Standard(Form IIB-IN)	0000368	0000376	✓	
9. Blanks (Form III-IN)	0000377	0000408	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	0000409	0000415	✓	
11. ICP-MS Interference Check Sample(Form IVB-IN)	NA	NA	—	
12. Matrix Spike Sample Recovery(Form VA-IN)	0000416	0000419	✓	
13. Post-Digestion Spike Sample Recovery(Form VB-IN)	0000420	0000421	✓	
14. Duplicates (Form VI-IN)	0000422	0000424	✓	
15. Laboratory Control Sample(Form VII-IN)	0000425	0000431	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	0000432	0000433	✓	
17. Method Detection Limits (Annually) (Form IX-IN)	—	—	—	
18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN)	0000434	0000446	✓	
19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN)	0000447	0000447	✓	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN)	0000448	0000449	✓	
21. Preparation Log (Form XII-IN)	0000450	0000456	✓	
22. Analysis Run Log (Form XIII-IN)	0000457	0000483	✓	

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23. ICP-MS Tune (Form XIV-IN)	—	—	—	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)	—	—	—	
25. ~~ICP-AES Raw Data~~ Logbooks	0000284	0000492	✓	
26. ICP-MS Raw Data	NA	NA	NA	
27. Mercury Raw Data	↓	↓	↓	
28. Cyanide Raw Data	↓	↓	↓	
29. Preparation Logs Raw Data (Wet Chemistry)	↓	↓	↓	
30. Percent Solids Determination Log	↓	↓	↓	
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)	↓	↓	↓	
Sample Tags	↓	↓	↓	
Sample Log-In Sheet (Lab)	↓	↓	↓	
32. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs	↓	↓	↓	
Sample Receipt Condition Report	↓	↓	↓	
	↓	↓	↓	
33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)	↓	↓	↓	
Internal Chain of Custody	↓	↓	↓	
Login Chain of Custody Report	↓	↓	↓	
34. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	↓	↓	↓	
Analysis Records	↓	↓	↓	
Description Duplicate Precision Form	↓	↓	↓	
35. Other Records (describe or list)				
Telephone Communications Log	↓	↓	↓	
DAS Specifications	↓	↓	↓	

36. Comments

Completed by:
(CLP Lab) [signature] Heather Marz/DM 7-1-15
(Signature) (Print Name & Title) (Date)

Audited by:
(USEPA) _____ _____ _____
(Signature) (Print Name & Title) (Date)

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, ME
CASE NO. WE08 SDG NO. S13862 SDG NOS. TO FOLLOW

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - ILM05.4, Exhibit B Section 2.6)

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1. Cover Page	NA	NA	NA	
2. SDG Narrative	↓	↓	↓	
3. Sample Log-In Sheet (DC-1)	↓	↓	↓	
4. Inventory Sheet (DC-2))	↓	↓	↓	
5. Traffic Report/Chain of Custody Record(s)	↓	↓	↓	
Inorganic Analysis - Wet Chemistry				
6. Data Sheet (Form I-IN)	0000498	0000502	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	NA	NA	NA	
8. CRQL Standard(Form IIB-IN)	↓	↓	↓	
9. Blanks (Form III-IN)	0000493	0000495	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	NA	NA	NA	
11. ICP-MS Interference Check Sample(Form IVB-IN)	↓	↓	↓	
12. Matrix Spike Sample Recovery(Form VA-IN)	↓	↓	↓	
13. Post-Digestion Spike Sample Recovery(Form VB-IN)	↓	↓	↓	
14. Duplicates (Form VI-IN)	0000497	0000497	✓	
15. Laboratory Control Sample(Form VII-IN)	0000496	0000496	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	NA	NA	NA	
17. Method Detection Limits (Annually) (Form IX-IN)	↓	↓	↓	
18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN)	↓	↓	↓	
19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN)	↓	↓	↓	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN)	↓	↓	↓	
21. Preparation Log (Form XII-IN)	↓	↓	↓	
22. Analysis Run Log (Form XIII-IN)	↓	↓	↓	

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23. ICP-MS Tune (Form XIV-IN)	NA	NA	NA	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)				
25. ~~ICP-AES~~ Raw Data - Wet chemistry	0000503	0000506	✓	
26. ICP-MS Raw Data	NA	NA	NA	
27. Mercury Raw Data				
28. Cyanide Raw Data				
29. Preparation Logs Raw Data (Wet Chemistry)				
30. Percent Solids Determination Log				
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)				
Sample Tags				
Sample Log-In Sheet (Lab)				
32. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs				
Sample Receipt Condition Report	0000026	0000026	✓	
	NA	NA	NA	
33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)				
Internal Chain of Custody	0000032	0000035	✓	
Login Chain of Custody Report	0000028	0000031	✓	
34. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	NA	NA	NA	
Analysis Records				
Description Duplicate Precision Form				
35. Other Records (describe or list)				
Telephone Communications Log				
DAS Specifications				

36. Comments

Completed by:
(CLP Lab) [signature] Heather Maiz/PM 7-1-95
(Signature) (Print Name & Title) (Date)

Audited by:
(USEPA) _____ _____ _____
(Signature) (Print Name & Title) (Date)

FORM DC-2-2 M&E DAS

ENSAFE
NAVY CLEAN WE08 NWIRP
BETHPAGE, NY
SI3862

KATAHDIN ANALYTICAL SERVICES, LLC
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

0000013

SAMPLE DATA PACKAGE

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
ENSAFE
NAVY CLEAN WE08 NWIRP BETHPAGE, NY
SI3862

Sample Receipt

The following samples were received on June 05, 2015 and were logged in under Katahdin Analytical Services work order number SI3862 for a hardcopy due date of June 24, 2015.

KATAHDIN Sample No.	ENSAFE Sample Identification
SI3862-1	SITE4TS-FB
SI3862-2	SITE4TS-XX
SI3862-3	SITE4TS-EB
SI3862-4	SITE4TS-TB-SOIL
SI3862-6	SITE4TS-FB
SI3862-7	SITE4TS-XX

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Jennifer Obrin.** This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SI3862 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

8270D SIM Analysis

Samples SI3862-1DL and 2DL were manually integrated for the analytes chrysene, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, the internal standards chreysene-d12, and/or perylene-d12. The specific reason for the manual

integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

8260C SPLP Analysis

The independent check standard (file P1435A) associated with the initial calibration analyzed on the P instrument on 06/16/15 had high concentrations for the target analytes dichlorodifluoromethane, bromomethane, chloromethane, vinyl chloride, chloroethane and trichlorofluoromethane and a low concentration for the target analyte methyl acetate, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The MSD, WG165024-7, had a recovery for the surrogate dibromofluoromethane which was high and exceed the DoD QSM acceptance limits. The associated MS, WG165024-6, and native sample SI3862-6 had acceptable surrogate recoveries. Since the recoveries were acceptable for the native sample and MS and the recoveries for the compounds matched between the MS and MSD, the MSD was not reanalyzed.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on DoD QSM acceptance limits for the full list of spiked compounds and laboratory established acceptance limits for all other analytes. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

8260C Analysis

Sample SI3862-4 was manually integrated for the target analyte acetone. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Sample SI3862-1 and the MS WG164407-11 had low recoveries for one surrogate and a high recoveries for one surrogate and the MSD WG164407-12 had a low recovery for one surrogate, which were outside of the DoD QSM acceptance limits. The sample and MS/MSD also had low responses for one or more internals that exceed the DoD QSM acceptance limits of -50% to +100% of the responses of the internal standards of the midpoint of the ICAL. Since sample SI3862-I is the native sample for the MS/MSD's and the surrogate and internal standard deviations confirm a matrix effect, the sample was not reanalyzed.

The analysis of the low concentration soil sample vial (DI water) of sample SI3862-2 had a low recovery for one surrogate and a high recovery for one surrogate, which were outside of the DoD QSM acceptance limits and also had a low response for one internal standard. These sample was reanalyzed using the high concentration soil sample vial (methanol) due to high concentrations of one or more target analytes that were outside the calibration range. Since the methanol vial analysis had acceptable recoveries for all surrogates and the concentration of target analytes were within the calibration ranges, the DI water vials were not reanalyzed.

The initial calibration analyzed on the P instrument on 06/03/15 had %RSD values for some target analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The analyte chloroethane failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990, respectively. This analyte was calibrated using the average model. The corresponding independent check standard (file P1233A) had high concentrations for the target analytes dichlorodifluoromethane, bromomethane, carbon disulfide and 2,2-dichloropropane, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The initial calibration analyzed on the T instrument on 06/08/15 had %RSD values for some target analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The analyte trichlorofluoromethane failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990, respectively. This analyte was calibrated using the average model. The corresponding independent check standard (file T3790A) had high concentrations for the target analytes chloroethane, trichlorofluoromethane and carbon disulfide and low concentrations for the target analytes methy tert-butyl ether and 2-butanone, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The calibration verification standard (file P1304) had high responses for the target analytes dichlorodifluoromethane and 2,2-dichloropropane that resulted in %D's that exceeded the DoD QSM acceptance limits of 20%.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on DoD QSM acceptance limits for the full list of spiked compounds and laboratory established acceptance limits for all other analytes. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

<u>8270D SIM SPLP Analysis</u>

The matrix spike sample duplicate WG165249-6 had a high recovery for one surrogate, which was outside the DoD QSM acceptance limits.

The initial calibration analyzed on the N instrument on 06/05/2015 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The corresponding independent check standard (file N6398) had a low concentration for the target analytes hexachlorocyclopentadiene, 2,4-dinitrophenol, 2,3,4,6-tetrachlorophenol, N-nitrosodiphenylamine, pentachlorophenol and bis(2-ethyl-hexyl)phthalate, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes

are evaluated.

The initial calibration analyzed on the N instrument on 06/23/2015 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analyte 2,4-dinitrophenol failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model. The corresponding independent check standard (file N6784) had high concentrations for the target analytes 3&4-methylphenol, nitrobenzene, 4-nitroaniline and low concentrations for hexachlorocyclopentadiene, 2,4-dintrophenol and 2,3,4,6-tetrachlorophenol, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The CV (file N6525) had high responses for the target analytes 2,2'-oxybis(1-chloropropane), bis(2-chloroethoxy)methane, 2-nitroaniline, 2,4-dinitrophenol, 4-nitroaniline and a low response for benzo(k)fluoranthene, which resulted in %D's that were greater than the acceptance limit of 20% from DoD QSM.

The CV (file N6598) had high responses for the target analytes bis(2-chloroethyl)ether, nitrobenzene, 2-nitroaniline, di-n-octylphthalate and a low response forhexachloroethane and 2,4,6-trichlorophenol, which resulted in %D's that were greater than the acceptance limit of 20% from DoD QSM.

The target analyte benzo(b)fluoranthene was detected above ½ of the LOQ, but less than the LOQ and the target analyte benzo(k)fluoranthene was detected (below ½ of the LOQ) in the method blank WG165249-1. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). If the target analyte was detected in any samples associated with the blank, they were flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed and/or extracted concurrently with the sample.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived limits for the full list of spiked compounds and are statistically derived limits for the surrogates. Although DoD QSM acceptance limits were requested for this project, laboratory established acceptance limits were used because the DoD QSM does not list acceptance limits for 8270SIM. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these statistical acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

8270C Analysis

Samples SI3862-1 and 2 were concentrated to a final volume of 5mL instead of the standard 1mL and were also analyzed at a dilution of 1:5 due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQL was elevated by a factor of 2.

Samples SI3862-1DL and 2DL had low responses for one internal that exceed the DoD QSM acceptance limits of -50% to +100% of the responses of the internal standards of the midpoint of the ICAL. Based on the sample chromatogram the deviation is likely matrix related. Therefore the sample was not reanalyzed.
The initial calibration analyzed on the U instrument on 06/05/2015 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analyte 1,1'-biphenyl failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model.

The CV (file U0611) had a high response for the target analyte benzoic acid which resulted in a %D that was greater than the acceptance limit of 20% from DoD QSM.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on DoD QSM acceptance limits for the full list of spiked compounds and laboratory established acceptance limits for all other analytes. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

8270C SPLP Analysis

The SPLP blank WG165594-3 had high recoveries for four surrogates, which were outside the DoD QSM acceptance limits.

The initial calibration analyzed on the U instrument on 06/22/2015 had the target analyte fluorene fail for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model.

The CV (file U0788) had a high response for the target analyte4-bromophenyl-phenylether which resulted in a %D that was greater than the acceptance limit of 20% from DoD QSM.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on DoD QSM acceptance limits for the full list of spiked compounds and laboratory established acceptance limits for all other analytes. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of

spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Metals Analysis

The samples of Katahdin Work Order SI3862 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

SPLP Extraction (EPA Method 1312)

Katahdin Sample Numbers SI3862-(6 and 7) are soil samples that were subjected to SPLP extraction on 06/05/15 in accordance with USEPA Method 1312. The SPLP fluid blank identified as PBT1225D is associated with these extracts. The measured concentrations of contaminants in this SPLP fluid blank are listed in Form 3P in the accompanying data package. The measured barium concentration (53.2 ug/L) in SPLP fluid blank PBT1225D is above the laboratory's reporting limit. However, because the concentrations of this element in the SPLP blank and in the associated SPLP extracts are well below regulatory limits, reanalysis was not required.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Aqueous-matrix SPLP Extraction Blank PBT1225D and aqueous-matrix SPLP extractions of Katahdin Sample Numbers SI3862-(6 and 7) were digested for ICP analysis on 06/08/15 (QC Batch IF08ICW3) in accordance with USEPA Method 3010A.

Duplicate matrix-spiked aliquots of aqueous-matrix SPLP extraction of Katahdin Sample Number SI3862-6 were digested for ICP analysis on 06/19/15 (QC Batch IF19ICW1) in accordance with USEPA Method 3010A.

All SPLP extracts are diluted by a factor of five during digestion to reduce matrix interferences during ICP analysis.

ICP analyses of Katahdin Work Order SI3862 sample digestates were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010C. All samples were analyzed within holding times and all analytical run QC criteria were met, with the following exceptions:

The measured recoveries of beryllium, cadmium, and manganese in the PQL (LOQ) standard analyzed in ICP analysis sequence IIF23A were above the project acceptance limit. Results for these analytes for samples analyzed in this sequence were either greater than ten times the concentration of the PQL standard or less than the LOD.

The measured concentration of potassium in the ICSA standard analyzed in ICP analysis sequence IIF23A was above the project acceptance limit. Results for potassium for samples analyzed in this sequence were either greater than ten times the concentration of the ICSA standard or less than the LOD.

The measured concentration of antimony in the CCBs analyzed at 21:57 and 22:58 in ICP analysis sequence IIF09B were above the project acceptance limit. Results for antimony for samples associated with these CCBs were either greater than ten times the concentration of the CCBs or less than the LOD.

Inductively-Coupled Plasma Mass Spectrometric Analysis (ICP-MS)

Solid-matrix Katahdin Sample Numbers SI3862-(1 and 2) were digested for ICP-MS analysis on 06/05/15 (QC Batch IF05IMS2) in accordance with USEPA Method 3050B. Katahdin Sample Number SI3862-1 was prepared in duplicate and with a matrix-spiked aliquot. The measured calcium (18 mg/Kg) and manganese (0.28 mg/Kg) concentrations of the preparation blank in this batch exceed the project acceptance limit. The measured manganese concentrations of the associated field samples are greater than ten times that of the preparation blank. No corrective action was necessary. The measured calcium concentrations of the associated field samples are less than ten times that of the preparation blank. The results for these samples appear with a "B" flag on the accompanying Form Is.

Aqueous-matrix Katahdin Sample Number SI3862-3 was digested for ICP-MS analysis on 06/08/15 (QC Batch IF08IMW2) in accordance with USEPA Method 3010A.

ICP-MS analyses of Katahdin Work Order SI3862 sample digestates were performed using an Agilent 7500 ICP-MS spectrometer in accordance with USEPA Method 6020A. Results for all standards and samples are reported using the mean of 3 replicate measurements. All sample digestates were diluted by a factor of 5 during analysis to reduce mass interferences from chlorine, which is present in the digestates from the hydrochloric acid used in digesting the samples. All samples were analyzed within holding times and all analytical run QC criteria were met, with the following exceptions:

The measured recovery of selenium in the PQL (LOQ) standard analyzed in ICP-MS analysis sequence JIF08A was above the project acceptance limit. Results for selenium for samples analyzed in this sequence were either greater than ten times the concentration of the PQL standard or less than the LOD.

Internal standard recoveries for ICP-MS analyses can be found in the raw data section of the accompanying data package. The following table indicates which analytes are associated with each internal standard element.

Internal Standard Element	Associated Analytes
Lithium	Beryllium
Scandium	Sodium, Magnesium, Aluminum, Potassium, Calcium
Germanium	Vanadium, Chromium, Manganese, Iron, Cobalt, Nickel, Copper, Zinc, Arsenic, Selenium, Silver, Cadmium
Terbium	Antimony, Barium
Bismuth	Lead, Thallium

Instrument tuning information can also be found in the raw data section in the report labeled "6020 QC Tune Report". The relative standard deviation was determined from 4 replicate measurements. The peak width was measured at 10% of the peak height.

Analysis of Mercury by Cold Vapor Atomic Absorption (CVAA)

Solid-matrix Katahdin Sample Numbers SI3862-(1 and 2) were digested for mercury analysis on 06/08/15 (QC Batch IF08HGS1) in accordance with USEPA Method 7471B. Katahdin Sample Number SI3862-1 was prepared with duplicate matrix-spiked aliquots.

Aqueous-matrix SPLP extracts of Katahdin Sample Numbers SI3862-(6 and 7), and aqueous-matrix Katahdin Sample Number SI3862-3 were digested for mercury analysis on 06/10/15 (QC Batch IF10HGW2) in accordance with USEPA Method 7470A. Katahdin Sample Number SI3862-6 was prepared with duplicate matrix-spiked aliquots.

Aqueous-matrix SPLP extraction blank PBT1225D was digested for mercury analysis on 06/10/15 (QC Batch IF10HGW3) in accordance with USEPA Method 7470A.

Mercury analysis of the Katahdin Work Order SI3862 sample digestates were performed using a Cetac M6100 automated mercury analyzer in accordance with USEPA Methods 7470A and 7471B. All analytical run QC criteria were met and all samples were analyzed within holding times.

Matrix QC Summary

The measured recoveries of aluminum, antimony, calcium, and iron in the matrix-spiked aliquot of Katahdin Sample Number SI3862-1 are outside the project acceptance criteria (80% - 120% recovery of the added element). For aluminum and iron, this may be attributable to the native concentration of the sample being much greater than the spike amount added.

The measured recovery of iron in the matrix-spiked aliquots of Katahdin Sample Number SI3862-6 is outside the project acceptance criteria (80% - 120% recovery of the added element).

The measured recoveries of iron and mercury in the post-digestion spike of Katahdin Sample

Number SI3862-1 is outside the project acceptance criteria (75% - 125% recovery of the added element). For iron, this may be attributable to the native concentration of the sample being much greater than the spike amount added.

The measured recovery of arsenic in the post-digestion spike of Katahdin Sample Number SI3862-6 is outside the project acceptance criteria (75% - 125% recovery of the added element).

The matrix-spike duplicate analyses of Katahdin Sample Numbers SI3862-(1 and 6) are within the laboratory's acceptance limit (<20% relative difference between duplicate matrix-spiked aliquots) for all analytes.

The duplicate analysis of Katahdin Sample Number SI3862-1 is outside the laboratory's acceptance limit (<20% relative difference between duplicate matrix-spiked aliquots) for aluminum, arsenic, barium, calcium, cobalt, copper, iron, lead, magnesium, potassium, and zinc.

The serial dilution analyses of Katahdin Sample Numbers SI3862-(1 and 6) are within the project acceptance limit (<10% relative percent difference, if the concentration in the original sample is greater than 50 times the LOD) for all analytes.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I and preparation blanks on Form IIIP have been reported using the laboratory's limits of detection (LOD). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that fall between the MDL and the LOQ are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOD is listed in the concentration column. These LOQs, MDLs, and LODs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

Analytical results on Forms VA, VD, VII, and IX for client samples, matrix QC samples (duplicates and matrix spikes), and laboratory control samples have been reported down to the laboratory's method detection limits (MDLs). Analytical results that are below the MDLs are flagged with "U" in the C-qualifier column, and the measured concentration is listed in the concentration column.

Analytical results for instrument run QC samples (ICVs, ICBs, etc.) have been reported down to the laboratory's instrument detection limits (IDLs).

IDLs, LODs, MDLs, and LOQs are listed on Form 10 of the accompanying data package.

Wet Chemistry Analysis

The samples of Work Order SI3862 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times. All quality control criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Leslie Dimond
07.01.15

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: AECOM	KAS PM: JO	Sampled By: Client
Project:	KIMS Entry By: AP	Delivered By: Fed Ex
KAS Work Order#: 513862	KIMS Review By:	Received By: AP
SDG #:	Cooler: 1 of 1	Date/Time Rec.: 6/5/15 0915

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): AP ~~0~~ 1.7
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg) analysi
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt t begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?	✓				
Soil/Sediment:					
Received in airtight container?	✓				
Received in methanol?	✓				
Methanol covering soil?	✓				
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

C0000026

S13862

RESOLUTION CONSULTANTS

CHAIN OF CUSTODY AND ANALYTICAL REQUEST RECORD

COC No.: | Page 1 of 1

Project Name: NWIRP Bethpage | PO No.: | Project No. 0708913596 Phase TS PT

Site Location: Site 4

CTO No. | RC Project Manager: Caldwell

Sampler/Site Phone# Gordon Hicks 952.221.9961

Lab Name: Katahdin | Turnaround Time(specify): 48 hrs.

Sample Analysis Requested (*Enter number of containers for each test*)

Lab ID	Sample ID (sys_samp_code)	Location ID (sys_loc_code)	Date (mm/dd/yy)	Time (Military) (hhmm)	Matrix Code (1)	Sample Type (2)	Field Filtered (Y/N)	Total No. of Containers	VOC VOA 4oz	SPLP VOA 4oz	SPLP Metals SPLP SVOA TS 8oz	Metals SVOA TS 8oz	SVOA 1L amber	VOC VOA	Metals				Extra Volume for MS/MSD	HOLD
								(3)→	NaOH/ZnAc/NaHSO4					HCl	HNO_3					
	SITE4TS - FB		060415	1200					4	1	1	1								
	SITE4TS - MSMSD - FB		060415	1200					8	2	1	1							2	
	SITE4TS - XX		060415	—					4	1	1	1								
	SITE4TS - EB		060415	1300									2	3	1					
	SITE4TS - TB - SOIL		052815	1500					4											
	SITE4TS - TB - WATER		052815	1145										3						

Field **Comments:** 48 hour turnaround. Site 4 Samples

Lab **Comments:**

Relinquished by (signature)	Date	Time	Received by (signature)	Date	Time
1	060415	1500	1 Fedex		
2			2	6/5/15	0915
3			3		

Sample Shipment and Delivery Details

Number of coolers in shipment: 1

Samples Iced?(check) Yes X No

Method of Shipment: FedEx

Airbill No: 806492689719

Date Shipped: 060415

(1) **AA**=Ambient air, **AQ**=Air quality control, **ASB**=Asbestos, **CK**=Caulk, **DS**=Storm drain sediment, **GS**=Soil gas, **IC**=IDW Concrete, **IDD**=IDW Solid, **IDS**=IDW soil, **IDW**=IDW Water, **LF**=Free Product, **MA**=Mastic, **PC**=Paint Chips, **SC**=Cement/Concrete, **SE**=Sediment, **SL**=Sludge, **SO**=Soil, **SQ**=Soil/Solid quality control, **SSD**=Subsurface sediment, **SU**=Surface soil (<6 in), **SW**=Swab or wipe, **TA**=Animal tissue, **TP**=Plant tissue, **TQ**=Tissue quality control, **WG**=Ground water, **WL**=Leachate, **WO**=Ocean water, **WP**=Drinking water, **WQ**=Water quality control, **WR**=Ground water effluent, **WS**=Surface water, **WU**=Storm water, **WW**=Waste water

(2) **Sample Type: AB**=Ambient Blk, **EB**=Equipment Blk, **FB**=Field Blk, **FD**=Field Duplicate Sample, **IDW**=Investigative-Derived Waste, **MIS**=Incremental Sampling Methodology, **N**=Normal Environmental Sample, **TB**=Trip Blk

(3) **Preservative added: HA**=Hydrochloric Acid, **NI**=Nitric Acid, **SH**=Sodium Hydroxide, **SA**=Sulfuric Acid, **ME**=Methanol, **SB**=sodium bisulfate, **ST**=Sodium Thiosulfate, If **NO preservative** added leave blank

Rev 5/12

00027

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (Ino1)

Jun. 25, 2015
07:29 AM

Login Number: SI3862

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Primary Report Address:
Dana Miller
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134
dmiller@Ensafe.com

Primary Invoice Address:
Accounts Payable
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: ENSAFE-BETHPAGE

Login Information:

ANALYSIS INSTRUCTIONS	:	Follow DoD QSM Version 4.2 using DoD limits. "U" LOD. "J" flag between DL and LOQ. VOA soils are NaHSO4 and MeOH pres.
CHECK NO.	:	
CLIENT PO#	:	18884
CLIENT PROJECT MANAGE	:	Brian Caldwell
CONTRACT	:	
COOLER TEMPERATURE	:	1.7
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	KAS135QC-CSV & KAS062-CSV
LOGIN INITIALS	:	AP
PM	:	JO
PROJECT NAME	:	Navy Clean WE08 NWIRP Bethpage, NY
QC LEVEL	:	III
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	Send PDF and CD to Dana. Upload to SDS folder. Email PDF to Dana and Jeff (jparillo@Ensafe.com) Email invoice to purchasing@ensafe.com.

Laboratory Sample ID	Client Sample Number	Collect Date/Time	SDG ID / SDG STATUS	Receive Date	PR	Verbal Date	Due Date	Mailed
SI3862-1	SITE4TS-FB	04-JUN-15 12:00		05-JUN-15		**09-JUN-15**	24-JUN-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	18-JUN-15	40 mL Vial+DI+MEOH		**MS/MSD**
Solid	S	SW8270-S	18-JUN-15	1L N-Amber Glass		
Solid	S	SW8270SIM-S	18-JUN-15	100g Glass		
Solid	P	TAL-MET-SW846-ICPMS		8oz Glass		

SW3050MS-PREP	SW6020-ALUMINUM	SW6020-ANTIMONY
SW6020-ARSENIC	SW6020-BARIUM	SW6020-BERYLLIUM
SW6020-CADMIUM	SW6020-CALCIUM	SW6020-CHROMIUM
SW6020-COBALT	SW6020-COPPER	SW6020-IRON
SW6020-LEAD	SW6020-MAGNESIUM	SW6020-MANGANESE
SW6020-NICKEL	SW6020-POTASSIUM	SW6020-SELENIUM
SW6020-SILVER	SW6020-SODIUM	SW6020-THALLIUM
SW6020-VANADIUM	SW6020-ZINC	SW7471-MERCURY

Solid S TS 04-JUL-15

SI3862-2	SITE4TS-XX	04-JUN-15 00:00		05-JUN-15		**09-JUN-15**	24-JUN-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	18-JUN-15	40 mL Vial+DI+MEOH		
Solid	S	SW8270-S	18-JUN-15	1L N-Amber Glass		
Solid	S	SW8270SIM-S	18-JUN-15	100g Glass		
Solid	P	TAL-MET-SW846-ICPMS		8oz Glass		

SW3050MS-PREP	SW6020-ALUMINUM	SW6020-ANTIMONY
SW6020-ARSENIC	SW6020-BARIUM	SW6020-BERYLLIUM
SW6020-CADMIUM	SW6020-CALCIUM	SW6020-CHROMIUM
SW6020-COBALT	SW6020-COPPER	SW6020-IRON
SW6020-LEAD	SW6020-MAGNESIUM	SW6020-MANGANESE
SW6020-NICKEL	SW6020-POTASSIUM	SW6020-SELENIUM
SW6020-SILVER	SW6020-SODIUM	SW6020-THALLIUM
SW6020-VANADIUM	SW6020-ZINC	SW7471-MERCURY

Solid S TS 04-JUL-15

AP
06.25.15
0000028

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jun. 25, 2015
07:29 AM

Login Number: SI3862

Quote/Incoming: ENSAFE-BETHPAGI

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI3862-3	SITE4TS-EB	04-JUN-15 13:00	05-JUN-15		**09-JUN-15**	24-JUN-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	18-JUN-15	40mL Vial+HCl		
Aqueous	S	SW8270-S	11-JUN-15	1L N-Amber Glass		
Aqueous	S	SW8270SIM-S	11-JUN-15	1L N-Amber Glass		
Aqueous	P	TAL-MET-SW846-ICPMS				

SW3010MS-PREP	SW6020-ALUMINUM	SW6020-ANTIMONY
SW6020-ARSENIC	SW6020-BARIUM	SW6020-BERYLLIUM
SW6020-CADMIUM	SW6020-CALCIUM	SW6020-CHROMIUM
SW6020-COBALT	SW6020-COPPER	SW6020-IRON
SW6020-LEAD	SW6020-MAGNESIUM	SW6020-MANGANESE
SW6020-NICKEL	SW6020-POTASSIUM	SW6020-SELENIUM
SW6020-SILVER	SW6020-SODIUM	SW6020-THALLIUM
SW6020-VANADIUM	SW6020-ZINC	SW7470-MERCURY

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI3862-4	SITE4TS-TB-SOIL	04-JUN-15 15:00	05-JUN-15		**09-JUN-15**	24-JUN-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	18-JUN-15	40 mL Vial+DI+MEOH		**Trip blank, no TS jar.**
Solid	S	TS	04-JUL-15			

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI3862-5	SITE4TS-TB-WATER	04-JUN-15 11:45	05-JUN-15		**09-JUN-15**	24-JUN-15	

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments

Total Samples: ***6*** ***Total Analyses:*** ***54***

OP
06.29.15

0000029

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jun. 25, 2015
07:29 AM

Login Number: SI3862

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Primary Report Address:
Dana Miller
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134
dmiller@Ensafe.com

Primary Invoice Address:
Accounts Payable
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: ENSAFE-BETHPAG

Login Information:

ANALYSIS INSTRUCTIONS	:	Follow DoD QSM Version 4.2 using DoD limits. "U" LOD. "J" flag between DL and LOQ. VOA soils are NaHSO4 and MeOH pres.
CHECK NO.	:	
CLIENT PO#	:	18884
CLIENT PROJECT MANAGE	:	Brian Caldwell
CONTRACT	:	
COOLER TEMPERATURE	:	1.7
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	KAS135QC-CSV & KAS062-CSV
LOGIN INITIALS	:	AP
PM	:	JO
PROJECT NAME	:	Navy Clean WE08 NWIRP Bethpage, NY
QC LEVEL	:	III
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	Send PDF and CD to Dana. Upload to SDS folder. Email PDF to Dana and Jeff (jparillo@Ensafe.com) Email invoice to purchasing@ensafe.com.

Laboratory Sample ID	Client Sample Number	Collect Date/Time	SDG ID / SDG STATUS	Receive Date	PR	Verbal Date	Due Date	Mailed
SI3862-6	SITE4TS-FB	04-JUN-15 12:00		05-JUN-15		**19-JUN-15**	24-JUN-15	

Matrix		*Product*	*Hold Date (shortest)*	*Bottle Type*	*Bottle Count*	*Comments*
Aqueous	S	SPLP-ALUMINUM	01-DEC-15			**MS/MSD**
Aqueous	S	SPLP-ANTIMONY	01-DEC-15			
Aqueous	S	SPLP-BERYLLIUM	01-DEC-15			
Aqueous	S	SPLP-CALCIUM	01-DEC-15			
Aqueous	S	SPLP-COBALT	01-DEC-15			
Aqueous	S	SPLP-COPPER	01-DEC-15			
Aqueous	S	SPLP-IRON	01-DEC-15			
Aqueous	S	SPLP-MAGNESIUM	01-DEC-15			
Aqueous	S	SPLP-MANGANESE	01-DEC-15			
Solid	P	SPLP-METALS				
SPLP-ARSENIC		SPLP-BARIUM		SPLP-CADMIUM		
SPLP-CHROMIUM		SPLP-LEAD		SPLP-MERCURY		
SPLP-SELENIUM		SPLP-SILVER		SW1312-EXT		
SW3010-PREP						
Aqueous	S	SPLP-NICKEL	01-DEC-15			
Aqueous	S	SPLP-POTASSIUM	01-DEC-15			
Aqueous	S	SPLP-SODIUM	01-DEC-15			
Solid	P	SPLP-SVOA				
SPLP-SW8270		SW1312-EXT-SVOA				
Aqueous	S	SPLP-SW8270SIM	11-JUN-15	1L N-Amber Glass		
Aqueous	S	SPLP-THALLIUM	01-DEC-15			
Aqueous	S	SPLP-VANADIUM	01-DEC-15			
Solid	P	SPLP-VOA				
SPLP-SW8260		SW1312-EXT-VOA				
Aqueous	S	SPLP-ZINC	01-DEC-15			

AP
Jun.25.15

000030

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jun. 25, 2015
07:29 AM

Login Number: SI3862

Quote/Incoming: ENSAFE-BETHPAG

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI3862-7	SITE4TS-XX	04-JUN-15 00:00	05-JUN-15		**19-JUN-15**	24-JUN-15	

Matrix		*Product*	*Hold Date (shortest)*	*Bottle Type*	*Bottle Count*	*Comments*
Aqueous	S	SPLP-ALUMINUM	01-DEC-15			
Aqueous	S	SPLP-ANTIMONY	01-DEC-15			
Aqueous	S	SPLP-BERYLLIUM	01-DEC-15			
Aqueous	S	SPLP-CALCIUM	01-DEC-15			
Aqueous	S	SPLP-COBALT	01-DEC-15			
Aqueous	S	SPLP-COPPER	01-DEC-15			
Aqueous	S	SPLP-IRON	01-DEC-15			
Aqueous	S	SPLP-MAGNESIUM	01-DEC-15			
Aqueous	S	SPLP-MANGANESE	01-DEC-15			
Solid	P	SPLP-METALS				
SPLP-ARSENIC		SPLP-BARIUM		SPLP-CADMIUM		
SPLP-CHROMIUM		SPLP-LEAD		SPLP-MERCURY		
SPLP-SELENIUM		SPLP-SILVER		SW1312-EXT		
SW3010-PREP						
Aqueous	S	SPLP-NICKEL	01-DEC-15			
Aqueous	S	SPLP-POTASSIUM	01-DEC-15			
Aqueous	S	SPLP-SODIUM	01-DEC-15			
Solid	P	SPLP-SVOA				
SPLP-SW8270		SW1312-EXT-SVOA				
Aqueous	S	SPLP-SW8270SIM	11-JUN-15	1L N-Amber Glass		
Aqueous	S	SPLP-THALLIUM	01-DEC-15			
Aqueous	S	SPLP-VANADIUM	01-DEC-15			
Solid	P	SPLP-VOA				
SPLP-SW8260		SW1312-EXT-VOA				
Aqueous	S	SPLP-ZINC	01-DEC-15			

***Total Samples:* 6** ***Total Analyses:* 54**

06.25.15

000031

Katahdin Analytical Services, Inc.

Container Transfer History for SI3862

Samplenum SI3862-1

Container Id SI3862-1A **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:21	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI3862-1B **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:21	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI3862-1C **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:21	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI3862-1D **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .
08-JUN-15 16:29	VOA_WALK-IN	GC/MS	EEVERETT	N	
09-JUN-15 13:47	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI3862-1E **Containertype** **8oz Glass** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .
08-JUN-15 16:29	VOA_WALK-IN	GC/MS	EEVERETT	N	
09-JUN-15 13:47	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI3862-1F **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .
08-JUN-15 16:29	VOA_WALK-IN	GC/MS	EEVERETT	N	
09-JUN-15 13:47	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI3862-1G **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .

Container Id SI3862-1H **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .

Container Id SI3862-1I **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

000032

Katahdin Analytical Services, Inc.

Container Transfer History for SI3862

Samplenum SI3862-1

Container Id SI3862-1I **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .

Container Id SI3862-1J **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .

Container Id SI3862-1K **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .

Container Id SI3862-1L **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .

Container Id SI3862-1O **Containertype 1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW7471-MERCURY, SW6020-THALLIUM, SW6020-VANADIUM, SW6020-ZINC, SW8270-S, SW6020-SODIUM, SW6020-COPPER, SW6020-IRON, SW6020-LEAD, SW6020-MAGNESIUM, SW6020-MANGANESE, SW6020-NICKEL, SW6020-POTASSIUM, SW6020-SELENIUM, SW6020-SILVER, SW6020-ALUMINUM, SW6020-ANTIMONY, SW6020-ARSENIC, SW6020-BARIUM, SW6020-BERYLLIUM, SW6020-CADMIUM, SW6020-CALCIUM, SW6020-CHROMIUM, SW6020-COBALT*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:26	WALK-IN	WALK-IN	APIMENTEL	N	
18-JUN-15 12:55	WET CHEMISTRY	METALS PREP	GJOHNSON	N	

Container Id SI3862-1P **Containertype 1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW7471-MERCURY, SW6020-THALLIUM, SW6020-VANADIUM, SW6020-ZINC, SW8270-S, SW6020-SODIUM, SW6020-ANTIMONY, SW6020-ARSENIC, SW6020-BARIUM, SW6020-BERYLLIUM, SW6020-CADMIUM, SW6020-CALCIUM, SW6020-CHROMIUM, SW6020-COBALT, SW6020-COPPER, SW6020-ALUMINUM, SW6020-IRON, SW6020-LEAD, SW6020-MAGNESIUM, SW6020-MANGANESE, SW6020-NICKEL, SW6020-POTASSIUM, SW6020-SELENIUM, SW6020-SILVER*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:26	WALK-IN	WALK-IN	APIMENTEL	N	
05-JUN-15 15:31	WALK-IN	METALS PREP	GJOHNSON	N	
05-JUN-15 17:08	METALS PREP	WALK-IN	GJOHNSON	N	
08-JUN-15 15:12	WALK-IN	METALS PREP	TSWETT	N	
08-JUN-15 16:31	ORGANIC PREP	WALK-IN	GJOHNSON	N	

Samplenum SI3862-2

Container Id SI3862-2A **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:21	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI3862-2B **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments

000033

Katahdin Analytical Services, Inc.

Container Transfer History for SI3862

Samplenum SI3862-2

Container Id SI3862-2B **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .
08-JUN-15 16:29	VOA_WALK-IN	GC/MS	EEVERETT	N	
09-JUN-15 13:47	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI3862-2C **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .
08-JUN-15 16:29	VOA_WALK-IN	GC/MS	EEVERETT	N	
09-JUN-15 13:47	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI3862-2D **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:28	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .

Container Id SI3862-2F **Containertype 1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW6020-COPPER, SW6020-IRON, SW6020-LEAD, SW6020-MAGNESIUM, SW6020-MANGANESE, SW6020-NICKEL, SW6020-POTASSIUM, SW6020-SELENIUM, SW6020-SILVER, SW6020-ALUMINUM, SW6020-ANTIMONY, SW6020-ARSENIC, SW6020-BARIUM, SW6020-BERYLLIUM, SW6020-CADMIUM, SW6020-CALCIUM, SW6020-CHROMIUM, SW6020-COBALT, SW7471-MERCURY, SW6020-ZINC, SW6020-VANADIUM, SW6020-SODIUM, SW6020-THALLIUM, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:23	LOGIN	WALK-IN	APIMENTEL	N	
05-JUN-15 15:31	WALK-IN	METALS PREP	GJOHNSON	N	
05-JUN-15 17:08	METALS PREP	WALK-IN	GJOHNSON	N	

Samplenum SI3862-3

Container Id SI3862-3A **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:21	LOGIN	VOA_WALK-IN	APIMENTEL	N	
08-JUN-15 12:11	VOA_WALK-IN	GC/MS	RCROCKER	N	
09-JUN-15 13:41	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI3862-3B **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:21	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI3862-3C **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:21	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Samplenum SI3862-4

Container Id SI3862-4A **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:21	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Katahdin Analytical Services, Inc.

Container Transfer History for SI3862

Samplenum SI3862-4

Container Id SI3862-4B **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:32	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .
08-JUN-15 16:29	VOA_WALK-IN	GC/MS	EEVERETT	N	
09-JUN-15 13:47	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI3862-4C **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:32	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .

Container Id SI3862-4D **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
05-JUN-15 13:22	LOGIN	VOA_FREEZER1	APIMENTEL	N	
05-JUN-15 13:32	VOA_FREEZER1	VOA_WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/05/15 13:22 .

000035

VOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI3862

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SITE4TS-EB	SI3862-3		88.4		93.6		101.		93.0	
Laboratory Control S	WG164386-1		97.2		104.		104.		96.8	
Method Blank Sample	WG164386-2		98.9		103.		109.		103.	

		QC Limits
DCA	1,2-DICHLOROETHANE-D4	70-120
BFB	P-BROMOFLUOROBENZENE	75-120
DBF	DIBROMOFLUOROMETHANE	85-115
TOL	TOLUENE-D8	85-120

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI3862

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SITE4TS-FB	SI3862-1		199.	*	96.8		102.		72.8	*
SITE4TS-FB	SI3862-1DL		107.		98.8		107.		102.	
SITE4TS-XX	SI3862-2		190.	*	109.		108.		61.6	*
SITE4TS-XX	SI3862-2DL		106.		93.6		101.		97.4	
SITE4TS-TB-SOIL	SI3862-4		110.		110.		105.		113.	
Methanol Blank	WG164386-5		98.7		92.1		99.3		94.5	
Matrix Spike	WG164407-11		199.	*	81.6		83.4		59.1	*
Matrix Spike Duplica	WG164407-12		102.		64.8		75.2		65.3	*
Laboratory Control S	WG164407-8		92.3		93.7		85.8		96.8	
Method Blank Sample	WG164407-9		104.		101.		89.9		115.	

		QC Limits
DBF	DIBROMOFLUOROMETHANE	64-130
TOL	TOLUENE-D8	85-115
BFB	P-BROMOFLUOROBENZENE	85-120
DCA	1,2-DICHLOROETHANE-D4	58-134

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : P1308.D
Instrument ID : GCMS-P
Heated Purge : No

SDG : SI3862
Lab Sample ID : WG164386-2
Date Analyzed : 08-JUN-15
Time Analyzed : 13:15

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG164386-1	P1305.D	06/08/15	11:42
Methanol Blank	WG164386-5	P1309.D	06/08/15	13:41
SITE4TS-EB	SI3862-3	P1310.D	06/08/15	14:06
SITE4TS-FB	SI3862-1DL	P1321.D	06/08/15	18:52
SITE4TS-XX	SI3862-2DL	P1322.D	06/08/15	19:18

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : T3793.D
Instrument ID : GCMS-T
Heated Purge : Yes

SDG : SI3862
Lab Sample ID : WG164407-9
Date Analyzed : 08-JUN-15
Time Analyzed : 17:34

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG164407-8	T3790.D	06/08/15	15:33
SITE4TS-TB-SOIL	SI3862-4	T3794.D	06/08/15	18:12
SITE4TS-FB	SI3862-1	T3795.D	06/08/15	18:49
SITE4TS-XX	SI3862-2	T3796.D	06/08/15	19:27
Matrix Spike	WG164407-11	T3798.D	06/08/15	20:42
Matrix Spike Duplica	WG164407-12	T3799.D	06/08/15	21:20

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164386-2
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: P1308.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164386-2
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: P1308.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
1,1-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2,3-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.27	0.50
1,2,3-Trichloropropane	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,3-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Chlorotoluene	U	0.50	ug/L	1	1	1.0	0.20	0.50
2,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
Bromochloromethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
Dibromomethane	U	0.50	ug/L	1	1	1.0	0.46	0.50
Hexachlorobutadiene	U	0.75	ug/L	1	1	1.0	0.52	0.75
m+p-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
n-Propylbenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
o-xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
p-Isopropyltoluene	U	0.50	ug/L	1	1	1.0	0.25	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
4-Chlorotoluene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
Xylenes (Total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Ethylbenzene	U	2.5	ug/L	1	5	5.0	0.65	2.5
Benzene	U	2.5	ug/L	1	5	5.0	0.93	2.5
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
1,3,5-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164386-2
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: P1308.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Diethyl Ether	U	0.50	ug/L	1	1	1.0	0.40	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
Tetrahydrofuran	U	5.0	ug/L	1	10	10.	1.7	5.0
Vinyl Acetate	U	0.50	ug/L	1	1	1.0	0.40	0.50
P-Bromofluorobenzene		98.9	%					
Toluene-d8		103.	%					
1,2-Dichloroethane-d4		109.	%					
Dibromofluoromethane		103.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164386-5
Client ID: Methanol Blank
Project:
SDG: SI3862
Lab File ID: P1309.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	250	ug/Kgdrywt	1	10	500	46.	250
Chloromethane	U	250	ug/Kgdrywt	1	10	500	70.	250
Vinyl Chloride	U	250	ug/Kgdrywt	1	10	500	44.	250
Bromomethane	U	250	ug/Kgdrywt	1	10	500	55.	250
Chloroethane	U	250	ug/Kgdrywt	1	10	500	65.	250
Trichlorofluoromethane	U	250	ug/Kgdrywt	1	10	500	46.	250
1,1-Dichloroethene	U	120	ug/Kgdrywt	1	5	250	46.	120
Carbon Disulfide	U	120	ug/Kgdrywt	1	5	250	39.	120
Methylene Chloride	U	620	ug/Kgdrywt	1	25	1200	400	620
Acetone	U	620	ug/Kgdrywt	1	25	1200	260	620
trans-1,2-Dichloroethene	U	120	ug/Kgdrywt	1	5	250	36.	120
Methyl tert-butyl Ether	U	120	ug/Kgdrywt	1	5	250	55.	120
1,1-Dichloroethane	U	120	ug/Kgdrywt	1	5	250	85.	120
cis-1,2-Dichloroethene	U	120	ug/Kgdrywt	1	5	250	46.	120
Chloroform	U	120	ug/Kgdrywt	1	5	250	18.	120
Carbon Tetrachloride	U	120	ug/Kgdrywt	1	5	250	65.	120
1,1,1-Trichloroethane	U	120	ug/Kgdrywt	1	5	250	21.	120
2-Butanone	U	620	ug/Kgdrywt	1	25	1200	300	620
Benzene	U	120	ug/Kgdrywt	1	5	250	46.	120
1,2-Dichloroethane	U	120	ug/Kgdrywt	1	5	250	50.	120
Trichloroethene	U	120	ug/Kgdrywt	1	5	250	30.	120
1,2-Dichloropropane	U	120	ug/Kgdrywt	1	5	250	70.	120
Bromodichloromethane	U	120	ug/Kgdrywt	1	5	250	30.	120
cis-1,3-Dichloropropene	U	120	ug/Kgdrywt	1	5	250	36.	120
Toluene	U	120	ug/Kgdrywt	1	5	250	70.	120
4-Methyl-2-Pentanone	U	620	ug/Kgdrywt	1	25	1200	300	620
Tetrachloroethene	U	120	ug/Kgdrywt	1	5	250	60.	120
trans-1,3-Dichloropropene	U	120	ug/Kgdrywt	1	5	250	43.	120
1,1,2-Trichloroethane	U	120	ug/Kgdrywt	1	5	250	48.	120
Dibromochloromethane	U	120	ug/Kgdrywt	1	5	250	50.	120
1,2-Dibromoethane	U	120	ug/Kgdrywt	1	5	250	60.	120
Chlorobenzene	U	120	ug/Kgdrywt	1	5	250	26.	120
Ethylbenzene	U	120	ug/Kgdrywt	1	5	250	32.	120
Styrene	U	120	ug/Kgdrywt	1	5	250	26.	120

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164386-5
Client ID: Methanol Blank
Project:
SDG: SI3862
Lab File ID: P1309.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bromoform	U	120	ug/Kgdrywt	1	5	250	35.	120
Isopropylbenzene	U	120	ug/Kgdrywt	1	5	250	46.	120
1,1,2,2-Tetrachloroethane	U	120	ug/Kgdrywt	1	5	250	42.	120
1,3-Dichlorobenzene	U	120	ug/Kgdrywt	1	5	250	31.	120
1,4-Dichlorobenzene	U	120	ug/Kgdrywt	1	5	250	22.	120
1,2-Dichlorobenzene	U	120	ug/Kgdrywt	1	5	250	39.	120
1,2-Dibromo-3-Chloropropane	U	120	ug/Kgdrywt	1	5	250	75.	120
1,2,4-Trichlorobenzene	U	120	ug/Kgdrywt	1	5	250	40.	120
1,2,4-Trimethylbenzene	U	120	ug/Kgdrywt	1	5	250	44.	120
1,3,5-Trimethylbenzene	U	120	ug/Kgdrywt	1	5	250	34.	120
n-Butylbenzene	U	120	ug/Kgdrywt	1	5	250	46.	120
sec-Butylbenzene	U	120	ug/Kgdrywt	1	5	250	46.	120
tert-Butylbenzene	U	120	ug/Kgdrywt	1	5	250	45.	120
m+p-Xylenes	U	120	ug/Kgdrywt	1	10	500	85.	120
o-Xylene	U	120	ug/Kgdrywt	1	5	250	65.	120
Xylenes (Total)	U	380	ug/Kgdrywt	1	15	750	65.	380
Naphthalene	U	120	ug/Kgdrywt	1	5	250	44.	120
1,1-Dichloropropene	U	120	ug/Kgdrywt	1	5	250	46.	120
1,2,3-Trichlorobenzene	U	120	ug/Kgdrywt	1	5	250	38.	120
1,2,3-Trichloropropane	U	120	ug/Kgdrywt	1	5	250	60.	120
2-Chlorotoluene	U	120	ug/Kgdrywt	1	5	250	55.	120
2,2-Dichloropropane	U	120	ug/Kgdrywt	1	5	250	25.	120
Bromobenzene	U	120	ug/Kgdrywt	1	5	250	37.	120
Bromochloromethane	U	120	ug/Kgdrywt	1	5	250	46.	120
Dibromomethane	U	120	ug/Kgdrywt	1	5	250	26.	120
Hexachlorobutadiene	U	120	ug/Kgdrywt	1	5	250	37.	120
n-Propylbenzene	U	120	ug/Kgdrywt	1	5	250	42.	120
p-Isopropyltoluene	U	120	ug/Kgdrywt	1	5	250	38.	120
1,3-Dichloropropane	U	120	ug/Kgdrywt	1	5	250	47.	120
2-Hexanone	U	620	ug/Kgdrywt	1	25	1200	240	620
4-Chlorotoluene	U	120	ug/Kgdrywt	1	5	250	24.	120
1,2-Dichloroethylene (Total)	U	250	ug/Kgdrywt	1	10	500	36.	250
Methylcyclohexane	U	120	ug/Kgdrywt	1	5	250	48.	120
Freon-113	U	120	ug/Kgdrywt	1	5	250	45.	120

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164386-5
Client ID: Methanol Blank
Project:
SDG: SI3862
Lab File ID: P1309.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,3,5-Trichlorobenzene	U	120	ug/Kgdrywt	1	5	250	44.	120
Cyclohexane	U	120	ug/Kgdrywt	1	5	250	70.	120
Diethyl Ether	U	120	ug/Kgdrywt	1	5	250	40.	120
Di-Isopropyl Ether	U	120	ug/Kgdrywt	1	5	250	100	120
Methyl Acetate	U	150	ug/Kgdrywt	1	5	250	140	150
Tetrahydrofuran	U	1200	ug/Kgdrywt	1	50	2500	220	1200
Vinyl Acetate	U	120	ug/Kgdrywt	1	5	250	47.	120
p-Bromofluorobenzene		98.7	%					
Toluene-D8		94.5	%					
1,2-Dichloroethane-D4		99.3	%					
Dibromofluoromethane		92.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164407-9
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: T3793.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	U	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	U	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
Methylene Chloride	U	12	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone	U	12	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164407-9
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: T3793.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylenes	U	2.5	ug/Kgdrywt	1	10	10.	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Xylenes (Total)	U	7.5	ug/Kgdrywt	1	15	15.	1.3	7.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
1,1-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
1,2,3-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,2,3-Trichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
2,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.50	2.5
Bromobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
Bromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Dibromomethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Hexachlorobutadiene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
n-Propylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.83	2.5
p-Isopropyltoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,3-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
2-Hexanone	U	12	ug/Kgdrywt	1	25	25.	4.8	12.
4-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.49	2.5
1,2-Dichloroethylene (Total)	U	5.0	ug/Kgdrywt	1	10	10.	0.71	5.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164407-9
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: T3793.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,3,5-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Diethyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	0.80	2.5
Di-Isopropyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Tetrahydrofuran	U	25	ug/Kgdrywt	1	50	50.	4.5	25.
Vinyl Acetate	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
p-Bromofluorobenzene		104.	%					
Toluene-D8		115.	%					
1,2-Dichloroethane-D4		89.9	%					
Dibromofluoromethane		101.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164386-1
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: P1305.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 22-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	* 167.	50.0	83.3	ug/L	30-155
Chloromethane	107.	50.0	53.3	ug/L	40-125
Vinyl Chloride	114.	50.0	57.2	ug/L	50-145
Bromomethane	103.	50.0	51.6	ug/L	30-145
Chloroethane	129.	50.0	64.6	ug/L	60-135
Trichlorofluoromethane	116.	50.0	57.8	ug/L	60-145
1,1-Dichloroethene	119.	50.0	59.3	ug/L	70-130
Carbon Disulfide	128.	50.0	63.9	ug/L	35-160
Methylene Chloride	105.	50.0	52.3	ug/L	55-140
Acetone	97.8	50.0	48.9	ug/L	40-140
trans-1,2-Dichloroethene	108.	50.0	53.8	ug/L	60-140
Methyl tert-butyl Ether	113.	100.	113.	ug/L	65-125
1,1-Dichloroethane	107.	50.0	53.7	ug/L	70-135
cis-1,2-Dichloroethene	103.	50.0	51.4	ug/L	70-125
Chloroform	109.	50.0	54.4	ug/L	65-135
1,1,1-Trichloroethane	112.	50.0	55.8	ug/L	65-130
2-Butanone	93.0	50.0	46.5	ug/L	30-150
Carbon Tetrachloride	109.	50.0	54.6	ug/L	65-140
1,2-Dichloroethane	106.	50.0	53.0	ug/L	70-130
Trichloroethene	101.	50.0	50.6	ug/L	70-125
1,2-Dichloropropane	103.	50.0	51.5	ug/L	75-125
Bromodichloromethane	110.	50.0	54.8	ug/L	75-120
cis-1,3-Dichloropropene	110.	50.0	54.9	ug/L	70-130
Toluene	98.4	50.0	49.2	ug/L	75-120
4-Methyl-2-Pentanone	96.2	50.0	48.1	ug/L	60-135
trans-1,3-Dichloropropene	119.	50.0	59.6	ug/L	55-140
1,1,2-Trichloroethane	103.	50.0	51.6	ug/L	75-125
Tetrachloroethene	95.2	50.0	47.6	ug/L	45-150
Dibromochloromethane	104.	50.0	52.2	ug/L	60-135
1,2-Dibromoethane	105.	50.0	52.7	ug/L	80-120
Chlorobenzene	105.	50.0	52.3	ug/L	80-120
Styrene	106.	50.0	52.8	ug/L	65-135
Bromoform	103.	50.0	51.3	ug/L	70-130
Isopropylbenzene	108.	50.0	53.8	ug/L	75-125
1,1,2,2-Tetrachloroethane	94.6	50.0	47.3	ug/L	65-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164386-1
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: P1305.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 22-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
1,3-Dichlorobenzene	108.	50.0	54.2	ug/L	75-125
1,4-Dichlorobenzene	98.4	50.0	49.2	ug/L	75-125
1,2-Dichlorobenzene	108.	50.0	53.8	ug/L	70-120
1,2-Dibromo-3-Chloropropane	101.	50.0	50.3	ug/L	50-130
1,2,4-Trichlorobenzene	101.	50.0	50.3	ug/L	65-135
1,1-Dichloropropene	107.	50.0	53.7	ug/L	75-130
1,2,3-Trichlorobenzene	100.	50.0	50.2	ug/L	55-140
1,2,3-Trichloropropane	96.0	50.0	48.0	ug/L	75-125
1,2,4-Trimethylbenzene	99.4	50.0	49.7	ug/L	75-130
1,3,5-Trimethylbenzene	101.	50.0	50.4	ug/L	75-130
1,3-Dichloropropane	101.	50.0	50.4	ug/L	75-125
2-Chlorotoluene	108.	50.0	54.2	ug/L	75-125
2,2-Dichloropropane	* 142.	50.0	71.2	ug/L	70-135
Bromobenzene	101.	50.0	50.6	ug/L	75-125
Bromochloromethane	113.	50.0	56.3	ug/L	65-130
Dibromomethane	106.	50.0	53.1	ug/L	75-125
Hexachlorobutadiene	109.	50.0	54.3	ug/L	50-140
m+p-Xylenes	104.	100.	104.	ug/L	75-130
Naphthalene	99.0	50.0	49.5	ug/L	55-140
n-Butylbenzene	99.8	50.0	49.9	ug/L	70-135
n-Propylbenzene	106.	50.0	52.9	ug/L	70-130
o-xylene	107.	50.0	53.7	ug/L	80-120
p-Isopropyltoluene	112.	50.0	55.9	ug/L	75-130
sec-Butylbenzene	104.	50.0	52.0	ug/L	70-125
tert-Butylbenzene	109.	50.0	54.5	ug/L	70-130
2-Hexanone	92.2	50.0	46.1	ug/L	55-130
4-Chlorotoluene	111.	50.0	55.7	ug/L	75-130
1,2-Dichloroethylene (Total)	105.	100.	105.	ug/L	84-121
Xylenes (Total)	105.	150.	157.	ug/L	89-116
Ethylbenzene	97.6	50.0	48.8	ug/L	75-125
Benzene	100.	50.0	50.0	ug/L	80-120
Freon-113	107.	50.0	53.4	ug/L	73-126
1,3,5-Trichlorobenzene	104.	50.0	52.1	ug/L	77-120
Cyclohexane	97.2	50.0	48.6	ug/L	71-133
Diethyl Ether	110.	50.0	55.1	ug/L	78-124

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164386-1
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: P1305.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 22-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Di-Isopropyl Ether	105.	50.0	52.4	ug/L	81-123
Methyl Acetate	95.0	50.0	47.5	ug/L	70-132
Methylcyclohexane	107.	50.0	53.3	ug/L	73-125
Tetrahydrofuran	85.8	50.0	42.9	ug/L	74-123
Vinyl Acetate	102.	50.0	51.2	ug/L	56-129
P-Bromofluorobenzene	97.2				75-120
Toluene-d8	96.8				85-120
1,2-Dichloroethane-d4	104.				70-120
Dibromofluoromethane	104.				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164407-8
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: T3790.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 22-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	102.	50.0	51.0	ug/Kgdrywt	35-135
Chloromethane	83.6	50.0	41.8	ug/Kgdrywt	50-130
Vinyl Chloride	96.4	50.0	48.2	ug/Kgdrywt	60-125
Bromomethane	114.	50.0	57.2	ug/Kgdrywt	30-160
Chloroethane	* 167.	50.0	83.6	ug/Kgdrywt	40-155
Trichlorofluoromethane	128.	50.0	64.1	ug/Kgdrywt	25-185
1,1-Dichloroethene	106.	50.0	52.8	ug/Kgdrywt	65-135
Carbon Disulfide	128.	50.0	64.0	ug/Kgdrywt	45-160
Methylene Chloride	92.0	50.0	46.0	ug/Kgdrywt	55-140
Acetone	91.2	50.0	45.6	ug/Kgdrywt	20-160
trans-1,2-Dichloroethene	109.	50.0	54.4	ug/Kgdrywt	65-135
Methyl tert-butyl Ether	* 74.8	100.	74.8	ug/Kgdrywt	81-125
1,1-Dichloroethane	102.	50.0	50.9	ug/Kgdrywt	75-125
cis-1,2-Dichloroethene	94.4	50.0	47.2	ug/Kgdrywt	65-125
Chloroform	99.2	50.0	49.6	ug/Kgdrywt	70-125
Carbon Tetrachloride	106.	50.0	53.1	ug/Kgdrywt	65-135
1,1,1-Trichloroethane	103.	50.0	51.4	ug/Kgdrywt	70-135
2-Butanone	73.8	50.0	36.9	ug/Kgdrywt	30-160
Benzene	104.	50.0	51.8	ug/Kgdrywt	75-125
1,2-Dichloroethane	93.0	50.0	46.5	ug/Kgdrywt	70-135
Trichloroethene	108.	50.0	54.0	ug/Kgdrywt	75-125
1,2-Dichloropropane	101.	50.0	50.6	ug/Kgdrywt	70-120
Bromodichloromethane	104.	50.0	51.9	ug/Kgdrywt	70-130
cis-1,3-Dichloropropene	104.	50.0	51.8	ug/Kgdrywt	70-125
Toluene	103.	50.0	51.3	ug/Kgdrywt	70-125
4-Methyl-2-Pentanone	89.0	50.0	44.5	ug/Kgdrywt	45-145
Tetrachloroethene	115.	50.0	57.3	ug/Kgdrywt	65-140
trans-1,3-Dichloropropene	107.	50.0	53.6	ug/Kgdrywt	65-125
1,1,2-Trichloroethane	97.4	50.0	48.7	ug/Kgdrywt	60-125
Dibromochloromethane	112.	50.0	55.8	ug/Kgdrywt	65-130
1,2-Dibromoethane	96.8	50.0	48.4	ug/Kgdrywt	70-125
Chlorobenzene	106.	50.0	53.2	ug/Kgdrywt	75-125
Ethylbenzene	108.	50.0	53.8	ug/Kgdrywt	75-125
Styrene	107.	50.0	53.6	ug/Kgdrywt	75-125
Bromoform	111.	50.0	55.3	ug/Kgdrywt	55-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164407-8
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: T3790.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 22-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Isopropylbenzene	115.	50.0	57.3	ug/Kgdrywt	75-130
1,1,2,2-Tetrachloroethane	99.4	50.0	49.7	ug/Kgdrywt	55-130
1,3-Dichlorobenzene	112.	50.0	55.9	ug/Kgdrywt	70-125
1,4-Dichlorobenzene	108.	50.0	54.1	ug/Kgdrywt	70-125
1,2-Dichlorobenzene	108.	50.0	54.1	ug/Kgdrywt	75-120
1,2-Dibromo-3-Chloropropane	99.6	50.0	49.8	ug/Kgdrywt	40-135
1,2,4-Trichlorobenzene	111.	50.0	55.4	ug/Kgdrywt	65-130
1,2,4-Trimethylbenzene	109.	50.0	54.7	ug/Kgdrywt	65-135
1,3,5-Trimethylbenzene	115.	50.0	57.3	ug/Kgdrywt	65-135
n-Butylbenzene	110.	50.0	54.9	ug/Kgdrywt	65-140
sec-Butylbenzene	114.	50.0	56.9	ug/Kgdrywt	65-130
tert-Butylbenzene	113.	50.0	56.6	ug/Kgdrywt	65-130
m+p-Xylenes	111.	100.	111.	ug/Kgdrywt	80-125
o-Xylene	111.	50.0	55.5	ug/Kgdrywt	75-125
Xylenes (Total)	111.	150.	167.	ug/Kgdrywt	81-114
Naphthalene	118.	50.0	58.8	ug/Kgdrywt	40-125
1,1-Dichloropropene	108.	50.0	54.1	ug/Kgdrywt	70-135
1,2,3-Trichlorobenzene	108.	50.0	54.2	ug/Kgdrywt	60-135
1,2,3-Trichloropropane	100.	50.0	50.0	ug/Kgdrywt	65-130
2-Chlorotoluene	111.	50.0	55.4	ug/Kgdrywt	70-130
2,2-Dichloropropane	104.	50.0	52.0	ug/Kgdrywt	65-135
Bromobenzene	112.	50.0	55.8	ug/Kgdrywt	65-120
Bromochloromethane	107.	50.0	53.6	ug/Kgdrywt	70-125
Dibromomethane	98.0	50.0	49.0	ug/Kgdrywt	75-130
Hexachlorobutadiene	110.	50.0	54.9	ug/Kgdrywt	55-140
n-Propylbenzene	114.	50.0	57.1	ug/Kgdrywt	65-135
p-Isopropyltoluene	114.	50.0	57.0	ug/Kgdrywt	75-135
1,3-Dichloropropane	98.4	50.0	49.2	ug/Kgdrywt	75-125
2-Hexanone	90.0	50.0	45.0	ug/Kgdrywt	45-145
4-Chlorotoluene	109.	50.0	54.7	ug/Kgdrywt	75-125
1,2-Dichloroethylene (Total)	102.	100.	102.	ug/Kgdrywt	82-120
Methylcyclohexane	104.	50.0	51.8	ug/Kgdrywt	71-127
Freon-113	106.	50.0	52.9	ug/Kgdrywt	67-135
1,3,5-Trichlorobenzene	99.4	50.0	49.7	ug/Kgdrywt	64-133
Cyclohexane	96.8	50.0	48.4	ug/Kgdrywt	75-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164407-8
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: T3790.D

Sample Date:
Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 22-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Diethyl Ether	89.4	50.0	44.7	ug/Kgdrywt	76-135
Di-Isopropyl Ether	94.0	50.0	47.0	ug/Kgdrywt	68-131
Methyl Acetate	87.0	50.0	43.5	ug/Kgdrywt	72-133
Tetrahydrofuran	84.8	50.0	42.4	ug/Kgdrywt	78-137
Vinyl Acetate	110.	50.0	54.9	ug/Kgdrywt	77-119
p-Bromofluorobenzene	92.3				85-120
Toluene-D8	96.8				85-115
1,2-Dichloroethane-D4	85.8				58-134
Dibromofluoromethane	93.7				64-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG164407-11
MSD ID: WG164407-12
Sample ID: SI3862-1
Client ID: SITE4TS-FB
Project:
SDG: SI3862
MS File ID: T3798.D

Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407
Report Date: 22-JUN-15
MSD File ID: T3799.D

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Dichlorodifluoromethane	45.0	45.0	ug/Kgdrywt	U4.4	55.	30.	122.	65.6	60*	30	35-135
Chloromethane	45.0	45.0	ug/Kgdrywt	U4.4	47.	26.	104.	56.7	58*	30	50-130
Vinyl Chloride	45.0	45.0	ug/Kgdrywt	U4.4	50.	27.	111.	60.4	59*	30	60-125
Bromomethane	45.0	45.0	ug/Kgdrywt	U4.4	47.	34.	104.	76.0	31*	30	30-160
Chloroethane	45.0	45.0	ug/Kgdrywt	ULM4.4	79.	51.	175.*	114.	43*	30	40-155
Trichlorofluoromethane	45.0	45.0	ug/Kgdrywt	U4.4	60.	35.	134.	77.8	53*	30	25-185
1,1-Dichloroethene	45.0	45.0	ug/Kgdrywt	U2.2	48.	32.	106.	70.0	41*	30	65-135
Carbon Disulfide	45.0	45.0	ug/Kgdrywt	J2.9	57.	38.	121.	77.3	41*	30	45-160
Methylene Chloride	45.0	45.0	ug/Kgdrywt	U11	43.	32.	96.0	70.0	31*	30	55-140
Acetone	45.0	45.0	ug/Kgdrywt	M100	180	140	173.*	68.9	29	30	20-160
trans-1,2-Dichloroethene	45.0	45.0	ug/Kgdrywt	U2.2	46.	31.	103.	68.4	40*	30	65-135
Methyl tert-butyl Ether	89.0	89.0	ug/Kgdrywt	ULMM2.	130	28.	147.*	31.1*	130*	30	81-125
1,1-Dichloroethane	45.0	45.0	ug/Kgdrywt	UM2.2	41.	28.	90.4	61.6*	38*	30	75-125
cis-1,2-Dichloroethene	45.0	45.0	ug/Kgdrywt	JM1.3	39.	28.	83.8	59.3*	33*	30	65-125
Chloroform	45.0	45.0	ug/Kgdrywt	UM2.2	37.	28.	81.8	62.0*	28	30	70-125
Carbon Tetrachloride	45.0	45.0	ug/Kgdrywt	UMM2.2	29.	19.	64.4*	42.2*	42*	30	65-135
1,1,1-Trichloroethane	45.0	45.0	ug/Kgdrywt	UM2.2	34.	22.	76.7	48.9*	44*	30	70-135
2-Butanone	45.0	45.0	ug/Kgdrywt	UMM11	120	78.	2.22*	0*	40*	30	30-160
Benzene	45.0	45.0	ug/Kgdrywt	JM4.2	40.	32.	80.0	62.7*	21	30	75-125
1,2-Dichloroethane	45.0	45.0	ug/Kgdrywt	UM2.2	33.	29.	72.9	64.9*	12	30	70-135
Trichloroethene	45.0	45.0	ug/Kgdrywt	UMM2.2	30.	29.	66.2*	65.1*	2	30	75-125
1,2-Dichloropropane	45.0	45.0	ug/Kgdrywt	UMM2.2	28.	26.	62.4*	57.3*	8	30	70-120
Bromodichloromethane	45.0	45.0	ug/Kgdrywt	UMM2.2	28.	25.	63.3*	55.6*	13	30	70-130
cis-1,3-Dichloropropene	45.0	45.0	ug/Kgdrywt	UM2.2	32.	21.	70.4	47.6*	39*	30	70-125
Toluene	45.0	45.0	ug/Kgdrywt	JMM4.0	29.	30.	55.8*	58.4*	4	30	70-125
4-Methyl-2-Pentanone	45.0	45.0	ug/Kgdrywt	UM11	440	510	91.1	247.*	15	30	45-145
Tetrachloroethene	45.0	45.0	ug/Kgdrywt	M9.7	42.	33.	71.1	52.7*	22	30	65-140
trans-1,3-Dichloropropene	45.0	45.0	ug/Kgdrywt	UM2.2	30.	14.	66.0	32.2*	69*	30	65-125
1,1,2-Trichloroethane	45.0	45.0	ug/Kgdrywt	UMM2.2	880	1100	1950*	2530*	26	30	60-125
Dibromochloromethane	45.0	45.0	ug/Kgdrywt	U2.2	40.	33.	89.3	73.6	19	30	65-130
1,2-Dibromoethane	45.0	45.0	ug/Kgdrywt	UM2.2	34.	28.	76.4	61.8*	21	30	70-125
Chlorobenzene	45.0	45.0	ug/Kgdrywt	UM2.2	38.	32.	83.6	70.2*	17	30	75-125
Ethylbenzene	45.0	45.0	ug/Kgdrywt	63	110	100	109.	84.7	10	30	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG164407-11
MSD ID: WG164407-12
Sample ID: SI3862-1
Client ID: SITE4TS-FB
Project:
SDG: SI3862
MS File ID: T3798.D

Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407
Report Date: 22-JUN-15
MSD File ID: T3799.D

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Styrene	45.0	45.0	ug/Kgdrywt	UMM2.2	24.	24.	54.0*	52.7*	2	30	75-125
Bromoform	45.0	45.0	ug/Kgdrywt	UM2.2	26.	20.	58.7	44.7*	27	30	55-135
Isopropylbenzene	45.0	45.0	ug/Kgdrywt	73	120	130	107.	127.	7	30	75-130
1,1,2,2-Tetrachloroethane	45.0	45.0	ug/Kgdrywt	UMM2.2	670	860	1500*	1920*	25	30	55-130
1,3-Dichlorobenzene	45.0	45.0	ug/Kgdrywt	UMM2.2	15.	14.	33.1*	31.6*	5	30	70-125
1,4-Dichlorobenzene	45.0	45.0	ug/Kgdrywt	UMM2.2	14.	15.	31.8*	32.4*	2	30	70-125
1,2-Dichlorobenzene	45.0	45.0	ug/Kgdrywt	UMM2.2	13.	12.	28.4*	27.1*	5	30	75-120
1,2-Dibromo-3-Chloropropane	45.0	45.0	ug/Kgdrywt	UMM2.2	16.	14.	34.7*	31.8*	9	30	40-135
1,2,4-Trichlorobenzene	45.0	45.0	ug/Kgdrywt	UMM2.2	1.2	2.0	2.67*	4.44*	50*	30	65-130
1,2,4-Trimethylbenzene	45.0	45.0	ug/Kgdrywt	MM26	47.	49.	45.3*	51.1*	5	30	65-135
1,3,5-Trimethylbenzene	45.0	45.0	ug/Kgdrywt	73	120	130	107.	127.	7	30	65-135
n-Butylbenzene	45.0	45.0	ug/Kgdrywt	MM39	54.	61.	33.8*	49.6*	12	30	65-140
sec-Butylbenzene	45.0	45.0	ug/Kgdrywt	M54	76.	86.	50.2*	71.8	12	30	65-130
tert-Butylbenzene	45.0	45.0	ug/Kgdrywt	UM2.2	31.	28.	69.3	62.2*	11	30	65-130
m+p-Xylenes	89.0	89.0	ug/Kgdrywt	JMM8.4	66.	58.	65.3*	55.7*	14	30	80-125
o-Xylene	45.0	45.0	ug/Kgdrywt	MM7.4	36.	32.	64.7*	54.4*	13	30	75-125
Xylenes (Total)	130.	130.	ug/Kgdrywt	MM16	100	90.	67.1*	57.0*	14	30	81-114
Naphthalene	45.0	45.0	ug/Kgdrywt	M29	52.	33.	49.8	7.78*	45*	30	40-125
1,1-Dichloropropene	45.0	45.0	ug/Kgdrywt	UMM2.2	31.	27.	69.8*	59.8*	15	30	70-135
1,2,3-Trichlorobenzene	45.0	45.0	ug/Kgdrywt	UMM2.2	12.	3.5	26.0*	7.78*	108*	30	60-135
1,2,3-Trichloropropane	45.0	45.0	ug/Kgdrywt	UMM2.2	61.	69.	136.*	152.*	11	30	65-130
2-Chlorotoluene	45.0	45.0	ug/Kgdrywt	U2.2	54.	35.	121.	78.7	42*	30	70-130
2,2-Dichloropropane	45.0	45.0	ug/Kgdrywt	UM2.2	38.	9.8	83.8	21.8*	117*	30	65-135
Bromobenzene	45.0	45.0	ug/Kgdrywt	U2.2	37.	38.	83.1	84.4	2	30	65-120
Bromochloromethane	45.0	45.0	ug/Kgdrywt	U2.2	45.	35.	99.6	76.9	26	30	70-125
Dibromomethane	45.0	45.0	ug/Kgdrywt	UMM2.2	33.	33.	73.3*	72.7*	1	30	75-130
Hexachlorobutadiene	45.0	45.0	ug/Kgdrywt	UMM2.2	1.2	2.2	2.67*	0*	200*	30	55-140
n-Propylbenzene	45.0	45.0	ug/Kgdrywt	UMM2.2	110	130	249.*	298.*	18	30	65-135
p-Isopropyltoluene	45.0	45.0	ug/Kgdrywt	MM52	79.	64.	58.9*	26.4*	20	30	75-135
1,3-Dichloropropane	45.0	45.0	ug/Kgdrywt	U2.2	46.	40.	103.	88.0	16	30	75-125
2-Hexanone	45.0	45.0	ug/Kgdrywt	UMM11	200	150	447.*	342.*	26	30	45-145
4-Chlorotoluene	45.0	45.0	ug/Kgdrywt	UMM2.2	27.	34.	59.6*	74.4*	22	30	75-125
1,2-Dichloroethylene (Total)	89.0	89.0	ug/Kgdrywt	JM1.3	85.	59.	94.4	64.5*	37*	30	82-120

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG164407-11
MSD ID: WG164407-12
Sample ID: SI3862-1
Client ID: SITE4TS-FB
Project:
SDG: SI3862
MS File ID: T3798.D

Received Date:
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407
Report Date: 22-JUN-15
MSD File ID: T3799.D

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Methylcyclohexane	45.0	45.0	ug/Kgdrywt	EM470	510	480	88.9	2.22*	8	30	71-127
Freon-113	45.0	45.0	ug/Kgdrywt	UM2.2	36.	26.	79.1	58.7*	30	30	67-135
1,3,5-Trichlorobenzene	45.0	45.0	ug/Kgdrywt	UMM2.2	1.0	0.92	2.22*	2.04*	8	30	64-133
Cyclohexane	45.0	45.0	ug/Kgdrywt	M120	160	110	84.4	0*	39*	30	75-128
Diethyl Ether	45.0	45.0	ug/Kgdrywt	UM2.2	44.	31.	98.9	69.1*	35*	30	76-135
Di-Isopropyl Ether	45.0	45.0	ug/Kgdrywt	UM2.2	40.	30.	89.8	65.8*	31*	30	68-131
Methyl Acetate	45.0	45.0	ug/Kgdrywt	UMM2.7	23.	22.	51.6*	48.4*	6	30	72-133
Tetrahydrofuran	45.0	45.0	ug/Kgdrywt	UM22	88.	61.	196.*	136.	36*	30	78-137
Vinyl Acetate	45.0	45.0	ug/Kgdrywt	UMM2.2	25.	7.4	55.3*	16.4*	108*	30	77-119
p-Bromofluorobenzene							199.*	102.			85-120
Toluene-D8							59.1*	65.3*			85-115
1,2-Dichloroethane-D4							83.4	75.2			58-134
Dibromofluoromethane							81.6	64.8			64-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB283.D
Instrument ID : GCMS-P

SDG : SI3862
Date Analyzed : 03-JUN-15
Time Analyzed : 13:35
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	22.4		
75	30.0 - 60.0% of mass 95	50.4		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.4		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	63.1		
175	5.0 - 9.0% of mass 174	3.2	5.11	1
176	95.0 - 101.0% of mass 174	61.0	96.63	1
177	5.0 - 9.0% of mass 176	4.2	6.93	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG164075-4	P1227.D	06/03/15	13:58
Initial Calibration	WG164075-3	P1228.D	06/03/15	14:23
Initial Calibration	WG164075-2	P1229.D	06/03/15	14:49
Initial Calibration	WG164075-1	P1230.D	06/03/15	15:15
Initial Calibration	WG164075-6	P1231.D	06/03/15	15:40
Initial Calibration	WG164075-5	P1232.D	06/03/15	16:06
Independent Source	WG164075-7	P1233A.D	06/03/15	16:32

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB286.D
Instrument ID : GCMS-P

SDG : SI3862
Date Analyzed : 08-JUN-15
Time Analyzed : 10:27
Heated Purge : Yes

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	23.9		
75	30.0 - 60.0% of mass 95	57.4		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	8.0		
173	Less than 2.0% of mass 174	0.5	0.79	1
174	Greater than 50.0% of mass 95	64.5		
175	5.0 - 9.0% of mass 174	3.5	5.48	1
176	95.0 - 101.0% of mass 174	62.5	96.97	1
177	5.0 - 9.0% of mass 176	4.0	6.34	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG164386-4	P1304.D	06/08/15	10:51
Laboratory Control S	WG164386-1	P1305.D	06/08/15	11:42
Method Blank Sample	WG164386-2	P1308.D	06/08/15	13:15
Methanol Blank	WG164386-5	P1309.D	06/08/15	13:41
SITE4TS-EB	SI3862-3	P1310.D	06/08/15	14:06
SITE4TS-FB	SI3862-1DL	P1321.D	06/08/15	18:52
SITE4TS-XX	SI3862-2DL	P1322.D	06/08/15	19:18

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : TB908.D
Instrument ID : GCMS-T

SDG : SI3862
Date Analyzed : 08-JUN-15
Time Analyzed : 10:08
Heated Purge : Yes

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	20.1		
75	30.0 - 60.0% of mass 95	47.1		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.5		
173	Less than 2.0% of mass 174	0.5	0.59	1
174	Greater than 50.0% of mass 95	77.2		
175	5.0 - 9.0% of mass 174	6.0	7.77	1
176	95.0 - 101.0% of mass 174	77.5	100.37	1
177	5.0 - 9.0% of mass 176	4.5	5.80	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG164407-4	T3783.D	06/08/15	10:43
Initial Calibration	WG164407-3	T3784.D	06/08/15	11:25
Initial Calibration	WG164407-2	T3785.D	06/08/15	12:03
Initial Calibration	WG164407-1	T3786.D	06/08/15	12:41
Initial Calibration	WG164407-6	T3787.D	06/08/15	13:18
Initial Calibration	WG164407-5	T3788.D	06/08/15	13:56
Laboratory Control S	WG164407-8	T3790.D	06/08/15	15:33
Independent Source	WG164407-7	T3790A.D	06/08/15	15:33
Method Blank Sample	WG164407-9	T3793.D	06/08/15	17:34
SITE4TS-TB-SOIL	SI3862-4	T3794.D	06/08/15	18:12
SITE4TS-FB	SI3862-1	T3795.D	06/08/15	18:49
SITE4TS-XX	SI3862-2	T3796.D	06/08/15	19:27
Matrix Spike	WG164407-11	T3798.D	06/08/15	20:42
Matrix Spike Duplica	WG164407-12	T3799.D	06/08/15	21:20

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164075-4
Lab File ID : P1227.D

SDG: SI3862
Analytical Date: 06/03/15 13:58
Instrument ID: GCMS-P

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	395997		8.71		747566		9.58		656138		13.93	
	Upper Limit	791994		9.21		1495132		10.08		1312276		14.43	
	Lower Limit	197998.5		8.21		373783		9.08		328069		13.43	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG164386-4	358541		8.71		681546		9.58		622596		13.93	
Laboratory Control S	WG164386-1	357512		8.71		695599		9.57		626507		13.93	
Method Blank Sample	WG164386-2	373511		8.72		702573		9.58		636531		13.93	
Methanol Blank	WG164386-5	394623		8.72		732160		9.58		693305		13.93	
SITE4TS-EB	SI3862-3	383379		8.72		731400		9.58		649046		13.93	
SITE4TS-FB	SI3862-1DL	380436		8.72		711266		9.58		676515		13.93	
SITE4TS-XX	SI3862-2DL	412489		8.71		772436		9.58		739911		13.93	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164075-4
Lab File ID : P1227.D

SDG: SI3862
Analytical Date: 06/03/15 13:58
Instrument ID: GCMS-P

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	348639		16.93	
	Upper Limit	697278		17.43	
	Lower Limit	174319.5		16.43	
Client Sample ID	Lab Sample ID				
Continuing Calibrati	WG164386-4	334540		16.93	
Laboratory Control S	WG164386-1	338056		16.93	
Method Blank Sample	WG164386-2	334482		16.93	
Methanol Blank	WG164386-5	378033		16.93	
SITE4TS-EB	SI3862-3	338232		16.93	
SITE4TS-FB	SI3862-1DL	367677		16.93	
SITE4TS-XX	SI3862-2DL	392493		16.93	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164407-4
Lab File ID : T3783.D

SDG: SI3862
Analytical Date: 06/08/15 10:43
Instrument ID: GCMS-T

		PENTAFLUOROBENZENE			1,4-DIFLUOROBENZENE			CHLOROBENZENE-D5		
		Area	#	RT #	Area	#	RT #	Area	#	RT #
	Std .	309641		7.99	562002		8.76	551636		12.82
	Upper Limit	619282		8.49	1124004		9.26	1103272		13.32
	Lower Limit	154820.5		7.49	281001		8.26	275818		12.32
Client Sample ID	Lab Sample ID									
Laboratory Control S	WG164407-8	378293		7.99	627414		8.75	592417		12.82
Method Blank Sample	WG164407-9	333019		7.99	507968		8.75	545996		12.82
SITE4TS-TB-SOIL	SI3862-4	325412		7.99	517751		8.75	551843		12.82
SITE4TS-FB	SI3862-1	294101		7.99	564097		8.75	357025		12.83
SITE4TS-XX	SI3862-2	244258		7.99	479211		8.75	237346	*	12.83
Matrix Spike	WG164407-11	341335		7.99	637839		8.76	363541		12.83
Matrix Spike Duplica	WG164407-12	52385	*	7.99	92071	*	8.75	56368	*	12.83

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164407-4
Lab File ID : T3783.D

SDG: SI3862
Analytical Date: 06/08/15 10:43
Instrument ID: GCMS-T

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	345501		15.95	
	Upper Limit	691002		16.45	
	Lower Limit	172750.5		15.45	
Client Sample ID	Lab Sample ID				
Laboratory Control S	WG164407-8	337380		15.95	
Method Blank Sample	WG164407-9	314913		15.95	
SITE4TS-TB-SOIL	SI3862-4	306795		15.95	
SITE4TS-FB	SI3862-1	95720	*	15.96	
SITE4TS-XX	SI3862-2	97050	*	15.97	
Matrix Spike	WG164407-11	104694	*	15.96	
Matrix Spike Duplica	WG164407-12	14498	*	15.96	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-1
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: T3795.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.4	ug/Kgdrywt	1	10	8.9	0.82	4.4
Chloromethane	U	4.4	ug/Kgdrywt	1	10	8.9	1.2	4.4
Vinyl Chloride	U	4.4	ug/Kgdrywt	1	10	8.9	0.77	4.4
Bromomethane	U	4.4	ug/Kgdrywt	1	10	8.9	0.98	4.4
Chloroethane	ULM	4.4	ug/Kgdrywt	1	10	8.9	1.2	4.4
Trichlorofluoromethane	U	4.4	ug/Kgdrywt	1	10	8.9	0.81	4.4
1,1-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.83	2.2
Carbon Disulfide	J	2.9	ug/Kgdrywt	1	5	4.4	0.69	2.2
Methylene Chloride	U	11	ug/Kgdrywt	1	25	22.	7.0	11.
Acetone	M	100	ug/Kgdrywt	1	25	22.	4.5	11.
trans-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.63	2.2
Methyl tert-butyl Ether	ULMM	2.2	ug/Kgdrywt	1	5	4.4	0.98	2.2
1,1-Dichloroethane	UM	2.2	ug/Kgdrywt	1	5	4.4	1.5	2.2
cis-1,2-Dichloroethene	JM	1.3	ug/Kgdrywt	1	5	4.4	0.81	2.2
Chloroform	UM	2.2	ug/Kgdrywt	1	5	4.4	0.31	2.2
Carbon Tetrachloride	UMM	2.2	ug/Kgdrywt	1	5	4.4	1.2	2.2
1,1,1-Trichloroethane	UM	2.2	ug/Kgdrywt	1	5	4.4	0.37	2.2
2-Butanone	UMM	11	ug/Kgdrywt	1	25	22.	5.2	11.
Benzene	JM	4.2	ug/Kgdrywt	1	5	4.4	0.82	2.2
1,2-Dichloroethane	UM	2.2	ug/Kgdrywt	1	5	4.4	0.89	2.2
Trichloroethene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.52	2.2
1,2-Dichloropropane	UMM	2.2	ug/Kgdrywt	1	5	4.4	1.2	2.2
Bromodichloromethane	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.53	2.2
cis-1,3-Dichloropropene	UM	2.2	ug/Kgdrywt	1	5	4.4	0.64	2.2
Toluene	JMM	4.0	ug/Kgdrywt	1	5	4.4	1.2	2.2
4-Methyl-2-Pentanone	UM	11	ug/Kgdrywt	1	25	22.	5.2	11.
Tetrachloroethene	M	9.7	ug/Kgdrywt	1	5	4.4	1.1	2.2
trans-1,3-Dichloropropene	UM	2.2	ug/Kgdrywt	1	5	4.4	0.76	2.2
1,1,2-Trichloroethane	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.86	2.2
Dibromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.89	2.2
1,2-Dibromoethane	UM	2.2	ug/Kgdrywt	1	5	4.4	1.1	2.2
Chlorobenzene	UM	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Ethylbenzene		63	ug/Kgdrywt	1	5	4.4	0.58	2.2
Styrene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Bromoform	UM	2.2	ug/Kgdrywt	1	5	4.4	0.62	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-1
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: T3795.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		73	ug/Kgdrywt	1	5	4.4	0.82	2.2
1,1,2,2-Tetrachloroethane	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.75	2.2
1,3-Dichlorobenzene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.55	2.2
1,4-Dichlorobenzene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.39	2.2
1,2-Dichlorobenzene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.69	2.2
1,2-Dibromo-3-Chloropropane	UMM	2.2	ug/Kgdrywt	1	5	4.4	1.3	2.2
1,2,4-Trichlorobenzene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.70	2.2
1,2,4-Trimethylbenzene	MM	26	ug/Kgdrywt	1	5	4.4	0.77	2.2
1,3,5-Trimethylbenzene		73	ug/Kgdrywt	1	5	4.4	0.60	2.2
n-Butylbenzene	MM	39	ug/Kgdrywt	1	5	4.4	0.82	2.2
sec-Butylbenzene	M	54	ug/Kgdrywt	1	5	4.4	0.81	2.2
tert-Butylbenzene	UM	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
m+p-Xylenes	JMM	8.4	ug/Kgdrywt	1	10	8.9	1.5	2.2
o-Xylene	MM	7.4	ug/Kgdrywt	1	5	4.4	1.2	2.2
Xylenes (Total)	MM	16	ug/Kgdrywt	1	15	13.	1.2	6.7
Naphthalene	M	29	ug/Kgdrywt	1	5	4.4	0.78	2.2
1,1-Dichloropropene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.81	2.2
1,2,3-Trichlorobenzene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.68	2.2
1,2,3-Trichloropropane	UMM	2.2	ug/Kgdrywt	1	5	4.4	1.1	2.2
2-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.4	0.98	2.2
2,2-Dichloropropane	UM	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
Bromobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.66	2.2
Bromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.81	2.2
Dibromomethane	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Hexachlorobutadiene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.66	2.2
n-Propylbenzene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.74	2.2
p-Isopropyltoluene	MM	52	ug/Kgdrywt	1	5	4.4	0.68	2.2
1,3-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	0.84	2.2
2-Hexanone	UMM	11	ug/Kgdrywt	1	25	22.	4.3	11.
4-Chlorotoluene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
1,2-Dichloroethylene (Total)	JM	1.3	ug/Kgdrywt	1	10	8.9	0.63	4.4
Methylcyclohexane	EM	470	ug/Kgdrywt	1	5	4.4	0.85	2.2
Freon-113	UM	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
1,3,5-Trichlorobenzene	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.77	2.2
Cyclohexane	M	120	ug/Kgdrywt	1	5	4.4	1.2	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-1
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: T3795.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	UM	2.2	ug/Kgdrywt	1	5	4.4	0.71	2.2
Di-Isopropyl Ether	UM	2.2	ug/Kgdrywt	1	5	4.4	1.9	2.2
Methyl Acetate	UMM	2.7	ug/Kgdrywt	1	5	4.4	2.4	2.7
Tetrahydrofuran	UM	22	ug/Kgdrywt	1	50	44.	4.0	22.
Vinyl Acetate	UMM	2.2	ug/Kgdrywt	1	5	4.4	0.84	2.2
p-Bromofluorobenzene	*	199.	%					
Toluene-D8	*	72.8	%					
1,2-Dichloroethane-D4		102.	%					
Dibromofluoromethane		96.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-1DL
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1321.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	UL	250	ug/Kgdrywt	1	10	500	46.	250
Chloromethane	U	250	ug/Kgdrywt	1	10	500	70.	250
Vinyl Chloride	U	250	ug/Kgdrywt	1	10	500	44.	250
Bromomethane	U	250	ug/Kgdrywt	1	10	500	55.	250
Chloroethane	UM	250	ug/Kgdrywt	1	10	500	65.	250
Trichlorofluoromethane	U	250	ug/Kgdrywt	1	10	500	46.	250
1,1-Dichloroethene	U	120	ug/Kgdrywt	1	5	250	47.	120
Carbon Disulfide	U	120	ug/Kgdrywt	1	5	250	39.	120
Methylene Chloride	U	630	ug/Kgdrywt	1	25	1200	400	630
Acetone	UM	630	ug/Kgdrywt	1	25	1200	260	630
trans-1,2-Dichloroethene	U	120	ug/Kgdrywt	1	5	250	36.	120
Methyl tert-butyl Ether	UMM	120	ug/Kgdrywt	1	5	250	55.	120
1,1-Dichloroethane	UM	120	ug/Kgdrywt	1	5	250	86.	120
cis-1,2-Dichloroethene	UM	120	ug/Kgdrywt	1	5	250	46.	120
Chloroform	UM	120	ug/Kgdrywt	1	5	250	18.	120
Carbon Tetrachloride	UMM	120	ug/Kgdrywt	1	5	250	65.	120
1,1,1-Trichloroethane	UM	120	ug/Kgdrywt	1	5	250	21.	120
2-Butanone	UMM	630	ug/Kgdrywt	1	25	1200	300	630
Benzene	UM	120	ug/Kgdrywt	1	5	250	46.	120
1,2-Dichloroethane	UM	120	ug/Kgdrywt	1	5	250	50.	120
Trichloroethene	UMM	120	ug/Kgdrywt	1	5	250	30.	120
1,2-Dichloropropane	UMM	120	ug/Kgdrywt	1	5	250	70.	120
Bromodichloromethane	UMM	120	ug/Kgdrywt	1	5	250	30.	120
cis-1,3-Dichloropropene	UM	120	ug/Kgdrywt	1	5	250	36.	120
Toluene	UMM	120	ug/Kgdrywt	1	5	250	70.	120
4-Methyl-2-Pentanone	UM	630	ug/Kgdrywt	1	25	1200	300	630
Tetrachloroethene	UM	120	ug/Kgdrywt	1	5	250	60.	120
trans-1,3-Dichloropropene	UM	120	ug/Kgdrywt	1	5	250	43.	120
1,1,2-Trichloroethane	UMM	120	ug/Kgdrywt	1	5	250	49.	120
Dibromochloromethane	U	120	ug/Kgdrywt	1	5	250	50.	120
1,2-Dibromoethane	UM	120	ug/Kgdrywt	1	5	250	60.	120
Chlorobenzene	UM	120	ug/Kgdrywt	1	5	250	26.	120
Ethylbenzene	J	120	ug/Kgdrywt	1	5	250	33.	120
Styrene	UMM	120	ug/Kgdrywt	1	5	250	26.	120
Bromoform	UM	120	ug/Kgdrywt	1	5	250	35.	120

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-1DL
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1321.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	J	80	ug/Kgdrywt	1	5	250	46.	120
1,1,2,2-Tetrachloroethane	UMM	120	ug/Kgdrywt	1	5	250	42.	120
1,3-Dichlorobenzene	UMM	120	ug/Kgdrywt	1	5	250	31.	120
1,4-Dichlorobenzene	UMM	120	ug/Kgdrywt	1	5	250	22.	120
1,2-Dichlorobenzene	UMM	120	ug/Kgdrywt	1	5	250	39.	120
1,2-Dibromo-3-Chloropropane	UMM	120	ug/Kgdrywt	1	5	250	75.	120
1,2,4-Trichlorobenzene	UMM	120	ug/Kgdrywt	1	5	250	40.	120
1,2,4-Trimethylbenzene	UMM	120	ug/Kgdrywt	1	5	250	44.	120
1,3,5-Trimethylbenzene	U	120	ug/Kgdrywt	1	5	250	34.	120
n-Butylbenzene	JMM	110	ug/Kgdrywt	1	5	250	46.	120
sec-Butylbenzene	JM	98	ug/Kgdrywt	1	5	250	46.	120
tert-Butylbenzene	UM	120	ug/Kgdrywt	1	5	250	45.	120
m+p-Xylenes	UMM	120	ug/Kgdrywt	1	10	500	86.	120
o-Xylene	UMM	120	ug/Kgdrywt	1	5	250	65.	120
Xylenes (Total)	UMM	380	ug/Kgdrywt	1	15	750	65.	380
Naphthalene	M	300	ug/Kgdrywt	1	5	250	44.	120
1,1-Dichloropropene	UMM	120	ug/Kgdrywt	1	5	250	46.	120
1,2,3-Trichlorobenzene	UMM	120	ug/Kgdrywt	1	5	250	38.	120
1,2,3-Trichloropropane	UMM	120	ug/Kgdrywt	1	5	250	60.	120
2-Chlorotoluene	U	120	ug/Kgdrywt	1	5	250	55.	120
2,2-Dichloropropane	ULM	120	ug/Kgdrywt	1	5	250	25.	120
Bromobenzene	U	120	ug/Kgdrywt	1	5	250	37.	120
Bromochloromethane	U	120	ug/Kgdrywt	1	5	250	46.	120
Dibromomethane	UMM	120	ug/Kgdrywt	1	5	250	26.	120
Hexachlorobutadiene	UMM	120	ug/Kgdrywt	1	5	250	37.	120
n-Propylbenzene	JMM	110	ug/Kgdrywt	1	5	250	42.	120
p-Isopropyltoluene	JMM	120	ug/Kgdrywt	1	5	250	38.	120
1,3-Dichloropropane	U	120	ug/Kgdrywt	1	5	250	47.	120
2-Hexanone	UMM	630	ug/Kgdrywt	1	25	1200	240	630
4-Chlorotoluene	UMM	120	ug/Kgdrywt	1	5	250	25.	120
1,2-Dichloroethylene (Total)	UM	250	ug/Kgdrywt	1	10	500	36.	250
Methylcyclohexane	M	680	ug/Kgdrywt	1	5	250	48.	120
Freon-113	UM	120	ug/Kgdrywt	1	5	250	45.	120
1,3,5-Trichlorobenzene	UMM	120	ug/Kgdrywt	1	5	250	44.	120
Cyclohexane	JM	160	ug/Kgdrywt	1	5	250	70.	120

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-1DL
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1321.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	UM	120	ug/Kgdrywt	1	5	250	40.	120
Di-Isopropyl Ether	UM	120	ug/Kgdrywt	1	5	250	100	120
Methyl Acetate	UMM	150	ug/Kgdrywt	1	5	250	140	150
Tetrahydrofuran	UM	1200	ug/Kgdrywt	1	50	2500	230	1200
Vinyl Acetate	UMM	120	ug/Kgdrywt	1	5	250	47.	120
p-Bromofluorobenzene		107.	%					
Toluene-D8		102.	%					
1,2-Dichloroethane-D4		107.	%					
Dibromofluoromethane		98.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-2
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: T3796.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.4	ug/Kgdrywt	1	10	8.9	0.82	4.4
Chloromethane	U	4.4	ug/Kgdrywt	1	10	8.9	1.2	4.4
Vinyl Chloride	U	4.4	ug/Kgdrywt	1	10	8.9	0.77	4.4
Bromomethane	U	4.4	ug/Kgdrywt	1	10	8.9	0.98	4.4
Chloroethane	UL	4.4	ug/Kgdrywt	1	10	8.9	1.2	4.4
Trichlorofluoromethane	U	4.4	ug/Kgdrywt	1	10	8.9	0.81	4.4
1,1-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.83	2.2
Carbon Disulfide		8.5	ug/Kgdrywt	1	5	4.4	0.69	2.2
Methylene Chloride	U	11	ug/Kgdrywt	1	25	22.	7.0	11.
Acetone		130	ug/Kgdrywt	1	25	22.	4.5	11.
trans-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.63	2.2
Methyl tert-butyl Ether	UL	2.2	ug/Kgdrywt	1	5	4.4	0.98	2.2
1,1-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	1.5	2.2
cis-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.81	2.2
Chloroform	U	2.2	ug/Kgdrywt	1	5	4.4	0.31	2.2
Carbon Tetrachloride	U	2.2	ug/Kgdrywt	1	5	4.4	1.2	2.2
1,1,1-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.37	2.2
2-Butanone	U	11	ug/Kgdrywt	1	25	22.	5.2	11.
Benzene		9.5	ug/Kgdrywt	1	5	4.4	0.82	2.2
1,2-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.89	2.2
Trichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.52	2.2
1,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.2	2.2
Bromodichloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.53	2.2
cis-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.64	2.2
Toluene		10	ug/Kgdrywt	1	5	4.4	1.2	2.2
4-Methyl-2-Pentanone	U	11	ug/Kgdrywt	1	25	22.	5.2	11.
Tetrachloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	1.1	2.2
trans-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.76	2.2
1,1,2-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.86	2.2
Dibromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.89	2.2
1,2-Dibromoethane	U	2.2	ug/Kgdrywt	1	5	4.4	1.1	2.2
Chlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Ethylbenzene		75	ug/Kgdrywt	1	5	4.4	0.58	2.2
Styrene	U	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Bromoform	U	2.2	ug/Kgdrywt	1	5	4.4	0.62	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-2
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: T3796.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		43	ug/Kgdrywt	1	5	4.4	0.82	2.2
1,1,2,2-Tetrachloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.75	2.2
1,3-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.55	2.2
1,4-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.39	2.2
1,2-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.69	2.2
1,2-Dibromo-3-Chloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.3	2.2
1,2,4-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.70	2.2
1,2,4-Trimethylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.77	2.2
1,3,5-Trimethylbenzene		43	ug/Kgdrywt	1	5	4.4	0.60	2.2
n-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.82	2.2
sec-Butylbenzene		36	ug/Kgdrywt	1	5	4.4	0.81	2.2
tert-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
m+p-Xylenes		23	ug/Kgdrywt	1	10	8.9	1.5	2.2
o-Xylene		20	ug/Kgdrywt	1	5	4.4	1.2	2.2
Xylenes (Total)		42	ug/Kgdrywt	1	15	13.	1.2	6.7
Naphthalene		62	ug/Kgdrywt	1	5	4.4	0.78	2.2
1,1-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.81	2.2
1,2,3-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.68	2.2
1,2,3-Trichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.1	2.2
2-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.4	0.98	2.2
2,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
Bromobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.66	2.2
Bromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.81	2.2
Dibromomethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Hexachlorobutadiene	U	2.2	ug/Kgdrywt	1	5	4.4	0.66	2.2
n-Propylbenzene		47	ug/Kgdrywt	1	5	4.4	0.74	2.2
p-Isopropyltoluene		60	ug/Kgdrywt	1	5	4.4	0.68	2.2
1,3-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	0.84	2.2
2-Hexanone	U	11	ug/Kgdrywt	1	25	22.	4.3	11.
4-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
1,2-Dichloroethylene (Total)	U	4.4	ug/Kgdrywt	1	10	8.9	0.63	4.4
Methylcyclohexane	E	340	ug/Kgdrywt	1	5	4.4	0.85	2.2
Freon-113	U	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
1,3,5-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.77	2.2
Cyclohexane		91	ug/Kgdrywt	1	5	4.4	1.2	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-2
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: T3796.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.2	ug/Kgdrywt	1	5	4.4	0.71	2.2
Di-Isopropyl Ether	U	2.2	ug/Kgdrywt	1	5	4.4	1.9	2.2
Methyl Acetate	U	2.7	ug/Kgdrywt	1	5	4.4	2.4	2.7
Tetrahydrofuran	U	22	ug/Kgdrywt	1	50	44.	4.0	22.
Vinyl Acetate	U	2.2	ug/Kgdrywt	1	5	4.4	0.84	2.2
p-Bromofluorobenzene	*	190.	%					
Toluene-D8	*	61.6	%					
1,2-Dichloroethane-D4		108.	%					
Dibromofluoromethane		109.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-2DL
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1322.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	UL	250	ug/Kgdrywt	1	10	500	46.	250
Chloromethane	U	250	ug/Kgdrywt	1	10	500	69.	250
Vinyl Chloride	U	250	ug/Kgdrywt	1	10	500	43.	250
Bromomethane	U	250	ug/Kgdrywt	1	10	500	54.	250
Chloroethane	U	250	ug/Kgdrywt	1	10	500	64.	250
Trichlorofluoromethane	U	250	ug/Kgdrywt	1	10	500	45.	250
1,1-Dichloroethene	U	120	ug/Kgdrywt	1	5	250	46.	120
Carbon Disulfide	U	120	ug/Kgdrywt	1	5	250	39.	120
Methylene Chloride	U	620	ug/Kgdrywt	1	25	1200	390	620
Acetone	U	620	ug/Kgdrywt	1	25	1200	250	620
trans-1,2-Dichloroethene	U	120	ug/Kgdrywt	1	5	250	35.	120
Methyl tert-butyl Ether	U	120	ug/Kgdrywt	1	5	250	54.	120
1,1-Dichloroethane	U	120	ug/Kgdrywt	1	5	250	84.	120
cis-1,2-Dichloroethene	U	120	ug/Kgdrywt	1	5	250	45.	120
Chloroform	U	120	ug/Kgdrywt	1	5	250	17.	120
Carbon Tetrachloride	U	120	ug/Kgdrywt	1	5	250	64.	120
1,1,1-Trichloroethane	U	120	ug/Kgdrywt	1	5	250	21.	120
2-Butanone	U	620	ug/Kgdrywt	1	25	1200	290	620
Benzene	U	120	ug/Kgdrywt	1	5	250	46.	120
1,2-Dichloroethane	U	120	ug/Kgdrywt	1	5	250	50.	120
Trichloroethene	U	120	ug/Kgdrywt	1	5	250	29.	120
1,2-Dichloropropane	U	120	ug/Kgdrywt	1	5	250	69.	120
Bromodichloromethane	U	120	ug/Kgdrywt	1	5	250	30.	120
cis-1,3-Dichloropropene	U	120	ug/Kgdrywt	1	5	250	36.	120
Toluene	U	120	ug/Kgdrywt	1	5	250	69.	120
4-Methyl-2-Pentanone	U	620	ug/Kgdrywt	1	25	1200	290	620
Tetrachloroethene	U	120	ug/Kgdrywt	1	5	250	59.	120
trans-1,3-Dichloropropene	U	120	ug/Kgdrywt	1	5	250	43.	120
1,1,2-Trichloroethane	U	120	ug/Kgdrywt	1	5	250	48.	120
Dibromochloromethane	U	120	ug/Kgdrywt	1	5	250	50.	120
1,2-Dibromoethane	U	120	ug/Kgdrywt	1	5	250	59.	120
Chlorobenzene	U	120	ug/Kgdrywt	1	5	250	25.	120
Ethylbenzene	J	120	ug/Kgdrywt	1	5	250	32.	120
Styrene	U	120	ug/Kgdrywt	1	5	250	25.	120
Bromoform	U	120	ug/Kgdrywt	1	5	250	35.	120

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-2DL
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1322.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	J	60	ug/Kgdrywt	1	5	250	46.	120
1,1,2,2-Tetrachloroethane	U	120	ug/Kgdrywt	1	5	250	42.	120
1,3-Dichlorobenzene	U	120	ug/Kgdrywt	1	5	250	31.	120
1,4-Dichlorobenzene	U	120	ug/Kgdrywt	1	5	250	22.	120
1,2-Dichlorobenzene	U	120	ug/Kgdrywt	1	5	250	39.	120
1,2-Dibromo-3-Chloropropane	U	120	ug/Kgdrywt	1	5	250	74.	120
1,2,4-Trichlorobenzene	U	120	ug/Kgdrywt	1	5	250	39.	120
1,2,4-Trimethylbenzene	U	120	ug/Kgdrywt	1	5	250	43.	120
1,3,5-Trimethylbenzene	U	120	ug/Kgdrywt	1	5	250	33.	120
n-Butylbenzene	J	81	ug/Kgdrywt	1	5	250	46.	120
sec-Butylbenzene	J	70	ug/Kgdrywt	1	5	250	45.	120
tert-Butylbenzene	U	120	ug/Kgdrywt	1	5	250	44.	120
m+p-Xylenes	U	120	ug/Kgdrywt	1	10	500	84.	120
o-Xylene	U	120	ug/Kgdrywt	1	5	250	64.	120
Xylenes (Total)	U	370	ug/Kgdrywt	1	15	740	64.	370
Naphthalene		410	ug/Kgdrywt	1	5	250	44.	120
1,1-Dichloropropene	U	120	ug/Kgdrywt	1	5	250	45.	120
1,2,3-Trichlorobenzene	U	120	ug/Kgdrywt	1	5	250	38.	120
1,2,3-Trichloropropane	U	120	ug/Kgdrywt	1	5	250	59.	120
2-Chlorotoluene	U	120	ug/Kgdrywt	1	5	250	54.	120
2,2-Dichloropropane	UL	120	ug/Kgdrywt	1	5	250	25.	120
Bromobenzene	U	120	ug/Kgdrywt	1	5	250	37.	120
Bromochloromethane	U	120	ug/Kgdrywt	1	5	250	45.	120
Dibromomethane	U	120	ug/Kgdrywt	1	5	250	25.	120
Hexachlorobutadiene	U	120	ug/Kgdrywt	1	5	250	37.	120
n-Propylbenzene	J	86	ug/Kgdrywt	1	5	250	41.	120
p-Isopropyltoluene	J	140	ug/Kgdrywt	1	5	250	38.	120
1,3-Dichloropropane	U	120	ug/Kgdrywt	1	5	250	46.	120
2-Hexanone	U	620	ug/Kgdrywt	1	25	1200	240	620
4-Chlorotoluene	U	120	ug/Kgdrywt	1	5	250	24.	120
1,2-Dichloroethylene (Total)	U	250	ug/Kgdrywt	1	10	500	35.	250
Methylcyclohexane		420	ug/Kgdrywt	1	5	250	48.	120
Freon-113	U	120	ug/Kgdrywt	1	5	250	44.	120
1,3,5-Trichlorobenzene	U	120	ug/Kgdrywt	1	5	250	43.	120
Cyclohexane	J	110	ug/Kgdrywt	1	5	250	69.	120

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-2DL
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1322.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	120	ug/Kgdrywt	1	5	250	40.	120
Di-Isopropyl Ether	U	120	ug/Kgdrywt	1	5	250	100	120
Methyl Acetate	U	150	ug/Kgdrywt	1	5	250	130	150
Tetrahydrofuran	U	1200	ug/Kgdrywt	1	50	2500	220	1200
Vinyl Acetate	U	120	ug/Kgdrywt	1	5	250	46.	120
p-Bromofluorobenzene		106.	%					
Toluene-D8		97.4	%					
1,2-Dichloroethane-D4		101.	%					
Dibromofluoromethane		93.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-3
Client ID: SITE4TS-EB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1310.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	UL	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	J	3.4	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-3
Client ID: SITE4TS-EB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1310.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
1,1-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2,3-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.27	0.50
1,2,3-Trichloropropane	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,3-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Chlorotoluene	U	0.50	ug/L	1	1	1.0	0.20	0.50
2,2-Dichloropropane	UL	0.50	ug/L	1	1	1.0	0.25	0.50
Bromobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
Bromochloromethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
Dibromomethane	U	0.50	ug/L	1	1	1.0	0.46	0.50
Hexachlorobutadiene	U	0.75	ug/L	1	1	1.0	0.52	0.75
m+p-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
n-Propylbenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
o-xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
p-Isopropyltoluene	U	0.50	ug/L	1	1	1.0	0.25	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
4-Chlorotoluene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
Xylenes (Total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Ethylbenzene	U	2.5	ug/L	1	5	5.0	0.65	2.5
Benzene	U	2.5	ug/L	1	5	5.0	0.93	2.5
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
1,3,5-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Diethyl Ether	U	0.50	ug/L	1	1	1.0	0.40	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-3
Client ID: SITE4TS-EB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1310.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164386

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
Tetrahydrofuran	U	5.0	ug/L	1	10	10.	1.7	5.0
Vinyl Acetate	U	0.50	ug/L	1	1	1.0	0.40	0.50
P-Bromofluorobenzene		88.4	%					
Toluene-d8		93.0	%					
1,2-Dichloroethane-d4		101.	%					
Dibromofluoromethane		93.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-4
Client ID: SITE4TS-TB-SOIL
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: T3794.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 100
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	U	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	UL	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
Methylene Chloride	U	12	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone	J	8.0	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	UL	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-4
Client ID: SITE4TS-TB-SOIL
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: T3794.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 100
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylenes	U	2.5	ug/Kgdrywt	1	10	10.	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Xylenes (Total)	U	7.5	ug/Kgdrywt	1	15	15.	1.3	7.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
1,1-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
1,2,3-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,2,3-Trichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
2,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.50	2.5
Bromobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
Bromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Dibromomethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Hexachlorobutadiene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
n-Propylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.83	2.5
p-Isopropyltoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,3-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
2-Hexanone	U	12	ug/Kgdrywt	1	25	25.	4.8	12.
4-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.49	2.5
1,2-Dichloroethylene (Total)	U	5.0	ug/Kgdrywt	1	10	10.	0.71	5.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
1,3,5-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-4
Client ID: SITE4TS-TB-SOIL
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: T3794.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 08-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG164407

Analysis Date: 08-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 100
Report Date: 22-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	0.80	2.5
Di-Isopropyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Tetrahydrofuran	U	25	ug/Kgdrywt	1	50	50.	4.5	25.
Vinyl Acetate	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
p-Bromofluorobenzene		110.	%					
Toluene-D8		113.	%					
1,2-Dichloroethane-D4		105.	%					
Dibromofluoromethane		110.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1230.D P1229.D P1228.D P1227.D P1232.D P1231.D **Column ID:**
Calibration Date(s): 03-JUN-15 13:58 03-JUN-15 16:06

	1.0000 Level 1	5.0000 Level 2	20.0000 Level 3	50.0000 Level 4	100.0000 Level 5	200.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.49456	0.46945	0.47211	0.51933	0.46090	0.47901	AVG		0.48256		4.40416	15.00000	O
Chloromethane	1.00267	1.15843	0.93704	1.00406	0.96327	0.99899	AVG		1.01074		7.63113	15.00000	O
Vinyl chloride	0.70198	0.80649	0.71663	0.78993	0.75099	0.75163	AVG		0.75294		5.36433	15.00000	O
Bromomethane	0.25759	0.38409	0.32108	0.33701	0.33809	0.31304	AVG		0.32515		12.68718	15.00000	O
Chloroethane	0.46165	0.55601	0.46918	0.45732	0.25733	0.21737	AVG		0.40314		33.25292	15.00000	W(
Trichlorofluoromethane	0.93732	0.87681	0.87022	0.93119	0.88919	0.93150	AVG		0.90604		3.37702	15.00000	O
Diethyl Ether	0.55899	0.61478	0.60671	0.63140	0.60952	0.61808	AVG		0.60658		4.09792	15.00000	O
1,1-Dichloroethene	0.45423	0.52112	0.45766	0.48596	0.50290	0.50355	AVG		0.48757		5.52240	15.00000	O
Carbon Disulfide	1.53930	1.87224	1.66144	1.70493	1.67218	1.59921	AVG		1.67488		6.76288	15.00000	O
Freon-113	0.29259	0.32391	0.30804	0.32382	0.30703	0.30404	AVG		0.30991		3.91514	15.00000	O
Methylene Chloride	0.75122	0.73499	0.63268	0.64684	0.64423	0.62867	AVG		0.67310		8.15462	15.00000	O
Acetone	0.27486	0.25881	0.25405	0.27146	0.26947	0.26841	AVG		0.26618		3.00735	15.00000	O
trans-1,2-Dichloroethene	0.63291	0.69818	0.56780	0.58876	0.57400	0.56601	AVG		0.60461		8.62250	15.00000	O
Methyl tert-butyl ether	1.63715	1.80875	1.81333	1.88626	1.83149	1.64460	AVG		1.77026		5.87307	15.00000	O
Di-isopropyl ether	1.98356	2.31496	2.17693	2.19840	2.13479	2.02903	AVG		2.13961		5.61628	15.00000	O
1,1-Dichloroethane	1.11936	1.30007	1.09252	1.09614	1.08254	1.06154	AVG		1.12536		7.78723	15.00000	O
Vinyl Acetate	0.69964	0.77677	0.84009	0.88367	0.94076	0.88205	AVG		0.83716		10.34184	15.00000	O
cis-1,2-Dichloroethene	0.63454	0.73515	0.62530	0.62474	0.62410	0.62630	AVG		0.64502		6.87094	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
2,2-Dichloropropane	0.51518	0.64493	0.58956	0.62684	0.63580	0.63892	AVG		0.60854		8.18350	15.00000	O
Bromochloromethane	0.25400	0.27373	0.26712	0.25428	0.23607	0.23658	AVG		0.25363		6.07222	15.00000	O
Chloroform	1.08205	1.20806	1.02844	1.04186	1.00712	0.98066	AVG		1.05803		7.65535	15.00000	O
Carbon Tetrachloride	0.32990	0.38728	0.34642	0.36476	0.35889	0.34901	AVG		0.35604		5.45385	15.00000	O
Tetrahydrofuran	0.25875	0.25497	0.25657	0.24786	0.25937	0.25120	AVG		0.25479		1.76230	15.00000	O
1,1,1-Trichloroethane	0.81055	0.98916	0.85952	0.88676	0.87117	0.83619	AVG		0.87556		7.05595	15.00000	O
1,1-Dichloropropene	0.43380	0.49789	0.42181	0.41273	0.41074	0.37931	AVG		0.42605		9.29156	15.00000	O
2-Butanone	0.38061	0.39025	0.38634	0.36551	0.38555	0.36357	AVG		0.37864		3.00025	15.00000	O
Benzene	1.39086	1.54805	1.28724	1.27939	1.25659	1.12731	AVG		1.31491		10.79520	15.00000	O
Cyclohexane	1.05911	1.10100	1.02269	1.07391	1.04020	0.99187	AVG		1.04813		3.68428	15.00000	O
1,2-Dichloroethane	0.50109	0.47523	0.43787	0.45450	0.42136	0.40132	AVG		0.44856		8.09449	15.00000	O
Trichloroethene	0.32179	0.36363	0.30206	0.29657	0.29378	0.27882	AVG		0.30944		9.68671	15.00000	O
Dibromomethane	0.18722	0.19282	0.18797	0.19560	0.19316	0.18778	AVG		0.19076		1.85544	15.00000	O
1,2-Dichloropropane	0.29670	0.36269	0.31625	0.31185	0.31852	0.30524	AVG		0.31854		7.23131	15.00000	O
Bromodichloromethane	0.40561	0.46761	0.42641	0.43794	0.43849	0.42520	AVG		0.43354		4.73313	15.00000	O
cis-1,3-dichloropropene	0.46142	0.51200	0.49403	0.52528	0.53349	0.51994	AVG		0.50769		5.18925	15.00000	O
Toluene	0.86976	0.98685	0.81332	0.82865	0.82188	0.74971	AVG		0.84503		9.41071	15.00000	O
4-methyl-2-pentanone	0.38336	0.41407	0.42515	0.40056	0.39161	0.31908	AVG		0.38897		9.61620	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1230.D P1229.D P1228.D **Column ID:**
P1227.D P1232.D P1231.D **Calibration Date(s):** 03-JUN-15 13:58
03-JUN-15 16:06

Tetrachloroethene	0.28079	0.31912	0.26203	0.25825	0.25685	0.24349	AVG		0.27009		9.94358	15.00000	O
trans-1,3-Dichloropropene	0.36759	0.42842	0.43595	0.45123	0.45329	0.44368	AVG		0.43003		7.43599	15.00000	O
1,1,2-Trichloroethane	0.27034	0.24943	0.25235	0.25083	0.25087	0.24355	AVG		0.25289		3.59096	15.00000	O
Dibromochloromethane	0.33359	0.35857	0.35520	0.36569	0.35838	0.34861	AVG		0.35334		3.15446	15.00000	O
1,3-Dichloropropane	0.64124	0.65935	0.62907	0.62968	0.61157	0.57712	AVG		0.62467		4.50236	15.00000	O
1,2-Dibromoethane	0.27547	0.30100	0.29850	0.30327	0.31078	0.30717	AVG		0.29937		4.17415	15.00000	O
2-Hexanone	0.29669	0.32562	0.34378	0.32477	0.33069	0.28117	AVG		0.31712		7.37531	15.00000	O
Chlorobenzene	1.03224	1.07469	0.91585	0.90784	0.87163	0.80483	AVG		0.93451		10.81068	15.00000	O
Ethylbenzene	0.56064	0.64679	0.53803	0.53419	0.52385	0.48746	AVG		0.54849		9.80319	15.00000	O
Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+0	15.00000	M
m+p-Xylenes	0.64863	0.78222	0.65299	0.64409	0.59952	0.50393	AVG		0.63856		14.11637	15.00000	O
o-Xylene	0.59464	0.70537	0.61017	0.60688	0.60385	0.55783	AVG		0.61312		8.00464	15.00000	O
Styrene	1.01510	1.23218	1.11781	1.13867	1.10441	0.95532	AVG		1.09392		8.88391	15.00000	O
Bromoform	0.18585	0.20565	0.22493	0.23086	0.23746	0.24845	AVG		0.22220		10.26258	15.00000	O
Isopropylbenzene	3.04677	3.55484	3.00867	2.96749	2.76001	2.32076	AVG		2.94309		13.68175	15.00000	O
Bromobenzene	0.72783	0.75342	0.71048	0.72975	0.71200	0.71400	AVG		0.72458		2.25749	15.00000	O
N-Propylbenzene	3.70290	4.38164	3.67403	3.52032	3.18466	+++++	AVG		3.69271		11.82669	15.00000	O
1,1,2,2-Tetrachloroethane	0.96774	1.00415	0.97496	0.96278	0.97122	0.96624	AVG		0.97452		1.55038	15.00000	O
1,3,5-Trimethylbenzene	2.74667	3.43116	2.85952	2.82456	2.60011	2.11282	AVG		2.76247		15.43539	15.00000	W
2-Chlorotoluene	2.23518	2.59692	2.20169	2.19335	2.05785	1.80705	AVG		2.18201		11.80054	15.00000	O
1,2,3-Trichloropropane	0.76567	0.81594	0.78001	0.76820	0.76058	0.74786	AVG		0.77304		3.03677	15.00000	O
4-Chlorotoluene	2.25766	2.67886	2.30368	2.24788	2.08449	1.79152	AVG		2.22735		13.03354	15.00000	O
tert-Butylbenzene	2.30893	2.91196	2.54327	2.54649	2.41078	2.15432	AVG		2.47929		10.44232	15.00000	O
1,2,4-Trimethylbenzene	2.72556	3.47076	2.93994	2.88428	2.63464	+++++	AVG		2.93104		11.10315	15.00000	O
P-Isopropyltoluene	2.71322	3.34097	2.83585	2.77465	2.56555	2.06196	AVG		2.71537		15.26267	15.00000	W
1,3-Dichlorobenzene	1.45662	1.57672	1.40932	1.41451	1.35544	1.24621	AVG		1.40980		7.75686	15.00000	O
1,4-Dichlorobenzene	1.69832	1.78994	1.55898	1.56697	1.49823	1.33251	AVG		1.57416		10.10118	15.00000	O
N-Butylbenzene	2.76354	3.47005	2.87897	2.81493	2.53149	+++++	AVG		2.89180		12.06266	15.00000	O
sec-Butylbenzene	3.26256	3.88520	3.23235	3.19042	2.90564	+++++	AVG		3.29523		10.89804	15.00000	O
1,2-Dichlorobenzene	1.47856	1.51132	1.36308	1.40917	1.36929	1.24337	AVG		1.39580		6.82526	15.00000	O
1,2-Dibromo-3-Chloropropane	0.20166	0.23650	0.22673	0.23530	0.25255	0.24675	AVG		0.23325		7.69254	15.00000	O
1,3,5-Trichlorobenzene	0.99941	1.24986	1.08272	1.07875	1.03460	0.95607	AVG		1.06690		9.53517	15.00000	O
Hexachlorobutadiene	0.29036	0.33289	0.30252	0.31329	0.30416	0.28703	AVG		0.30504		5.46687	15.00000	O
1,2,4-Trichlorobenzene	1.12033	1.19168	1.07169	1.09574	1.05622	0.96210	AVG		1.08296		7.01179	15.00000	O
Naphthalene	3.51974	3.92464	3.98076	3.78653	3.45057	2.64064	AVG		3.55048		13.91022	15.00000	O
1,2,3-Trichlorobenzene	1.11018	1.12245	1.04478	1.06922	1.02520	0.93171	AVG		1.05059		6.57735	15.00000	O
Methyl Acetate	0.68564	0.68956	0.63700	0.65473	0.70772	0.67520	AVG		0.67497		3.77794	15.00000	O
Methylcyclohexane	0.97139	0.98986	0.96607	0.98832	0.96872	0.90829	AVG		0.96544		3.08406	15.00000	O
Dibromofluoromethane	0.52619	0.58336	0.51437	0.51023	0.49732	0.49257	AVG		0.52067		6.33760	15.00000	

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1230.D P1229.D P1228.D **Column ID:**
P1227.D P1232.D P1231.D **Calibration Date(s):** 03-JUN-15 13:58
03-JUN-15 16:06

1,2-Dichloroethane-D4	0.74752	0.77493	0.72349	0.72115	0.65921	0.63171	AVG		0.70967		7.62435	15.00000	
Toluene-D8	1.12097	1.37677	1.12876	1.10365	1.06869	0.97226	AVG		1.12852		11.90843	15.00000	
P-Bromofluorobenzene	0.46732	0.50453	0.44161	0.44517	0.44676	0.43500	AVG		0.45673		5.65042	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-p.i\P060315.b\P1233A.D
Report Date: 09-Jun-2015 12:46

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG164075-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-p.i\P060315.b\P826A07.m
Misc Info: WG164075,WG164075-4

Client SDG: WG164075
Fraction: VOA
Client Smp ID: Independent Source
Operator: JSS
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	91.2	182.52*	80-120
	2 Chloromethane	50.0	56.1	112.23	80-120
	3 Vinyl chloride	50.0	56.2	112.33	80-120
	4 Bromomethane	50.0	64.8	129.51*	80-120
	5 Chloroethane	50.0	59.5	119.04	80-120
	6 Trichlorofluoromet	50.0	53.2	106.42	80-120
	7 Diethyl Ether	50.0	47.7	95.45	80-120
	8 Tertiary-butyl alc	250	239	95.46	80-120
	9 1,1-Dichloroethene	50.0	56.6	113.22	80-120
	10 Carbon Disulfide	50.0	60.7	121.47*	80-120
	11 Freon-113	50.0	45.6	91.30	80-120
	12 Iodomethane	50.0	69.0	138.10*	80-120
	13 Acrolein	250	262	104.76	80-120
	14 Methylene Chloride	50.0	48.8	97.70	80-120
	15 Acetone	50.0	55.0	110.03	80-120
	16 Isobutyl Alcohol	1000	971	97.12	80-120
	17 trans-1,2-Dichloro	50.0	50.1	100.23	80-120
	18 Allyl Chloride	50.0	52.6	105.17	80-120
	19 Methyl tert-butyl	100	107	107.26	80-120
	20 Acetonitrile	500	498	99.71	80-120
	21 Di-isopropyl ether	50.0	49.0	98.01	80-120
	22 Chloroprene	50.0	47.1	94.25	80-120
	23 Propionitrile	500	504	100.78	80-120
	24 Methacrylonitrile	500	515	102.94	80-120
	25 1,1-Dichloroethane	50.0	51.0	102.07	80-120
	26 Acrylonitrile	250	260	103.91	80-120
	27 Ethyl tertiary-but	50.0	50.9	101.77	80-120
	28 Vinyl Acetate	50.0	57.9	115.76	80-120
	29 cis-1,2-Dichloroet	50.0	49.2	98.33	80-120
M	30 1,2-Dichloroethyle	100	99.3	99.28	80-120
	31 Methyl Methacrylat	50.0	53.2	106.37	80-120
	32 2,2-Dichloropropan	50.0	63.3	126.67*	80-120
	33 Bromochloromethane	50.0	49.3	98.59	80-120
	34 Chloroform	50.0	50.1	100.22	80-120
	35 Carbon Tetrachlori	50.0	50.5	101.06	80-120
	36 Tetrahydrofuran	50.0	53.4	106.86	80-120
	38 1,1,1-Trichloroeth	50.0	50.5	101.00	80-120
	39 1,1-Dichloropropen	50.0	53.2	106.33	80-120
	40 2-Butanone	50.0	55.8	111.57	80-120
	41 Benzene	50.0	49.8	99.60	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P060315.b\P1233A.D
Report Date: 09-Jun-2015 12:46

	SPIKE	COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	43	Cyclohexane	50.0	48.5	96.97	80-120
	44	Ethyl Methacrylate	50.0	51.7	103.45	80-120
	46	Tertiary-amyl meth	50.0	51.7	103.34	80-120
	47	1,2-Dichloroethane	50.0	50.8	101.56	80-120
	48	Trichloroethene	50.0	50.4	100.85	80-120
	50	Dibromomethane	50.0	50.9	101.80	80-120
	51	1,2-Dichloropropan	50.0	53.1	106.18	80-120
	52	Bromodichlorometha	50.0	51.8	103.62	80-120
	53	cis-1,3-dichloropr	50.0	53.3	106.69	80-120
	54	1,4-Dioxane	1000	1080	108.54	80-120
	56	2-Chloroethylvinyl	50.0	68.4	136.84*	80-120
	57	Toluene	50.0	49.0	98.08	80-120
	58	4-methyl-2-pentano	50.0	58.6	117.21	80-120
	59	Tetrachloroethene	50.0	48.9	97.83	80-120
	60	trans-1,3-Dichloro	50.0	56.7	113.49	80-120
	61	1,1,2-Trichloroeth	50.0	51.6	103.16	80-120
	62	Dibromochlorometha	50.0	53.0	105.98	80-120
	63	1,3-Dichloropropan	50.0	52.9	105.82	80-120
	64	1,2-Dibromoethane	50.0	52.8	105.67	80-120
	65	2-Hexanone	50.0	59.5	119.04	80-120
	67	Chlorobenzene	50.0	53.1	106.21	80-120
	152	1-Chlorohexane	50.0	50.3	100.63	80-120
	68	Ethylbenzene	50.0	49.6	99.31	80-120
	69	1,1,1,2-Tetrachlor	50.0	51.6	103.20	80-120
M	70	Xylenes (total)	150	159	105.92	80-120
	71	m+p-Xylenes	100	105	104.66	80-120
	72	o-Xylene	50.0	54.2	108.43	80-120
	73	Styrene	50.0	53.3	106.60	80-120
	74	Bromoform	50.0	52.2	104.35	80-120
	75	Isopropylbenzene	50.0	55.1	110.19	80-120
	77	cis-1,4-Dichloro-2	50.0	54.7	109.38	80-120
	78	trans-1,4-Dichloro	50.0	56.1	112.21	80-120
	79	Bromobenzene	50.0	52.0	104.08	80-120
	80	N-Propylbenzene	50.0	53.2	106.42	80-120
	81	1,1,2,2-Tetrachlor	50.0	53.3	106.59	80-120
	82	1,3,5-Trimethylben	50.0	51.0	102.03	80-120
	83	2-Chlorotoluene	50.0	54.9	109.85	80-120
	84	1,2,3-Trichloropro	50.0	54.8	109.63	80-120
	85	4-Chlorotoluene	50.0	55.9	111.76	80-120
	86	tert-Butylbenzene	50.0	54.9	109.76	80-120
	87	Pentachloroethane	50.0	45.5	90.96	80-120
	88	1,2,4-Trimethylben	50.0	49.9	99.84	80-120
	89	P-Isopropyltoluene	50.0	56.6	113.31	80-120
	90	1,3-Dichlorobenzen	50.0	55.5	110.97	80-120
	92	1,4-Dichlorobenzen	50.0	49.8	99.62	80-120
	93	N-Butylbenzene	50.0	50.8	101.60	80-120
	94	sec-Butylbenzene	50.0	53.0	106.10	80-120
	95	1,2-Dichlorobenzen	50.0	54.1	108.27	80-120
	96	1,2-Dibromo-3-Chlo	50.0	58.6	117.21	80-120
	97	1,3,5-Trichloroben	50.0	49.7	99.47	80-120
	98	Hexachlorobutadien	50.0	53.8	107.66	80-120
	99	1,2,4-Trichloroben	50.0	52.1	104.15	80-120
	100	1,2,3-Trimethylben	50.0	47.3	94.62	80-120
	101	Naphthalene	50.0	56.1	112.14	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P060315.b\P1233A.D
Report Date: 09-Jun-2015 12:46

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	52.2	104.33	80-120
103 Methyl Acetate	50.0	50.8	101.51	80-120
104 Methylcyclohexane	50.0	48.3	96.61	80-120
M 153 Total Alkylbenzene	350	370	105.58	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	49.5	99.02	68-128
$ 45 1,2-Dichloroethane	50.0	48.8	97.51	67-135
$ 55 Toluene-D8	50.0	49.2	98.35	65-128
$ 76 P-Bromofluorobenze	50.0	48.2	96.38	56-133

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-T
Lab File IDs : T3786.D T3785.D T3784.D T3783.D T3788.D T3787.D **Column ID:**
Calibration Date(s): 08-JUN-15 10:43 08-JUN-15 13:56

	5.0000 Level 1	10.0000 Level 2	20.0000 Level 3	50.0000 Level 4	100.0000 Level 5	200.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.68191	0.70406	0.71707	0.66452	0.57203	0.61389	AVG		0.65891		8.46542	15.00000	O
Chloromethane	1.14150	0.95764	1.11344	0.96632	0.86395	0.97996	AVG		1.00380		10.4145	15.00000	O
Vinyl chloride	0.87016	0.91169	0.93668	0.86119	0.72036	0.80087	AVG		0.85016		9.27265	15.00000	O
Bromomethane	20278	36844	68310	132339	354477	686038	LNR	-0.01163	0.47424		0.99782	0.99000	O
Chloroethane	0.27507	0.29418	0.27799	0.28815	0.25198	0.27124	AVG		0.27643		5.31980	15.00000	O
Trichlorofluoromethane	1.08564	0.98831	0.88517	0.77523	0.52421	0.62234	AVG		0.81348		26.4481	15.00000	W
Diethyl Ether	0.68975	0.71913	0.73070	0.69109	0.59120	0.64975	AVG		0.67860		7.54565	15.00000	O
1,1-Dichloroethene	0.67952	0.71142	0.71405	0.66954	0.61612	0.68628	AVG		0.67949		5.25499	15.00000	O
Carbon Disulfide	1.82577	2.06470	2.05997	1.97582	1.76409	1.87593	AVG		1.92771		6.49664	15.00000	O
Freon-113	0.41785	0.46153	0.46275	0.41103	0.39855	0.41708	AVG		0.42813		6.36179	15.00000	O
Methylene Chloride	1.05191	1.01703	0.94435	0.89868	0.79405	0.85729	AVG		0.92722		10.4945	15.00000	O
Acetone	0.25089	0.22796	0.24546	0.25133	0.17429	0.18860	AVG		0.22309		15.0877	15.00000	W
trans-1,2-Dichloroethene	0.79069	0.76717	0.79007	0.73634	0.67544	0.74249	AVG		0.75037		5.76563	15.00000	O
Methyl tert-butyl ether	34111	71099	191544	556953	1429781	2919233	LNR	0.20833	1.03727		0.99846	0.99000	O
Di-isopropyl ether	1.67782	1.82590	2.14543	2.31408	2.06128	2.33126	AVG		2.05930		12.7797	15.00000	O
1,1-Dichloroethane	1.41190	1.43068	1.46567	1.39394	1.25190	1.36414	AVG		1.38637		5.35286	15.00000	O
Vinyl Acetate	15349	37372	120024	363257	693696	1551362	LNR	0.07440	0.63508		0.99475	0.99000	O
cis-1,2-Dichloroethene	0.90664	0.95814	0.96056	0.91937	0.85411	0.92105	AVG		0.91998		4.24384	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+	15.00000	M
2,2-Dichloropropane	0.63134	0.80240	0.83941	0.85614	0.77891	0.90536	AVG		0.80226		11.7819	15.00000	O
Bromochloromethane	0.36287	0.39387	0.39763	0.36954	0.33525	0.36739	AVG		0.37109		6.13527	15.00000	O
Chloroform	1.36179	1.40669	1.41505	1.35226	1.20282	1.30988	AVG		1.34141		5.81454	15.00000	O
Carbon Tetrachloride	0.49286	0.53862	0.51681	0.47505	0.47526	0.50966	AVG		0.50138		4.99951	15.00000	O
Tetrahydrofuran	0.21071	0.22371	0.27707	0.28737	0.21246	0.23127	AVG		0.24043		13.8879	15.00000	O
1,1,1-Trichloroethane	0.99421	1.06578	1.12493	1.08691	1.00259	1.09088	AVG		1.06088		4.90636	15.00000	O
1,1-Dichloropropene	0.55537	0.58332	0.63091	0.59592	0.58849	0.60719	AVG		0.59353		4.24598	15.00000	O
2-Butanone	43004	90126	237144	633289	1185335	2395737	LNR	-0.12622	0.33266		0.99330	0.99000	O
Benzene	1.78468	1.81657	1.85115	1.76565	1.72087	1.73907	AVG		1.77966		2.72952	15.00000	O
Cyclohexane	1.04403	1.08170	1.18266	1.16964	1.01743	1.10858	AVG		1.10067		6.03197	15.00000	O
1,2-Dichloroethane	0.59520	0.62818	0.61612	0.54748	0.50152	0.54526	AVG		0.57229		8.53290	15.00000	O
Trichloroethene	0.42325	0.44415	0.45029	0.42966	0.43522	0.45775	AVG		0.44005		2.96065	15.00000	O
Dibromomethane	0.27950	0.29135	0.28945	0.26664	0.25722	0.27305	AVG		0.27620		4.79624	15.00000	O
1,2-Dichloropropane	0.44162	0.47039	0.47319	0.45841	0.44103	0.47719	AVG		0.46030		3.47223	15.00000	O
Bromodichloromethane	0.52669	0.59877	0.59395	0.56463	0.54231	0.59248	AVG		0.56981		5.30997	15.00000	O
cis-1,3-dichloropropene	0.55006	0.60199	0.66928	0.66521	0.66561	0.72798	AVG		0.64669		9.57089	15.00000	O
Toluene	1.13717	1.17322	1.11159	1.05080	1.05770	1.09486	AVG		1.10422		4.24895	15.00000	O
4-methyl-2-pentanone	0.37819	0.41899	0.45834	0.45011	0.37713	0.36888	AVG		0.40861		9.66543	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-T
Lab File IDs : T3786.D T3785.D T3784.D **Column ID:**
T3783.D T3788.D T3787.D **Calibration Date(s):** 08-JUN-15 10:43
08-JUN-15 13:56

Tetrachloroethene	0.34716	0.37169	0.35542	0.33398	0.37398	0.38638	AVG		0.36144		5.36263	15.00000	O
trans-1,3-Dichloropropene	0.44946	0.49894	0.54080	0.54460	0.54002	0.60097	AVG		0.52913		9.60455	15.00000	O
1,1,2-Trichloroethane	0.32756	0.34270	0.35798	0.34547	0.33390	0.35522	AVG		0.34380		3.43456	15.00000	O
Dibromochloromethane	0.39333	0.40481	0.44110	0.43894	0.47118	0.48844	AVG		0.43963		8.34926	15.00000	O
1,3-Dichloropropane	0.66111	0.70904	0.77918	0.73830	0.75618	0.76641	AVG		0.73504		5.94014	15.00000	O
1,2-Dibromoethane	0.35013	0.39850	0.40036	0.38400	0.37890	0.40623	AVG		0.38635		5.31935	15.00000	O
2-Hexanone	0.29239	0.31165	0.36057	0.33676	0.29538	0.27964	AVG		0.31273		9.78019	15.00000	O
Chlorobenzene	1.34955	1.37283	1.34817	1.21670	1.25400	1.24363	AVG		1.29748		5.14422	15.00000	O
Ethylbenzene	0.70825	0.70502	0.71964	0.64982	0.68771	0.70128	AVG		0.69529		3.53260	15.00000	O
Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.81166	0.91157	0.88527	0.79988	0.80494	0.77547	AVG		0.83147		6.48579	15.00000	O
o-Xylene	0.76596	0.83774	0.85836	0.78502	0.80752	0.82802	AVG		0.81377		4.22729	15.00000	O
Styrene	1.37640	1.46596	1.46747	1.34183	1.36284	1.33692	AVG		1.39190		4.28802	15.00000	O
Bromoform	0.25435	0.28551	0.30633	0.30305	0.32289	0.34348	AVG		0.30260		10.1498	15.00000	O
Isopropylbenzene	3.40253	3.63954	3.64873	3.07955	3.35324	3.15821	AVG		3.38030		7.00394	15.00000	O
Bromobenzene	0.99539	1.02002	1.00576	0.85323	0.99420	1.00751	AVG		0.97935		6.38122	15.00000	O
N-Propylbenzene	4.35911	4.45921	4.54107	3.75371	3.93812	3.55839	AVG		4.10160		9.93442	15.00000	O
1,1,2,2-Tetrachloroethane	1.06852	1.03794	1.15871	0.97410	1.04203	1.03572	AVG		1.05284		5.74375	15.00000	O
1,3,5-Trimethylbenzene	3.40253	3.63954	3.64873	3.07955	3.35324	3.15821	AVG		3.38030		7.00394	15.00000	O
2-Chlorotoluene	2.65712	2.68976	2.76691	2.26361	2.45855	2.37829	AVG		2.53571		7.82200	15.00000	O
1,2,3-Trichloropropane	0.81242	0.83507	0.87027	0.76083	0.79859	0.79991	AVG		0.81285		4.55951	15.00000	O
4-Chlorotoluene	2.83047	2.89035	2.91564	2.42669	2.60447	2.48723	AVG		2.69247		7.93994	15.00000	O
tert-Butylbenzene	2.93241	3.11909	3.27150	2.75340	3.09751	3.00000	AVG		3.02899		5.86398	15.00000	O
1,2,4-Trimethylbenzene	2.99195	3.09590	3.29040	2.74344	3.02108	2.88393	AVG		3.00445		6.19498	15.00000	O
P-Isopropyltoluene	3.51743	3.50904	3.65863	3.05241	3.32482	3.08659	AVG		3.35815		7.37586	15.00000	O
1,3-Dichlorobenzene	1.93151	1.91615	1.96057	1.62319	1.83142	1.80439	AVG		1.84454		6.72495	15.00000	O
1,4-Dichlorobenzene	2.10239	2.04934	2.05686	1.68072	1.86969	1.82602	AVG		1.93084		8.56173	15.00000	O
N-Butylbenzene	3.36004	3.50926	3.63523	2.95225	3.14246	2.88693	AVG		3.24769		9.33673	15.00000	O
sec-Butylbenzene	3.97621	4.20013	4.28212	3.52155	3.80353	3.44760	AVG		3.87186		8.90468	15.00000	O
1,2-Dichlorobenzene	1.93313	1.88975	1.90648	1.59748	1.79501	1.74536	AVG		1.81120		7.00081	15.00000	O
1,2-Dibromo-3-Chloropropane	0.19126	0.20329	0.21641	0.18583	0.19838	0.20576	AVG		0.20016		5.44041	15.00000	O
1,3,5-Trichlorobenzene	1.58531	1.52669	1.51893	1.40551	1.31055	1.40400	AVG		1.45850		6.99548	15.00000	O
Hexachlorobutadiene	0.70116	0.70378	0.69842	0.58101	0.70200	0.69939	AVG		0.68096		7.19581	15.00000	O
1,2,4-Trichlorobenzene	1.32466	1.35469	1.45841	1.17590	1.37744	1.36424	AVG		1.34256		6.93541	15.00000	O
Naphthalene	2.88070	2.88698	3.43971	2.69723	3.06862	2.70237	AVG		2.94593		9.45329	15.00000	O
1,2,3-Trichlorobenzene	1.25246	1.26197	1.36317	1.09263	1.30284	1.26901	AVG		1.25701		7.16699	15.00000	O
Methyl Acetate	0.55812	0.59054	0.62104	0.65924	0.43556	0.48914	AVG		0.55894		14.9709	15.00000	O
Methylcyclohexane	1.00310	1.15878	1.21180	1.24558	1.15417	1.26070	AVG		1.17235		7.99111	15.00000	O
Dibromofluoromethane	0.80648	0.76363	0.71627	0.76090	0.63716	0.64630	AVG		0.72179		9.46637	15.00000	

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-T
Lab File IDs : T3786.D T3785.D T3784.D **Column ID:**
T3783.D T3788.D T3787.D **Calibration Date(s):** 08-JUN-15 10:43
08-JUN-15 13:56

1,2-Dichloroethane-D4	0.95852	0.89856	0.80641	0.87355	0.65806	0.70652	AVG		0.81694		14.21791	15.00000	
Toluene-D8	1.76151	1.70778	1.50723	1.47475	1.38192	1.34308	AVG		1.52938		11.15922	15.00000	
P-Bromofluorobenzene	0.77274	0.74326	0.62765	0.62079	0.53461	0.54612	AVG		0.64086		15.40345	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-t.i\T060815.b\T3790A.D
Report Date: 22-Jun-2015 11:08

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: WG164407-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-t.i\T060815.b\T826SB31.m
Misc Info: WG164407,WG164407-4

Client SDG: WG164407
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	51.0	101.93	80-120
	2 Chloromethane	50.0	41.8	83.61	80-120
	3 Vinyl chloride	50.0	48.2	96.49	80-120
	4 Bromomethane	50.0	57.2	114.41	80-120
	5 Chloroethane	50.0	83.6	167.27*	80-120
	6 Trichlorofluoromet	50.0	64.1	128.19*	80-120
	7 Diethyl Ether	50.0	44.7	89.49	80-120
	8 Tertiary-butyl alc	250	226	90.56	80-120
	9 1,1-Dichloroethene	50.0	52.8	105.70	80-120
	10 Carbon Disulfide	50.0	64.0	127.91*	80-120
	11 Freon-113	50.0	52.9	105.81	80-120
	12 Iodomethane	50.0	57.2	114.40	80-120
	13 Acrolein	250	254	101.59	80-120
	14 Methylene Chloride	50.0	46.0	91.99	80-120
	15 Acetone	50.0	45.6	91.20	80-120
	16 Isobutyl Alcohol	1000	837	83.74	80-120
	17 trans-1,2-Dichloro	50.0	54.4	108.75	80-120
	18 Allyl Chloride	50.0	45.9	91.76	80-120
	19 Methyl tert-butyl	100	74.8	74.82*	80-120
	20 Acetonitrile	500	475	94.99	80-120
	21 Di-isopropyl ether	50.0	47.0	94.07	80-120
	22 Chloroprene	50.0	49.9	99.80	80-120
	23 Propionitrile	500	425	84.95	80-120
	24 Methacrylonitrile	500	438	87.67	80-120
	25 1,1-Dichloroethane	50.0	50.9	101.81	80-120
	26 Acrylonitrile	250	214	85.55	80-120
	27 Ethyl tertiary-but	50.0	24.6	49.13*	80-120
	28 Vinyl Acetate	50.0	54.9	109.86	80-120
	29 cis-1,2-Dichloroet	50.0	47.2	94.33	80-120
M	30 1,2-Dichloroethyle	100	102	101.54	80-120
	31 Methyl Methacrylat	50.0	46.9	93.77	80-120
	32 2,2-Dichloropropan	50.0	52.0	103.97	80-120
	33 Bromochloromethane	50.0	53.6	107.13	80-120
	34 Chloroform	50.0	49.6	99.19	80-120
	35 Carbon Tetrachlori	50.0	53.1	106.24	80-120
	36 Tetrahydrofuran	50.0	42.4	84.80	80-120
	38 1,1,1-Trichloroeth	50.0	51.4	102.80	80-120
	39 1,1-Dichloropropen	50.0	54.1	108.27	80-120
	40 2-Butanone	50.0	36.9	73.75*	80-120
	41 Benzene	50.0	51.8	103.61	80-120

Data File: \\target_server\gg\chem\gcms-t.i\T060815.b\T3790A.D
Report Date: 22-Jun-2015 11:08

	SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
	43 Cyclohexane	50.0	48.4	96.80	80-120
	44 Ethyl Methacrylate	50.0	49.9	99.73	80-120
	46 Tertiary-amyl meth	50.0	22.6	45.27*	80-120
	47 1,2-Dichloroethane	50.0	46.5	92.98	80-120
	48 Trichloroethene	50.0	54.0	107.97	80-120
	50 Dibromomethane	50.0	49.0	97.94	80-120
	51 1,2-Dichloropropan	50.0	50.6	101.17	80-120
	52 Bromodichlorometha	50.0	51.9	103.79	80-120
	53 cis-1,3-dichloropr	50.0	51.8	103.70	80-120
	54 1,4-Dioxane	1000	976	97.57	80-120
	56 2-Chloroethylviny	50.0	0.00	*	80-120
	57 Toluene	50.0	51.3	102.61	80-120
	58 4-methyl-2-pentano	50.0	44.5	88.95	80-120
	59 Tetrachloroethene	50.0	57.3	114.66	80-120
	60 trans-1,3-Dichloro	50.0	53.6	107.11	80-120
	61 1,1,2-Trichloroeth	50.0	48.7	97.35	80-120
	62 Dibromochlorometha	50.0	55.8	111.59	80-120
	63 1,3-Dichloropropan	50.0	49.2	98.40	80-120
	64 1,2-Dibromoethane	50.0	48.4	96.73	80-120
	65 2-Hexanone	50.0	45.0	89.92	80-120
	67 Chlorobenzene	50.0	53.2	106.42	80-120
	152 1-Chlorohexane	50.0	49.2	98.30	80-120
	68 Ethylbenzene	50.0	53.8	107.51	80-120
	69 1,1,1,2-Tetrachlor	50.0	55.2	110.40	80-120
M	70 Xylenes (total)	150	167	111.22	80-120
	71 m+p-Xylenes	100	111	111.35	80-120
	72 o-Xylene	50.0	55.5	110.95	80-120
	73 Styrene	50.0	53.6	107.23	80-120
	74 Bromoform	50.0	55.3	110.57	80-120
	75 Isopropylbenzene	50.0	57.3	114.54	80-120
	77 cis-1,4-Dichloro-2	50.0	42.9	85.85	80-120
	78 trans-1,4-Dichloro	50.0	46.4	92.81	80-120
	79 Bromobenzene	50.0	55.8	111.70	80-120
	80 N-Propylbenzene	50.0	57.1	114.24	80-120
	81 1,1,2,2-Tetrachlor	50.0	49.7	99.39	80-120
	82 1,3,5-Trimethylben	50.0	57.3	114.54	80-120
	83 2-Chlorotoluene	50.0	55.4	110.88	80-120
	84 1,2,3-Trichloropro	50.0	50.0	99.95	80-120
	85 4-Chlorotoluene	50.0	54.7	109.41	80-120
	86 tert-Butylbenzene	50.0	56.6	113.23	80-120
	87 Pentachloroethane	50.0	51.5	102.93	80-120
	88 1,2,4-Trimethylben	50.0	54.7	109.40	80-120
	89 P-Isopropyltoluene	50.0	57.0	114.01	80-120
	90 1,3-Dichlorobenzen	50.0	55.9	111.73	80-120
	92 1,4-Dichlorobenzen	50.0	54.1	108.12	80-120
	93 N-Butylbenzene	50.0	54.9	109.72	80-120
	94 sec-Butylbenzene	50.0	56.9	113.76	80-120
	95 1,2-Dichlorobenzen	50.0	54.1	108.23	80-120
	96 1,2-Dibromo-3-Chlo	50.0	49.8	99.59	80-120
	97 1,3,5-Trichloroben	50.0	49.7	99.37	80-120
	98 Hexachlorobutadien	50.0	54.9	109.79	80-120
	99 1,2,4-Trichloroben	50.0	55.4	110.72	80-120
	100 1,2,3-Trimethylben	50.0	52.2	104.37	80-120
	101 Naphthalene	50.0	58.8	117.68	80-120

Data File: \\target_server\gg\chem\gcms-t.i\T060815.b\T3790A.D
Report Date: 22-Jun-2015 11:08

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	54.2	108.43	80-120
103 Methyl Acetate	50.0	43.5	86.97	80-120
104 Methylcyclohexane	50.0	51.8	103.51	80-120
M 153 Total Alkylbenzene	350	394	112.70	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/kg	AMOUNT RECOVERED ug/kg	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	46.8	93.66	64-130
$ 45 1,2-Dichloroethane	50.0	42.9	85.83	58-134
$ 55 Toluene-D8	50.0	48.4	96.80	67-118
$ 76 P-Bromofluorobenze	50.0	46.1	92.28	47-119

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164386-4
Analytical Date: 06/08/15 10:51
Lab File ID : P1304.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/03/15 13:58 06/03/15 16:06
Column ID:

	Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1	Dichlorodifluoromethane	0.48256	0.66007	0.66007	0.010	36.78440	20.00000	Averaged	*
2	Chloromethane	1.01074	0.88727	0.88727	0.100	-12.21583	20.00000	Averaged	
3	Vinyl chloride	0.75294	0.74000	0.74000	0.010	-1.71824	20.00000	Averaged	
4	Bromomethane	0.32515	0.30375	0.30375	0.010	-6.58123	20.00000	Averaged	
5	Chloroethane	0.40314	0.47118	0.47118	0.010	16.87681	20.00000	Averaged	
6	Trichlorofluoromethane	0.90604	0.91545	0.91545	0.010	1.03871	20.00000	Averaged	
7	Diethyl Ether	0.60658	0.65480	0.65480	0.010	7.94869	20.00000	Averaged	
9	1,1-Dichloroethene	0.48757	0.53519	0.53519	0.100	9.76624	20.00000	Averaged	
10	Carbon Disulfide	1.67488	1.60650	1.60650	0.010	-4.08279	20.00000	Averaged	
11	Freon-113	0.30991	0.28975	0.28975	0.010	-6.50306	20.00000	Averaged	
14	Methylene Chloride	0.67310	0.68390	0.68390	0.010	1.60416	20.00000	Averaged	
15	Acetone	0.26618	0.28208	0.28208	0.010	5.97507	20.00000	Averaged	
17	trans-1,2-Dichloroethene	0.60461	0.57917	0.57917	0.010	-4.20744	20.00000	Averaged	
19	Methyl tert-butyl ether	1.77026	1.92574	1.92574	0.010	8.78248	20.00000	Averaged	
21	Di-isopropyl ether	2.13961	2.20231	2.20231	0.010	2.93010	20.00000	Averaged	
25	1,1-Dichloroethane	1.12536	1.11293	1.11293	0.100	-1.10471	20.00000	Averaged	
28	Vinyl Acetate	0.83716	0.85720	0.85720	0.010	2.39316	20.00000	Averaged	
29	cis-1,2-Dichloroethene	0.64502	0.68583	0.68583	0.010	6.32692	20.00000	Averaged	
30	1,2-Dichloroethylene (total	++++	1.26500	1.26500	0.010	++++	20.00000	Averaged	*
32	2,2-Dichloropropane	0.60854	0.81237	0.81237	0.010	33.49611	20.00000	Averaged	*
33	Bromochloromethane	0.25363	0.26010	0.26010	0.010	2.55157	20.00000	Averaged	
34	Chloroform	1.05803	1.10743	1.10743	0.010	4.66922	20.00000	Averaged	
35	Carbon Tetrachloride	0.35604	0.37821	0.37821	0.010	6.22578	20.00000	Averaged	
36	Tetrahydrofuran	0.25479	0.23000	0.23000	0.010	-9.72820	20.00000	Averaged	
38	1,1,1-Trichloroethane	0.87556	0.95150	0.95150	0.010	8.67285	20.00000	Averaged	
39	1,1-Dichloropropene	0.42605	0.43971	0.43971	0.010	3.20736	20.00000	Averaged	
40	2-Butanone	0.37864	0.37730	0.37730	0.010	-0.35263	20.00000	Averaged	
41	Benzene	1.31491	1.31027	1.31027	0.010	-0.35249	20.00000	Averaged	
43	Cyclohexane	1.04813	0.92012	0.92012	0.010	-12.21302	20.00000	Averaged	
47	1,2-Dichloroethane	0.44856	0.48986	0.48986	0.010	9.20677	20.00000	Averaged	
48	Trichloroethene	0.30944	0.30938	0.30938	0.010	-0.01786	20.00000	Averaged	
50	Dibromomethane	0.19076	0.20324	0.20324	0.010	6.54520	20.00000	Averaged	
51	1,2-Dichloropropane	0.31854	0.32496	0.32496	0.010	2.01601	20.00000	Averaged	
52	Bromodichloromethane	0.43354	0.46671	0.46671	0.010	7.64978	20.00000	Averaged	
53	cis-1,3-dichloropropene	0.50769	0.54276	0.54276	0.010	6.90761	20.00000	Averaged	
57	Toluene	0.84503	0.83286	0.83286	0.010	-1.43992	20.00000	Averaged	
58	4-methyl-2-pentanone	0.38897	0.39394	0.39394	0.010	1.27804	20.00000	Averaged	
59	Tetrachloroethene	0.27009	0.24469	0.24469	0.010	-9.40138	20.00000	Averaged	
60	trans-1,3-Dichloropropene	0.43003	0.47251	0.47251	0.010	9.87810	20.00000	Averaged	
61	1,1,2-Trichloroethane	0.25289	0.25964	0.25964	0.010	2.66629	20.00000	Averaged	
62	Dibromochloromethane	0.35334	0.35923	0.35923	0.010	1.66656	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164386-4
Analytical Date: 06/08/15 10:51
Lab File ID : P1304.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/03/15 13:58 06/03/15 16:06
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
63 1,3-Dichloropropane	0.62467	0.63619	0.63619	0.010	1.84300	20.00000	Averaged	
64 1,2-Dibromoethane	0.29937	0.31532	0.31532	0.010	5.32939	20.00000	Averaged	
65 2-Hexanone	0.31712	0.30823	0.30823	0.010	-2.80393	20.00000	Averaged	
67 Chlorobenzene	0.93451	0.94271	0.94271	0.300	0.87732	20.00000	Averaged	
68 Ethylbenzene	0.54849	0.51442	0.51442	0.010	-6.21323	20.00000	Averaged	
70 Xylenes (total)	++++	0.64166	0.64166	0.010	++++	20.00000	Averaged	*
71 m+p-Xylenes	0.63856	0.64095	0.64095	0.010	0.37363	20.00000	Averaged	
72 o-Xylene	0.61312	0.64307	0.64307	0.010	4.88441	20.00000	Averaged	
73 Styrene	1.09392	1.10992	1.10992	0.010	1.46268	20.00000	Averaged	
74 Bromoform	0.22220	0.22169	0.22169	0.100	-0.22891	20.00000	Averaged	
75 Isopropylbenzene	2.94309	3.01881	3.01881	0.010	2.57271	20.00000	Averaged	
79 Bromobenzene	0.72458	0.71596	0.71596	0.010	-1.18990	20.00000	Averaged	
80 N-Propylbenzene	3.69271	3.63682	3.63682	0.010	-1.51346	20.00000	Averaged	
81 1,1,2,2-Tetrachloroethane	0.97452	0.91602	0.91602	0.300	-6.00227	20.00000	Averaged	
82 1,3,5-Trimethylbenzene	2.76247	2.74548	2.74548	0.010	-0.61512	20.00000	Averaged	
83 2-Chlorotoluene	2.18201	2.24150	2.24150	0.010	2.72638	20.00000	Averaged	
84 1,2,3-Trichloropropane	0.77304	0.74229	0.74229	0.010	-3.97819	20.00000	Averaged	
85 4-Chlorotoluene	2.22735	2.38192	2.38192	0.010	6.93955	20.00000	Averaged	
86 tert-Butylbenzene	2.47929	2.57986	2.57986	0.010	4.05655	20.00000	Averaged	
88 1,2,4-Trimethylbenzene	2.93104	2.77478	2.77478	0.010	-5.33116	20.00000	Averaged	
89 P-Isopropyltoluene	2.71537	2.89972	2.89972	0.010	6.78948	20.00000	Averaged	
90 1,3-Dichlorobenzene	1.40980	1.46615	1.46615	0.010	3.99691	20.00000	Averaged	
92 1,4-Dichlorobenzene	1.57416	1.51289	1.51289	0.010	-3.89238	20.00000	Averaged	
93 N-Butylbenzene	2.89180	2.75924	2.75924	0.010	-4.58377	20.00000	Averaged	
94 sec-Butylbenzene	3.29523	3.22269	3.22269	0.010	-2.20144	20.00000	Averaged	
95 1,2-Dichlorobenzene	1.39580	1.46047	1.46047	0.010	4.63332	20.00000	Averaged	
96 1,2-Dibromo-3-Chloropropane	0.23325	0.23355	0.23355	0.010	0.12746	20.00000	Averaged	
97 1,3,5-Trichlorobenzene	1.06690	1.10502	1.10502	0.010	3.57324	20.00000	Averaged	
98 Hexachlorobutadiene	0.30504	0.31182	0.31182	0.010	2.22069	20.00000	Averaged	
99 1,2,4-Trichlorobenzene	1.08296	1.08795	1.08795	0.010	0.46114	20.00000	Averaged	
101 Naphthalene	3.55048	3.29173	3.29173	0.010	-7.28766	20.00000	Averaged	
102 1,2,3-Trichlorobenzene	1.05059	1.04809	1.04809	0.010	-0.23782	20.00000	Averaged	
103 Methyl Acetate	0.67497	0.65630	0.65630	0.010	-2.76679	20.00000	Averaged	
104 Methylcyclohexane	0.96544	0.91099	0.91099	0.010	-5.63949	20.00000	Averaged	
37 Dibromofluoromethane	0.52067	0.52422	0.52422	0.010	0.68045	20.00000	Averaged	
45 1,2-Dichloroethane-D4	0.70967	0.73485	0.73485	0.010	3.54885	20.00000	Averaged	
55 Toluene-D8	1.12852	1.09831	1.09831	0.010	-2.67640	20.00000	Averaged	
76 P-Bromofluorobenzene	0.45673	0.44388	0.44388	0.010	-2.81396	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab ID : WG164386-4
Lab File ID : P1304.D
Initial Calibration Date(s): 06/03/15 13:58 06/03/15 16:06

SDG: SI3862
Analytical Date: 06/08/15 10:51
Instrument ID: GCMS-P
Column ID:

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

GCMS-P INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06-03-15 / 13:35

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB -10	PB283	1	-1	VOABFBAQ							Y	EME		
VSTD050P03A	P1227	1	1	P626A07							Y			W6164075-4
020	28	1	2								Y			-3
005	29	1	3								Y			-2
001	30	1	4								Y			-1
200	31	1	5								Y			-6
100	32	1	6								Y			-5
LCSA W6164075-8	33	1	7								Y			IND -7
VBLKA	34	1	8								N			
VBLKB	35	1	9								N			
VBLKC -9	36	1	10								Y			
SI 3552-5RA B	37	1	11		X				X		Y		<2	
-1RA B	38	1	12								Y		<2	
-2RA B	39	1	13								Y		<2	
-3RA B	40	1	14								Y		<2	
-4RA B	41	1	15								Y		<2	
-6DL B	42	10	16								Y		<2	4mL → 40mL
-7DL B	43	10	17								Y		<2	↓
-8RA B	44	1	18								Y		<2	
-6RA B	45	1	19								Y		<2	
-7RA B	46	1	20								Y		<2	22:14
Rinse	47	1	21								N		Z	
Rinse	48	1	22								N			
Rinse	49	1	23								N		Z	
Rinse	50	1	24								N			

06/04/15 BEC

STANDARD	CODE
BFB	V9879
CAL. STD.	V9869, V9870
LCS/MS MIX	V9867
EXTRAS MIX	V9868

STANDARD	CODE
IS MIX	V9873
SS MIX	V9874

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

KATAHDIN ANALYTICAL SERVICES

GCMS-P INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06-08-15 / 10:27

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB -3	P3286	1	-1	VOABFBAQ							Y	EME		
VSTD050P08A -4	P1304	1	1	P826A07							Y			
LCSA W6164386-1	05	1	2								Y			
VBLKA	06	1	3								N			
VBLKB	07	1	4								N			
VBLKC -2	08	1	5								Y			
MeOH BLK -5	09	1	6								Y			800uL→40mL
SI3862-3 A	10	1	7		X				X		Y		<2	
SI3607-3RA B	11	1	8								Y		<2	
↓ -5RA C	12	1	9								Y		<2	
SI3552-9RA A	13	1	10								Y		<2	
SI3861-9 A	14	1	11								Y		<2	
SI3512-6RA B	15	1	12								Y		<2	
↓ -7RA B	16	1	13								Y		<2	Decanted
SI3693-1RA C	17	1	14								Y		<2	
SI3607-6RA A	18	1	15								Y		<2	
SI3552-11RADL A	19	10	16								Y		<2	4mL→40mL
↓ -12RA A	20	1	17								Y		<2	
SI3862-1DL A	21	1	18			X					Y		Z	800uL→40mL
↓ -2DL A	22	1	19			↓					Y			↓
SI3861-~~8~~10 A (Colors RED)	23	1	20		X						Y		<2	
↓ -~~3~~11 A	24	1	21		↓						Y		<2	
↓ -~~4~~12 A	25	1	22		↓				↓		Y		<2	Decanted 20:37
Rinse	26	1	23								N		Z	
Rinse	27	1	24								N		Z	
Rinse x 2	28-29	1	25								N		Z	

STANDARD	CODE
BFB	V9874
CAL. STD.	V9882, V9883
LCS/MS MIX	V9880
EXTRAS MIX	V9884

STANDARD	CODE
IS MIX	V9873
SS MIX	V9885

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM	EPA 624
(heated purge)	EPA 524

QAMS546

GCMS-T INSTRUMENT RUNLOG

KATAHDIN ANALYTICAL SERVICES

DATE/TIME OF BFB INJECTION: 06-08-15/ 10:08

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ⑩	T3908	1	-1	VOABFB3							Y	EME		
VSTD050TOB A ④	T3783	1	1	T826SB31							Y			
020 ③	84	1	2								Y			
010 ②	85	1	3								Y			Curve
005 ①	86	1	4								Y			okay
200 ⑥	87	1	5								Y			
100 ⑤	88	1	6								Y			
LCS A	89	1	7								N			surr. were not added
B [WG64407] ⑧	90	1	8								Y			IND⑦
VBLK A	91	1	9								N			
B	92	1	10								N			
C ⑨	93	1	11								Y			
SI3862-4 B	94	1	12			X			X		Y			
-1 D	95	1	13								Y			1SSL 1SSH 1DSL
-2 B	96	1	14								Y			1SSL 1SSH 2DSL
-2RA C	97	1	15								Y			1SSL 1SSH 1DSL
-1MS E ⑪	98	1	16								Y			1SSL 1SSH 1DSL
-1MSD F ⑫	99	1	17								Y			1SSL 4SSL 21:20
Rinse	T3800	1	18								N			
Rinse	01	1	19								N			
Rinse	02	1	20								N			
Rinse	03	1	21								N			

06/09/15 BEC

STANDARD	CODE
BFB	V9879
CAL. STD.	V9882, V9883
LCS/MS MIX	V9880
EXTRAS MIX	V9884

STANDARD	CODE
IS MIX	~~V9851~~ EME 06/08/15 V9873
SS MIX	V9874

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

KATAHDIN ANALYTICAL SERVICES

Organics Vial Prep Log

Methods: SW8260 SW8015 ME DEP 4.2.17 MA DEP VPH

Date	Analyst	Vial Number	Vial + Preservative (g)	Vial + Preservative + Sample (g)	Sample Weight (g)	Preservative	Preservative Volume (mL)	Sample Name	Comments
5.26.15	DEW	88700	40.99			DI / MEOH / NaHSO4	5 / 10		
		88701	40.85			DI / MEOH / NaHSO4	5 / 10		
		88702	40.54	59.30	18.76	DI / MEOH / NaHSO4	5 / 10	SI3635-3A	
		88703	41.14			DI / MEOH / NaHSO4	5 / 10		
		88704	40.95	58.21	17.26	DI / MEOH / NaHSO4	5 / 10	SI3635-4A	
		88705	40.91			DI / MEOH / NaHSO4	5 / 10		
		88706	40.90			DI / MEOH / NaHSO4	5 / 10		
		88707	40.58			DI / MEOH / NaHSO4	5 / 10		
		88708	41.28	41.40	0.12	DI / MEOH / NaHSO4	5 / 10	SI3635-5A	TB
		88709	41.03			DI / MEOH / NaHSO4	5 / 10		
5.28.15	GN	88710	32.71	38.53	5.82	DI / MEOH / NaHSO4	5 / 10	SI3862-1 A	
		88711	33.05			DI / MEOH / NaHSO4	5 / 10		
		88712	33.04			DI / MEOH / NaHSO4	5 / 10		
		88713	33.23	39.28	6.05	DI / MEOH / NaHSO4	5 / 10	SI3862-2 A	
		88714	32.65			DI / MEOH / NaHSO4	5 / 10		
		88715	32.39			DI / MEOH / NaHSO4	5 / 10		
		88716	32.31			DI / MEOH / NaHSO4	5 / 10		
		88717	33.19			DI / MEOH / NaHSO4	5 / 10		
		88718	35.35	41.39	6.04	DI / MEOH / NaHSO4	5 / 10	SI3862-1 E	
		88719	35.16	41.21	6.05	DI / MEOH / NaHSO4	5 / 10	SI3862-1 D	

40 mL Vial Lot # 121514-3AVF
MeOH Lot #: DM027
NaSO4 Lot #: BCBH6622V

DI Preservative = Deionized Water +Stirbar
NaHSO4 Preservative = 20% NaSO4 Solution + stirbar

KATAHDIN ANALYTICAL SERVICES

Organics Vial Prep Log

Methods: SW8260 SW8015 ME DEP 4.2.17 MA DEP VPH

Date	Analyst	Vial Number	Vial + Preservative (g)	Vial + Preservative + Sample (g)	Sample Weight (g)	Preservative	Preservative Volume (mL)	Sample Name	Comments
52815	DEW	88720	35.23	41.26	6.03	DI / MEOH / NaHSO4	5 / 10	SI 3862-1 F	
		88721	35.17			DI / MEOH / NaHSO4	5 / 10		
		88722	35.04			DI / MEOH / NaHSO4	5 / 10		
		88723	34.84			DI / MEOH / NaHSO4	5 / 10		
		88724	34.97			DI / MEOH / NaHSO4	5 / 10		
		88725	34.91			DI / MEOH / NaHSO4	5 / 10		
		88726	35.14			DI / MEOH / NaHSO4	5 / 10		
		88727	35.01	41.21	6.20	DI / MEOH / NaHSO4	5 / 10	SI 3862-2 C	
		88728	35.16	41.27	6.11	DI / MEOH / NaHSO4	5 / 10	SI 3862-2 B	
		88729	35.18			DI / MEOH / NaHSO4	5 / 10		
		88730	34.48			DI / MEOH / NaHSO4	5 / 10		
		88731	35.09			DI / MEOH / NaHSO4	5 / 10		
		88732	34.71			DI / MEOH / NaHSO4	5 / 10		
		88733	34.56			DI / MEOH / NaHSO4	5 / 10		
		88734	34.71			DI / MEOH / NaHSO4	5 / 10		
		88735	35.12			DI / MEOH / NaHSO4	5 / 10		
		88736	34.89			DI / MEOH / NaHSO4	5 / 10		
		88737	34.81			DI / MEOH / NaHSO4	5 / 10		
		88738	35.15			DI / MEOH / NaHSO4	5 / 10		
		88739	35.24	35.41	0.17	DI / MEOH / NaHSO4	5 / 10	SI 3862-4 B	TB

40 mL Vial Lot #: 121514-3AV F
MeOH Lot #:
NaSO4 Lot #: BCB H6622V

DI Preservative = Deionized Water +Stirbar
NaHSO4 Preservative = 20% NaSO4 Solution + stirbar

SPLP VOLATILE DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI3862

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SITE4TS-FB	SI3862-6DL		104.		100.		113.		109.	
SITE4TS-XX	SI3862-7DL		111.		107.		119.		115.	
Laboratory Control S	WG164966-1		111.		112.		116.		117.	
Method Blank Sample	WG164966-2		111.		108.		117.		115.	
SPLP Blank	WG164966-7		106.		102.		114.		112.	
Laboratory Control S	WG165024-1		110.		113.		118.		117.	
Method Blank Sample	WG165024-2		103.		103.		114.		107.	
Matrix Spike	WG165024-6		114.		112.		102.		118.	
Matrix Spike Duplica	WG165024-7		118.		116.	*	120.		120.	

		QC Limits
DCA	1,2-DICHLOROETHANE-D4	70-120
BFB	P-BROMOFLUOROBENZENE	75-120
DBF	DIBROMOFLUOROMETHANE	85-115
TOL	TOLUENE-D8	85-120

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : P1459.D
Instrument ID : GCMS-P
Heated Purge : No

SDG : SI3862
Lab Sample ID : WG164966-2
Date Analyzed : 17-JUN-15
Time Analyzed : 13:09

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG164966-1	P1456.D	06/17/15	11:34
SPLP Blank	WG164966-7	P1462.D	06/17/15	14:28
SITE4TS-FB	SI3862-6DL	P1470.D	06/17/15	17:56
SITE4TS-XX	SI3862-7DL	P1471.D	06/17/15	18:25

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : P1484.D
Instrument ID : GCMS-P
Heated Purge : No

SDG : SI3862
Lab Sample ID : WG165024-2
Date Analyzed : 18-JUN-15
Time Analyzed : 11:10

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165024-1	P1481.D	06/18/15	09:35
Matrix Spike	WG165024-6	P1496.D	06/18/15	16:30
Matrix Spike Duplica	WG165024-7	P1497.D	06/18/15	16:56

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164966-2
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: P1459.D

Sample Date:
Received Date:
Extract Date: 17-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164966

Analysis Date: 17-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164966-2
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: P1459.D

Sample Date:
Received Date:
Extract Date: 17-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164966

Analysis Date: 17-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Xylenes (Total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
Bromochloromethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2,3-Trichloropropane	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,2-dibromo-3-chloropropane	U	0.50	ug/L	1	1	1.0	0.50	0.50
P-Bromofluorobenzene		111.	%					
Toluene-d8		115.	%					
1,2-Dichloroethane-d4		117.	%					
Dibromofluoromethane		108.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164966-7
Client ID: SPLP Blank
Project:
SDG: SI3862
Lab File ID: P1462.D

Sample Date:
Received Date:
Extract Date: 17-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG164966

Analysis Date: 17-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	U	12.	ug/L	5	5	25.	5.6	12.
Acetone	U	12.	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12.	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12.	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12.	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164966-7
Client ID: SPLP Blank
Project:
SDG: SI3862
Lab File ID: P1462.D

Sample Date:
Received Date:
Extract Date: 17-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG164966

Analysis Date: 17-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		106.	%					
Toluene-d8		112.	%					
1,2-Dichloroethane-d4		114.	%					
Dibromofluoromethane		102.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165024-2
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: P1484.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165024

Analysis Date: 18-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	J	1.6	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165024-2
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: P1484.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165024

Analysis Date: 18-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Xylenes (Total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
Bromochloromethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2,3-Trichloropropane	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,2-dibromo-3-chloropropane	U	0.50	ug/L	1	1	1.0	0.50	0.50
P-Bromofluorobenzene		103.	%					
Toluene-d8		107.	%					
1,2-Dichloroethane-d4		114.	%					
Dibromofluoromethane		103.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164966-1
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: P1456.D

Sample Date:
Received Date:
Extract Date: 17-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164966

Analysis Date: 17-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	* 159.	50.0	79.6	ug/L	30-155
Chloromethane	* 131.	50.0	65.5	ug/L	40-125
Vinyl Chloride	124.	50.0	62.1	ug/L	50-145
Bromomethane	120.	50.0	60.2	ug/L	30-145
Chloroethane	129.	50.0	64.3	ug/L	60-135
Trichlorofluoromethane	131.	50.0	65.4	ug/L	60-145
1,1-Dichloroethene	108.	50.0	54.0	ug/L	70-130
Carbon Disulfide	114.	50.0	57.2	ug/L	35-160
Freon-113	105.	50.0	52.6	ug/L	73-126
Methylene Chloride	96.8	50.0	48.4	ug/L	55-140
Acetone	94.0	50.0	47.0	ug/L	40-140
trans-1,2-Dichloroethene	111.	50.0	55.6	ug/L	60-140
Methyl tert-butyl Ether	109.	100.	109.	ug/L	65-125
1,1-Dichloroethane	109.	50.0	54.7	ug/L	70-135
cis-1,2-Dichloroethene	94.0	50.0	47.0	ug/L	70-125
Chloroform	106.	50.0	52.8	ug/L	65-135
1,1,1-Trichloroethane	109.	50.0	54.7	ug/L	65-130
2-Butanone	98.0	50.0	49.0	ug/L	30-150
Cyclohexane	102.	50.0	51.0	ug/L	71-133
Carbon Tetrachloride	108.	50.0	54.1	ug/L	65-140
Benzene	103.	50.0	51.7	ug/L	80-120
1,2-Dichloroethane	104.	50.0	52.1	ug/L	70-130
Trichloroethene	98.2	50.0	49.1	ug/L	70-125
1,2-Dichloropropane	99.8	50.0	49.9	ug/L	75-125
Bromodichloromethane	107.	50.0	53.3	ug/L	75-120
cis-1,3-Dichloropropene	107.	50.0	53.4	ug/L	70-130
Toluene	101.	50.0	50.3	ug/L	75-120
4-Methyl-2-Pentanone	104.	50.0	51.8	ug/L	60-135
trans-1,3-Dichloropropene	113.	50.0	56.6	ug/L	55-140
1,1,2-Trichloroethane	101.	50.0	50.7	ug/L	75-125
Tetrachloroethene	101.	50.0	50.4	ug/L	45-150
Dibromochloromethane	104.	50.0	51.9	ug/L	60-135
2-Hexanone	99.4	50.0	49.7	ug/L	55-130
Chlorobenzene	102.	50.0	51.1	ug/L	80-120
Ethylbenzene	99.6	50.0	49.8	ug/L	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164966-1
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: P1456.D

Sample Date:
Received Date:
Extract Date: 17-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG164966

Analysis Date: 17-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
1,2-Dibromoethane	101.	50.0	50.4	ug/L	80-120
M+P-Xylenes	105.	100.	105.	ug/L	75-130
o-Xylene	105.	50.0	52.7	ug/L	80-120
Xylenes (Total)	105.	150.	158.	ug/L	89-116
Styrene	107.	50.0	53.7	ug/L	65-135
Bromoform	106.	50.0	52.9	ug/L	70-130
Isopropylbenzene	109.	50.0	54.6	ug/L	75-125
1,1,2,2-Tetrachloroethane	98.2	50.0	49.1	ug/L	65-130
1,3-Dichlorobenzene	104.	50.0	51.8	ug/L	75-125
1,4-Dichlorobenzene	102.	50.0	51.2	ug/L	75-125
1,2-Dichlorobenzene	102.	50.0	51.2	ug/L	70-120
1,2,4-Trichlorobenzene	105.	50.0	52.7	ug/L	65-135
Methyl Acetate	82.8	50.0	41.4	ug/L	70-132
Methylcyclohexane	102.	50.0	51.2	ug/L	73-125
Bromochloromethane	103.	50.0	51.6	ug/L	65-130
1,2,3-Trichloropropane	97.2	50.0	48.6	ug/L	75-125
1,2-dibromo-3-chloropropane	106.	50.0	53.2	ug/L	50-130
P-Bromofluorobenzene	111.				75-120
Toluene-d8	117.				85-120
1,2-Dichloroethane-d4	116.				70-120
Dibromofluoromethane	112.				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165024-1
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: P1481.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165024

Analysis Date: 18-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	* 161.	50.0	80.3	ug/L	30-155
Chloromethane	* 134.	50.0	67.2	ug/L	40-125
Vinyl Chloride	122.	50.0	61.0	ug/L	50-145
Bromomethane	122.	50.0	61.2	ug/L	30-145
Chloroethane	127.	50.0	63.7	ug/L	60-135
Trichlorofluoromethane	138.	50.0	69.1	ug/L	60-145
1,1-Dichloroethene	110.	50.0	55.0	ug/L	70-130
Carbon Disulfide	116.	50.0	58.1	ug/L	35-160
Freon-113	104.	50.0	52.2	ug/L	73-126
Methylene Chloride	99.8	50.0	49.9	ug/L	55-140
Acetone	118.	50.0	59.0	ug/L	40-140
trans-1,2-Dichloroethene	117.	50.0	58.7	ug/L	60-140
Methyl tert-butyl Ether	117.	100.	117.	ug/L	65-125
1,1-Dichloroethane	116.	50.0	57.8	ug/L	70-135
cis-1,2-Dichloroethene	97.8	50.0	48.9	ug/L	70-125
Chloroform	112.	50.0	56.0	ug/L	65-135
1,1,1-Trichloroethane	116.	50.0	58.2	ug/L	65-130
2-Butanone	110.	50.0	55.2	ug/L	30-150
Cyclohexane	107.	50.0	53.5	ug/L	71-133
Carbon Tetrachloride	118.	50.0	59.0	ug/L	65-140
Benzene	110.	50.0	54.8	ug/L	80-120
1,2-Dichloroethane	117.	50.0	58.4	ug/L	70-130
Trichloroethene	106.	50.0	53.0	ug/L	70-125
1,2-Dichloropropane	107.	50.0	53.6	ug/L	75-125
Bromodichloromethane	113.	50.0	56.7	ug/L	75-120
cis-1,3-Dichloropropene	115.	50.0	57.5	ug/L	70-130
Toluene	106.	50.0	53.1	ug/L	75-120
4-Methyl-2-Pentanone	117.	50.0	58.5	ug/L	60-135
trans-1,3-Dichloropropene	125.	50.0	62.6	ug/L	55-140
1,1,2-Trichloroethane	106.	50.0	53.0	ug/L	75-125
Tetrachloroethene	106.	50.0	53.2	ug/L	45-150
Dibromochloromethane	113.	50.0	56.3	ug/L	60-135
2-Hexanone	119.	50.0	59.4	ug/L	55-130
Chlorobenzene	107.	50.0	53.6	ug/L	80-120
Ethylbenzene	106.	50.0	52.9	ug/L	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165024-1
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: P1481.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165024

Analysis Date: 18-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
1,2-Dibromoethane	109.	50.0	54.7	ug/L	80-120
M+P-Xylenes	110.	100.	110.	ug/L	75-130
o-Xylene	111.	50.0	55.4	ug/L	80-120
Xylenes (Total)	111.	150.	166.	ug/L	89-116
Styrene	112.	50.0	56.1	ug/L	65-135
Bromoform	113.	50.0	56.7	ug/L	70-130
Isopropylbenzene	115.	50.0	57.6	ug/L	75-125
1,1,2,2-Tetrachloroethane	106.	50.0	53.0	ug/L	65-130
1,3-Dichlorobenzene	109.	50.0	54.6	ug/L	75-125
1,4-Dichlorobenzene	108.	50.0	53.9	ug/L	75-125
1,2-Dichlorobenzene	109.	50.0	54.3	ug/L	70-120
1,2,4-Trichlorobenzene	113.	50.0	56.7	ug/L	65-135
Methyl Acetate	103.	50.0	51.5	ug/L	70-132
Methylcyclohexane	106.	50.0	52.9	ug/L	73-125
Bromochloromethane	104.	50.0	52.2	ug/L	65-130
1,2,3-Trichloropropane	106.	50.0	53.2	ug/L	75-125
1,2-dibromo-3-chloropropane	120.	50.0	59.8	ug/L	50-130
P-Bromofluorobenzene	110.				75-120
Toluene-d8	117.				85-120
1,2-Dichloroethane-d4	118.				70-120
Dibromofluoromethane	113.				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG165024-6
MSD ID: WG165024-7
Sample ID: SI3862-6
Client ID: SITE4TS-FB
Project:
SDG: SI3862
MS File ID: P1496.D

Received Date:
Extract Date: 18-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165024
Report Date: 19-JUN-15
MSD File ID: P1497.D

Analysis Date: 18-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Dichlorodifluoromethane	250.	250.	ug/L	ULMM5.	420.	431.	168.*	172.*	2	30	30-155
Chloromethane	250.	250.	ug/L	ULMM5.	368.	340.	147.*	136.*	8	30	40-125
Vinyl Chloride	250.	250.	ug/L	U5.0	334.	330.	134.	132.	1	30	50-145
Bromomethane	250.	250.	ug/L	U5.0	340.	320.	136.	128.	6	30	30-145
Chloroethane	250.	250.	ug/L	UM5.0	347.	281.	139.*	112.	21	30	60-135
Trichlorofluoromethane	250.	250.	ug/L	UM5.0	372.	361.	149.*	144.	3	30	60-145
1,1-Dichloroethene	250.	250.	ug/L	U2.5	306.	284.	122.	114.	7	30	70-130
Carbon Disulfide	250.	250.	ug/L	U2.5	319.	303.	128.	121.	5	30	35-160
Freon-113	250.	250.	ug/L	U2.5	260.	205.	104.	82.0	24	30	73-126
Methylene Chloride	250.	250.	ug/L	U12	308.	256.	123.	102.	18	30	55-140
Acetone	250.	250.	ug/L	U12	259.	266.	104.	106.	3	30	40-140
trans-1,2-Dichloroethene	250.	250.	ug/L	U2.5	310.	299.	124.	120.	4	30	60-140
Methyl tert-butyl Ether	500.	500.	ug/L	U2.5	448.	485.	89.6	97.0	8	30	65-125
1,1-Dichloroethane	250.	250.	ug/L	U2.5	291.	294.	116.	118.	1	30	70-135
cis-1,2-Dichloroethene	250.	250.	ug/L	U2.5	265.	247.	106.	98.8	7	30	70-125
Chloroform	250.	250.	ug/L	U2.5	299.	283.	120.	113.	5	30	65-135
1,1,1-Trichloroethane	250.	250.	ug/L	U2.5	306.	305.	122.	122.	0	30	65-130
2-Butanone	250.	250.	ug/L	U12	218.	245.	87.2	98.0	12	30	30-150
Cyclohexane	250.	250.	ug/L	U2.5	278.	297.	111.	119.	7	30	71-133
Carbon Tetrachloride	250.	250.	ug/L	U2.5	312.	303.	125.	121.	3	30	65-140
Benzene	250.	250.	ug/L	U2.5	294.	280.	118.	112.	5	30	80-120
1,2-Dichloroethane	250.	250.	ug/L	U2.5	282.	280.	113.	112.	1	30	70-130
Trichloroethene	250.	250.	ug/L	UMM2.5	334.	324.	134.*	130.*	3	30	70-125
1,2-Dichloropropane	250.	250.	ug/L	U2.5	282.	269.	113.	108.	5	30	75-125
Bromodichloromethane	250.	250.	ug/L	UM2.5	306.	286.	122.*	114.	7	30	75-120
cis-1,3-Dichloropropene	250.	250.	ug/L	U2.5	281.	279.	112.	112.	1	30	70-130
Toluene	250.	250.	ug/L	U2.5	289.	272.	116.	109.	6	30	75-120
4-Methyl-2-Pentanone	250.	250.	ug/L	U12	280.	275.	112.	110.	2	30	60-135
trans-1,3-Dichloropropene	250.	250.	ug/L	U2.5	306.	304.	122.	122.	1	30	55-140
1,1,2-Trichloroethane	250.	250.	ug/L	U2.5	275.	259.	110.	104.	6	30	75-125
Tetrachloroethene	250.	250.	ug/L	UMM2.5	508.	452.	203.*	181.*	12	30	45-150
Dibromochloromethane	250.	250.	ug/L	U2.5	286.	270.	114.	108.	6	30	60-135
2-Hexanone	250.	250.	ug/L	U12	298.	301.	119.	120.	1	30	55-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG165024-6
MSD ID: WG165024-7
Sample ID: SI3862-6
Client ID: SITE4TS-FB
Project:
SDG: SI3862
MS File ID: P1496.D

Received Date:
Extract Date: 18-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165024
Report Date: 19-JUN-15
MSD File ID: P1497.D

Analysis Date: 18-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Chlorobenzene	250.	250.	ug/L	U2.5	284.	266.	114.	106.	6	30	80-120
Ethylbenzene	250.	250.	ug/L	J1.2	284.	270.	113.	108.	5	30	75-125
1,2-Dibromoethane	250.	250.	ug/L	UM2.5	166.	252.	66.4*	101.	41*	30	80-120
M+P-Xylenes	500.	500.	ug/L	U5.0	581.	557.	116.	111.	4	30	75-130
o-Xylene	250.	250.	ug/L	U2.5	293.	280.	117.	112.	4	30	80-120
Xylenes (Total)	750.	750.	ug/L	U7.5	874.	837.	116.	112.	4	30	89-116
Styrene	250.	250.	ug/L	U2.5	290.	280.	116.	112.	4	30	65-135
Bromoform	250.	250.	ug/L	U2.5	288.	267.	115.	107.	8	30	70-130
Isopropylbenzene	250.	250.	ug/L	U2.5	310.	293.	124.	117.	6	30	75-125
1,1,2,2-Tetrachloroethane	250.	250.	ug/L	U2.5	197.	180.	78.8	72.0	9	30	65-130
1,3-Dichlorobenzene	250.	250.	ug/L	U2.5	285.	273.	114.	109.	4	30	75-125
1,4-Dichlorobenzene	250.	250.	ug/L	U2.5	282.	270.	113.	108.	4	30	75-125
1,2-Dichlorobenzene	250.	250.	ug/L	U2.5	283.	265.	113.	106.	6	30	70-120
1,2,4-Trichlorobenzene	250.	250.	ug/L	U2.5	282.	278.	113.	111.	1	30	65-135
Methyl Acetate	250.	250.	ug/L	UM3.8	172.	203.	68.8*	81.2	16	30	70-132
Methylcyclohexane	250.	250.	ug/L	U2.5	269.	220.	108.	88.0	20	30	73-125
Bromochloromethane	250.	250.	ug/L	UM2.5	346.	277.	138.*	111.	22	30	65-130
1,2,3-Trichloropropane	250.	250.	ug/L	U2.5	262.	250.	105.	100.	5	30	75-125
1,2-dibromo-3-chloropropane	250.	250.	ug/L	U2.5	281.	260.	112.	104.	8	30	50-130
P-Bromofluorobenzene							114.	118.			75-120
Toluene-d8							118.	120.			85-120
1,2-Dichloroethane-d4							102.	120.			70-120
Dibromofluoromethane							112.	116.*			85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB291.D
Instrument ID : GCMS-P

SDG : SI3862
Date Analyzed : 16-JUN-15
Time Analyzed : 10:02
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	21.7		
75	30.0 - 60.0% of mass 95	48.9		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.7		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	62.3		
175	5.0 - 9.0% of mass 174	5.5	8.78	1
176	95.0 - 101.0% of mass 174	60.4	96.90	1
177	5.0 - 9.0% of mass 176	4.2	6.88	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG164916-4	P1429.D	06/16/15	10:37
Initial Calibration	WG164916-3	P1430.D	06/16/15	11:03
Initial Calibration	WG164916-2	P1431.D	06/16/15	11:29
Initial Calibration	WG164916-1	P1432.D	06/16/15	11:56
Initial Calibration	WG164916-6	P1433.D	06/16/15	12:22
Initial Calibration	WG164916-5	P1434.D	06/16/15	12:48
Independent Source	WG164916-7	P1435A.D	06/16/15	13:36

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB292.D
Instrument ID : GCMS-P

SDG : SI3862
Date Analyzed : 17-JUN-15
Time Analyzed : 10:22
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	21.8		
75	30.0 - 60.0% of mass 95	52.3		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.9		
173	Less than 2.0% of mass 174	0.8	1.23	1
174	Greater than 50.0% of mass 95	65.3		
175	5.0 - 9.0% of mass 174	5.4	8.28	1
176	95.0 - 101.0% of mass 174	65.3	99.96	1
177	5.0 - 9.0% of mass 176	4.2	6.50	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG164966-4	P1455.D	06/17/15	10:47
Laboratory Control S	WG164966-1	P1456.D	06/17/15	11:34
Method Blank Sample	WG164966-2	P1459.D	06/17/15	13:09
SPLP Blank	WG164966-7	P1462.D	06/17/15	14:28
SITE4TS-FB	SI3862-6DL	P1470.D	06/17/15	17:56
SITE4TS-XX	SI3862-7DL	P1471.D	06/17/15	18:25

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB293.D
Instrument ID : GCMS-P

SDG : SI3862
Date Analyzed : 18-JUN-15
Time Analyzed : 08:26
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	22.6		
75	30.0 - 60.0% of mass 95	53.2		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.9		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	72.6		
175	5.0 - 9.0% of mass 174	6.3	8.72	1
176	95.0 - 101.0% of mass 174	69.2	95.35	1
177	5.0 - 9.0% of mass 176	4.7	6.74	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165024-4	P1480.D	06/18/15	08:54
Laboratory Control S	WG165024-1	P1481.D	06/18/15	09:35
Method Blank Sample	WG165024-2	P1484.D	06/18/15	11:10
Matrix Spike	WG165024-6	P1496.D	06/18/15	16:30
Matrix Spike Duplica	WG165024-7	P1497.D	06/18/15	16:56

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164916-4
Lab File ID : P1429.D

SDG: SI3862
Analytical Date: 06/16/15 10:37
Instrument ID: GCMS-P

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	514232		8.71		973264		9.58		877936		13.93	
	Upper Limit	1028464		9.21		1946528		10.08		1755872		14.43	
	Lower Limit	257116		8.21		486632		9.08		438968		13.43	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG164966-4	455371		8.72		873727		9.58		788112		13.93	
Laboratory Control S	WG164966-1	480058		8.72		916906		9.57		823528		13.93	
Method Blank Sample	WG164966-2	488613		8.72		912676		9.58		836321		13.93	
SPLP Blank	WG164966-7	490581		8.72		916658		9.58		834321		13.93	
SITE4TS-FB	SI3862-6DL	477810		8.72		898066		9.58		800859		13.93	
SITE4TS-XX	SI3862-7DL	468942		8.72		880401		9.58		796785		13.94	
Continuing Calibrati	WG165024-4	469578		8.72		874256		9.57		780040		13.93	
Laboratory Control S	WG165024-1	452851		8.72		854296		9.58		764474		13.93	
Method Blank Sample	WG165024-2	476351		8.72		895081		9.58		797329		13.93	
Matrix Spike	WG165024-6	460056		8.72		855614		9.58		787981		13.94	
Matrix Spike Duplica	WG165024-7	453267		8.72		854313		9.58		778966		13.93	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164916-4
Lab File ID : P1429.D

SDG: SI3862
Analytical Date: 06/16/15 10:37
Instrument ID: GCMS-P

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	463075		16.93	
	Upper Limit	926150		17.43	
	Lower Limit	231537.5		16.43	
Client Sample ID	Lab Sample ID				
Continuing Calibrati	WG164966-4	418269		16.92	
Laboratory Control S	WG164966-1	431625		16.92	
Method Blank Sample	WG164966-2	445845		16.93	
SPLP Blank	WG164966-7	450078		16.93	
SITE4TS-FB	SI3862-6DL	442404		16.93	
SITE4TS-XX	SI3862-7DL	435614		16.92	
Continuing Calibrati	WG165024-4	417946		16.92	
Laboratory Control S	WG165024-1	406561		16.92	
Method Blank Sample	WG165024-2	428959		16.92	
Matrix Spike	WG165024-6	409016		16.92	
Matrix Spike Duplica	WG165024-7	414668		16.93	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-6DL
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1470.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 17-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG164966

Analysis Date: 17-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	ULMM	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	ULMM	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	UM	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	UM	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	U	12	ug/L	5	5	25.	5.6	12.
Acetone	U	12	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	UMM	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	UM	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	UMM	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5
Ethylbenzene	J	1.2	ug/L	5	1	5.0	1.0	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-6DL
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1470.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 17-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG164966

Analysis Date: 17-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,2-Dibromoethane	UM	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	UM	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	UM	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		104.	%					
Toluene-d8		109.	%					
1,2-Dichloroethane-d4		113.	%					
Dibromofluoromethane		100.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-7DL
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1471.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 17-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG164966

Analysis Date: 17-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	UL	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	UL	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	U	12	ug/L	5	5	25.	5.6	12.
Acetone	U	12	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5
Ethylbenzene	J	1.0	ug/L	5	1	5.0	1.0	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-7DL
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: P1471.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 17-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG164966

Analysis Date: 17-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 19-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		111.	%					
Toluene-d8		115.	%					
1,2-Dichloroethane-d4		119.	%					
Dibromofluoromethane		107.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1432.D P1431.D P1430.D **Column ID:**
P1429.D P1434.D P1433.D **Calibration Date(s):** 16-JUN-15 10:37
16-JUN-15 12:48

	1.0000 Level 1	5.0000 Level 2	20.0000 Level 3	50.0000 Level 4	100.0000 Level 5	200.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.44490	0.52502	0.52637	0.53715	0.57312	0.60267	AVG		0.53487		10.00853	15.00000	O
Chloromethane	0.88587	0.83946	0.82429	0.86740	0.91204	1.00975	AVG		0.88980		7.49314	15.00000	O
Vinyl chloride	0.63092	0.63996	0.61639	0.62941	0.72741	0.71825	AVG		0.66039		7.42482	15.00000	O
Bromomethane	0.24315	0.27619	0.29384	0.31461	0.35406	0.33692	AVG		0.30313		13.42176	15.00000	O
Chloroethane	0.50082	0.48490	0.48105	0.48975	0.36783	+++++	AVG		0.46487		11.77826	15.00000	O
Trichlorofluoromethane	0.73535	0.75039	0.77945	0.73617	0.79604	0.75353	AVG		0.75849		3.21512	15.00000	O
1,1-Dichloroethene	0.47899	0.48454	0.50381	0.48049	0.55504	0.59461	AVG		0.51625		9.27833	15.00000	O
Carbon Disulfide	1.63911	1.61859	1.83417	1.80751	2.00011	1.97172	AVG		1.81187		8.85500	15.00000	O
Freon-113	0.30712	0.29911	0.31528	0.27290	0.33034	0.33995	AVG		0.31078		7.66559	15.00000	O
Methylene Chloride	0.89964	0.67478	0.67247	0.68308	0.71510	0.72294	AVG		0.72800		11.90922	15.00000	O
Acetone	0.20924	0.21209	0.22664	0.20968	0.21975	0.22125	AVG		0.21644		3.29659	15.00000	O
trans-1,2-Dichloroethene	0.46092	0.55408	0.56329	0.53487	0.58552	0.57734	AVG		0.54600		8.30091	15.00000	O
Methyl tert-butyl ether	1.55242	1.68133	1.84430	1.73324	1.60701	1.31307	AVG		1.62189		11.22814	15.00000	O
1,1-Dichloroethane	0.92745	1.01576	1.02835	0.99016	1.06970	1.05304	AVG		1.01408		5.00766	15.00000	O
cis-1,2-Dichloroethene	0.64178	0.65897	0.67084	0.64956	0.71384	0.70753	AVG		0.67375		4.49302	15.00000	O
Bromochloromethane	0.23641	0.24750	0.25221	0.25443	0.25199	0.25724	AVG		0.24996		2.95029	15.00000	O
Chloroform	0.95499	0.96209	1.01529	0.99546	1.08390	1.03844	AVG		1.00836		4.82075	15.00000	O
Carbon Tetrachloride	0.30667	0.32194	0.33787	0.31528	0.35585	0.36362	AVG		0.33354		6.85151	15.00000	O
1,1,1-Trichloroethane	0.75034	0.80449	0.85359	0.80334	0.88975	0.85844	AVG		0.82665		6.06674	15.00000	O
2-Butanone	0.27247	0.28233	0.32361	0.27536	0.27156	0.24937	AVG		0.27912		8.76139	15.00000	O
Benzene	1.18329	1.24940	1.27248	1.20182	1.29917	1.14707	AVG		1.22554		4.71569	15.00000	O
Cyclohexane	0.88324	0.99869	0.98544	0.85401	1.02716	1.03055	AVG		0.96318		7.86564	15.00000	O
1,2-Dichloroethane	0.39432	0.43045	0.43864	0.41344	0.42729	0.39425	AVG		0.41640		4.55372	15.00000	O
Trichloroethene	0.32842	0.31042	0.30517	0.28708	0.31688	0.30438	AVG		0.30872		4.48272	15.00000	O
1,2-Dichloropropane	0.29721	0.30895	0.31366	0.30346	0.33524	0.32226	AVG		0.31347		4.36563	15.00000	O
Bromodichloromethane	0.35825	0.40280	0.41585	0.41207	0.44757	0.44254	AVG		0.41318		7.78921	15.00000	O
cis-1,3-dichloropropene	0.42107	0.46727	0.49290	0.47849	0.52491	0.52136	AVG		0.48433		7.95262	15.00000	O
Toluene	0.80543	0.81437	0.83091	0.78937	0.85644	0.77918	AVG		0.81262		3.46669	15.00000	O
4-methyl-2-pentanone	0.26137	0.31551	0.35877	0.30754	0.29675	0.24089	AVG		0.29681		14.04298	15.00000	O
Tetrachloroethene	0.26678	0.25182	0.24513	0.22839	0.25885	0.24944	AVG		0.25007		5.22707	15.00000	O
trans-1,3-Dichloropropene	0.34824	0.38537	0.42301	0.41263	0.44364	0.43331	AVG		0.40770		8.66517	15.00000	O
1,1,2-Trichloroethane	0.22186	0.23192	0.25111	0.23877	0.25984	0.24678	AVG		0.24171		5.67779	15.00000	O
Dibromochloromethane	0.30513	0.31199	0.33473	0.33777	0.35773	0.35785	AVG		0.33420		6.64269	15.00000	O
1,2-Dibromoethane	0.26768	0.27355	0.29888	0.28974	0.28618	0.28671	AVG		0.28379		3.99144	15.00000	O
2-Hexanone	0.18666	0.23754	0.28017	0.24304	0.23879	0.20269	AVG		0.23148		14.23860	15.00000	O
Chlorobenzene	0.94361	0.98519	0.96906	0.93795	0.99633	0.88311	AVG		0.95254		4.29510	15.00000	O
Ethylbenzene	0.52945	0.52826	0.53177	0.50311	0.55081	0.50988	AVG		0.52555		3.23864	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1432.D P1431.D P1430.D **Column ID:**
P1429.D P1434.D P1433.D **Calibration Date(s):** 16-JUN-15 10:37
16-JUN-15 12:48

Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.64059	0.66795	0.67279	0.62430	0.63141	0.51277	AVG		0.62497		9.33228	15.00000	O
o-Xylene	0.54004	0.64527	0.66801	0.63293	0.67324	0.61758	AVG		0.62951		7.71762	15.00000	O
Styrene	0.95985	1.09584	1.16426	1.13368	1.15204	0.94037	AVG		1.07434		9.22960	15.00000	O
Bromoform	0.16695	0.18719	0.21338	0.21391	0.22482	0.21663	AVG		0.20381		10.82625	15.00000	O
Isopropylbenzene	2.76378	3.10878	3.20988	3.00547	3.14220	2.53129	AVG		2.96023		8.83667	15.00000	O
1,1,2,2-Tetrachloroethane	0.83943	0.89970	1.01513	0.92278	0.95393	0.87996	AVG		0.91849		6.65862	15.00000	O
1,2,3-Trichloropropane	0.74931	0.72106	0.75414	0.70037	0.72728	0.65790	AVG		0.71834		4.94287	15.00000	O
1,3-Dichlorobenzene	1.49094	1.51478	1.56326	1.48502	1.55580	1.38871	AVG		1.49975		4.21965	15.00000	O
1,4-Dichlorobenzene	1.57660	1.57640	1.59173	1.52623	1.56779	1.37862	AVG		1.53623		5.22884	15.00000	O
1,2-Dichlorobenzene	1.47455	1.52647	1.51944	1.45746	1.50458	1.34811	AVG		1.47177		4.49121	15.00000	O
1,2-Dibromo-3-Chloropropane	0.12995	0.14456	0.17305	0.15987	0.17184	0.17292	AVG		0.15870		11.30376	15.00000	O
1,2,4-Trichlorobenzene	0.87407	0.87424	0.93733	0.91218	0.97562	0.91649	AVG		0.91499		4.23856	15.00000	O
Methyl Acetate	0.46523	0.49246	0.53311	0.44285	0.45025	0.46818	AVG		0.47535		6.95796	15.00000	O
Methylcyclohexane	0.88652	0.94062	0.97801	0.80340	0.98599	0.96596	AVG		0.92675		7.58389	15.00000	O
Dibromofluoromethane	0.46963	0.44242	0.45331	0.45488	0.46817	0.46869	AVG		0.45952		2.41063	15.00000	
1,2-Dichloroethane-D4	0.63691	0.60032	0.61357	0.58638	0.56845	0.54328	AVG		0.59149		5.61230	15.00000	
Toluene-D8	0.94658	0.95506	0.97301	0.94843	0.98307	0.91489	AVG		0.95351		2.49166	15.00000	
P-Bromofluorobenzene	0.46932	0.42882	0.43025	0.42562	0.43185	0.41351	AVG		0.43323		4.35504	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-p.i\P061615.b\P1435A.D
Report Date: 18-Jun-2015 11:04

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG164916-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-p.i\P061615.b\P826A08.m
Misc Info: WG164916,WG164916-4

Client SDG: WG164916
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	74.6	149.18*	80-120
	2 Chloromethane	50.0	66.7	133.46*	80-120
	3 Vinyl chloride	50.0	63.7	127.34*	80-120
	4 Bromomethane	50.0	61.9	123.74*	80-120
	5 Chloroethane	50.0	63.5	127.07*	80-120
	6 Trichlorofluoromet	50.0	62.3	124.70*	80-120
	7 Diethyl Ether	50.0	49.2	98.46	80-120
	8 Tertiary-butyl alc	250	256	102.48	80-120
	9 1,1-Dichloroethene	50.0	54.2	108.40	80-120
	10 Carbon Disulfide	50.0	56.9	113.79	80-120
	11 Freon-113	50.0	50.6	101.30	80-120
	12 Iodomethane	50.0	64.1	128.20*	80-120
	13 Acrolein	250	235	93.95	80-120
	14 Methylene Chloride	50.0	48.7	97.41	80-120
	15 Acetone	50.0	46.7	93.48	80-120
	16 Isobutyl Alcohol	1000	936	93.62	80-120
	17 trans-1,2-Dichloro	50.0	56.9	113.90	80-120
	18 Allyl Chloride	50.0	50.9	101.83	80-120
	19 Methyl tert-butyl	100	108	108.15	80-120
	20 Acetonitrile	500	445	89.05	80-120
	21 Di-isopropyl ether	50.0	50.8	101.70	80-120
	22 Chloroprene	50.0	52.2	104.37	80-120
	23 Propionitrile	500	459	91.83	80-120
	24 Methacrylonitrile	500	450	90.09	80-120
	25 1,1-Dichloroethane	50.0	54.1	108.19	80-120
	26 Acrylonitrile	250	243	97.05	80-120
	27 Ethyl tertiary-but	50.0	51.4	102.84	80-120
	28 Vinyl Acetate	50.0	52.7	105.37	80-120
	29 cis-1,2-Dichloroet	50.0	48.0	95.98	80-120
M	30 1,2-Dichloroethyle	100	105	104.94	80-120
	31 Methyl Methacrylat	50.0	48.2	96.39	80-120
	32 2,2-Dichloropropan	50.0	51.4	102.83	80-120
	33 Bromochloromethane	50.0	52.0	104.07	80-120
	34 Chloroform	50.0	52.3	104.65	80-120
	35 Carbon Tetrachlori	50.0	53.2	106.35	80-120
	36 Tetrahydrofuran	50.0	45.2	90.44	80-120
	38 1,1,1-Trichloroeth	50.0	53.3	106.62	80-120
	39 1,1-Dichloropropen	50.0	54.8	109.54	80-120
	40 2-Butanone	50.0	47.8	95.59	80-120
	41 Benzene	50.0	53.5	107.02	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P061615.b\P1435A.D
Report Date: 18-Jun-2015 11:04

	SPIKE	COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	43	Cyclohexane	50.0	49.0	97.98	80-120
	44	Ethyl Methacrylate	50.0	48.5	97.01	80-120
	46	Tertiary-amyl meth	50.0	51.0	102.08	80-120
	47	1,2-Dichloroethane	50.0	51.1	102.23	80-120
	48	Trichloroethene	50.0	50.5	100.95	80-120
	50	Dibromomethane	50.0	52.2	104.32	80-120
	51	1,2-Dichloropropan	50.0	52.0	104.01	80-120
	52	Bromodichlorometha	50.0	53.1	106.27	80-120
	53	cis-1,3-dichloropr	50.0	53.9	107.85	80-120
	54	1,4-Dioxane	1000	881	88.07	80-120
	56	2-Chloroethylvinyl	50.0	58.3	116.68	80-120
	57	Toluene	50.0	52.1	104.17	80-120
	58	4-methyl-2-pentano	50.0	50.1	100.12	80-120
	59	Tetrachloroethene	50.0	50.2	100.48	80-120
	60	trans-1,3-Dichloro	50.0	56.3	112.69	80-120
	61	1,1,2-Trichloroeth	50.0	50.5	101.00	80-120
	62	Dibromochlorometha	50.0	51.2	102.42	80-120
	63	1,3-Dichloropropan	50.0	49.6	99.17	80-120
	64	1,2-Dibromoethane	50.0	50.0	100.02	80-120
	65	2-Hexanone	50.0	50.4	100.75	80-120
	67	Chlorobenzene	50.0	52.4	104.91	80-120
	152	1-Chlorohexane	50.0	51.1	102.14	80-120
	68	Ethylbenzene	50.0	51.6	103.19	80-120
	69	1,1,1,2-Tetrachlor	50.0	51.9	103.76	80-120
M	70	Xylenes (total)	150	160	106.56	80-120
	71	m+p-Xylenes	100	106	106.19	80-120
	72	o-Xylene	50.0	53.6	107.32	80-120
	73	Styrene	50.0	54.8	109.57	80-120
	74	Bromoform	50.0	51.1	102.26	80-120
	75	Isopropylbenzene	50.0	57.0	114.12	80-120
	77	cis-1,4-Dichloro-2	50.0	46.5	92.93	80-120
	78	trans-1,4-Dichloro	50.0	46.3	92.56	80-120
	79	Bromobenzene	50.0	53.0	105.93	80-120
	80	N-Propylbenzene	50.0	57.9	115.76	80-120
	81	1,1,2,2-Tetrachlor	50.0	49.1	98.29	80-120
	82	1,3,5-Trimethylben	50.0	54.6	109.22	80-120
	83	2-Chlorotoluene	50.0	55.9	111.78	80-120
	84	1,2,3-Trichloropro	50.0	48.6	97.32	80-120
	85	4-Chlorotoluene	50.0	54.7	109.48	80-120
	86	tert-Butylbenzene	50.0	57.4	114.81	80-120
	87	Pentachloroethane	50.0	51.5	102.99	80-120
	88	1,2,4-Trimethylben	50.0	57.4	114.79	80-120
	89	P-Isopropyltoluene	50.0	55.6	111.15	80-120
	90	1,3-Dichlorobenzen	50.0	53.1	106.25	80-120
	92	1,4-Dichlorobenzen	50.0	52.9	105.76	80-120
	93	N-Butylbenzene	50.0	55.2	110.42	80-120
	94	sec-Butylbenzene	50.0	57.1	114.16	80-120
	95	1,2-Dichlorobenzen	50.0	52.0	104.10	80-120
	96	1,2-Dibromo-3-Chlo	50.0	54.2	108.41	80-120
	97	1,3,5-Trichloroben	50.0	50.4	100.79	80-120
	98	Hexachlorobutadien	50.0	50.0	99.99	80-120
	99	1,2,4-Trichloroben	50.0	51.8	103.61	80-120
	100	1,2,3-Trimethylben	50.0	52.8	105.57	80-120
	101	Naphthalene	50.0	54.8	109.56	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P061615.b\P1435A.D
Report Date: 18-Jun-2015 11:04

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	49.0	98.02	80-120
103 Methyl Acetate	50.0	39.1	78.18*	80-120
104 Methylcyclohexane	50.0	50.6	101.11	80-120
M 153 Total Alkylbenzene	350	395	112.90	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	53.4	106.87	68-128
$ 45 1,2-Dichloroethane	50.0	52.3	104.59	67-135
$ 55 Toluene-D8	50.0	56.6	113.29	65-128
$ 76 P-Bromofluorobenze	50.0	53.5	107.06	56-133

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164966-4
Analytical Date: 06/17/15 10:47
Lab File ID : P1455.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/16/15 10:37 06/16/15 12:48
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1 Dichlorodifluoromethane	0.53487	0.49988	0.49988	0.010	-6.54295	20.00000	Averaged	
2 Chloromethane	0.88980	0.83031	0.83031	0.100	-6.68563	20.00000	Averaged	
3 Vinyl chloride	0.66039	0.62912	0.62912	0.010	-4.73568	20.00000	Averaged	
4 Bromomethane	0.30313	0.31608	0.31608	0.010	4.27376	20.00000	Averaged	
5 Chloroethane	0.46487	0.51249	0.51249	0.010	10.24515	20.00000	Averaged	
6 Trichlorofluoromethane	0.75849	0.85462	0.85462	0.010	12.67471	20.00000	Averaged	
9 1,1-Dichloroethene	0.51625	0.51441	0.51441	0.100	-0.35533	20.00000	Averaged	
10 Carbon Disulfide	1.81187	1.86991	1.86991	0.010	3.20353	20.00000	Averaged	
11 Freon-113	0.31078	0.32130	0.32130	0.010	3.38446	20.00000	Averaged	
14 Methylene Chloride	0.72800	0.68976	0.68976	0.010	-5.25324	20.00000	Averaged	
15 Acetone	0.21644	0.25260	0.25260	0.010	16.70617	20.00000	Averaged	
17 trans-1,2-Dichloroethene	0.54600	0.56101	0.56101	0.010	2.74779	20.00000	Averaged	
19 Methyl tert-butyl ether	1.62189	1.77543	1.77543	0.010	9.46634	20.00000	Averaged	
25 1,1-Dichloroethane	1.01408	1.05504	1.05504	0.100	4.03904	20.00000	Averaged	
29 cis-1,2-Dichloroethene	0.67375	0.67667	0.67667	0.010	0.43255	20.00000	Averaged	
33 Bromochloromethane	0.24996	0.25449	0.25449	0.010	1.80962	20.00000	Averaged	
34 Chloroform	1.00836	1.06976	1.06976	0.010	6.08901	20.00000	Averaged	
35 Carbon Tetrachloride	0.33354	0.36129	0.36129	0.010	8.31993	20.00000	Averaged	
38 1,1,1-Trichloroethane	0.82665	0.89006	0.89006	0.010	7.67049	20.00000	Averaged	
40 2-Butanone	0.27912	0.31594	0.31594	0.010	13.19415	20.00000	Averaged	
41 Benzene	1.22554	1.26321	1.26321	0.010	3.07403	20.00000	Averaged	
43 Cyclohexane	0.96318	1.03045	1.03045	0.010	6.98337	20.00000	Averaged	
47 1,2-Dichloroethane	0.41640	0.44002	0.44002	0.010	5.67315	20.00000	Averaged	
48 Trichloroethene	0.30872	0.30852	0.30852	0.010	-0.06500	20.00000	Averaged	
51 1,2-Dichloropropane	0.31347	0.31025	0.31025	0.010	-1.02637	20.00000	Averaged	
52 Bromodichloromethane	0.41318	0.42790	0.42790	0.010	3.56228	20.00000	Averaged	
53 cis-1,3-dichloropropene	0.48433	0.50088	0.50088	0.010	3.41610	20.00000	Averaged	
57 Toluene	0.81262	0.82203	0.82203	0.010	1.15863	20.00000	Averaged	
58 4-methyl-2-pentanone	0.29681	0.32693	0.32693	0.010	10.14964	20.00000	Averaged	
59 Tetrachloroethene	0.25007	0.25020	0.25020	0.010	0.05297	20.00000	Averaged	
60 trans-1,3-Dichloropropene	0.40770	0.43093	0.43093	0.010	5.69816	20.00000	Averaged	
61 1,1,2-Trichloroethane	0.24171	0.24559	0.24559	0.010	1.60251	20.00000	Averaged	
62 Dibromochloromethane	0.33420	0.34496	0.34496	0.010	3.22062	20.00000	Averaged	
64 1,2-Dibromoethane	0.28379	0.28874	0.28874	0.010	1.74206	20.00000	Averaged	
65 2-Hexanone	0.23148	0.25958	0.25958	0.010	12.14071	20.00000	Averaged	
67 Chlorobenzene	0.95254	0.96481	0.96481	0.300	1.28825	20.00000	Averaged	
68 Ethylbenzene	0.52555	0.52683	0.52683	0.010	0.24410	20.00000	Averaged	
70 Xylenes (total)	++++	0.64851	0.64851	0.010	++++	20.00000	Averaged	*
71 m+p-Xylenes	0.62497	0.65122	0.65122	0.010	4.20031	20.00000	Averaged	
72 o-Xylene	0.62951	0.64310	0.64310	0.010	2.15766	20.00000	Averaged	
73 Styrene	1.07434	1.15483	1.15483	0.010	7.49170	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164966-4
Analytical Date: 06/17/15 10:47
Lab File ID : P1455.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/16/15 10:37 06/16/15 12:48
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
74 Bromoform	0.20381	0.21509	0.21509	0.100	5.53474	20.00000	Averaged
75 Isopropylbenzene	2.96023	3.16246	3.16246	0.010	6.83155	20.00000	Averaged
81 1,1,2,2-Tetrachloroethane	0.91849	0.93016	0.93016	0.300	1.27105	20.00000	Averaged
84 1,2,3-Trichloropropane	0.71834	0.71401	0.71401	0.010	-0.60329	20.00000	Averaged
90 1,3-Dichlorobenzene	1.49975	1.54410	1.54410	0.010	2.95739	20.00000	Averaged
92 1,4-Dichlorobenzene	1.53623	1.58501	1.58501	0.010	3.17560	20.00000	Averaged
95 1,2-Dichlorobenzene	1.47177	1.50745	1.50745	0.010	2.42413	20.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.15870	0.17575	0.17575	0.010	10.74581	20.00000	Averaged
99 1,2,4-Trichlorobenzene	0.91499	0.98029	0.98029	0.010	7.13659	20.00000	Averaged
103 Methyl Acetate	0.47535	0.43002	0.43002	0.010	-9.53495	20.00000	Averaged
104 Methylcyclohexane	0.92675	0.96706	0.96706	0.010	4.34943	20.00000	Averaged
37 Dibromofluoromethane	0.45952	0.52803	0.52803	0.010	14.90929	20.00000	Averaged
45 1,2-Dichloroethane-D4	0.59149	0.69894	0.69894	0.010	18.16716	20.00000	Averaged
55 Toluene-D8	0.95351	1.11516	1.11516	0.010	16.95377	20.00000	Averaged
76 P-Bromofluorobenzene	0.43323	0.48441	0.48441	0.010	11.81396	20.00000	Averaged

*** = Compound out of QC criteria**

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG165024-4
Analytical Date: 06/18/15 08:54
Lab File ID : P1480.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/16/15 10:37 06/16/15 12:48
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1 Dichlorodifluoromethane	0.53487	0.44543	0.44543	0.010	-16.72224	20.00000	Averaged	
2 Chloromethane	0.88980	0.76019	0.76019	0.100	-14.56639	20.00000	Averaged	
3 Vinyl chloride	0.66039	0.57474	0.57474	0.010	-12.97027	20.00000	Averaged	
4 Bromomethane	0.30313	0.28510	0.28510	0.010	-5.94710	20.00000	Averaged	
5 Chloroethane	0.46487	0.46715	0.46715	0.010	0.49123	20.00000	Averaged	
6 Trichlorofluoromethane	0.75849	0.79919	0.79919	0.010	5.36676	20.00000	Averaged	
9 1,1-Dichloroethene	0.51625	0.48039	0.48039	0.100	-6.94528	20.00000	Averaged	
10 Carbon Disulfide	1.81187	1.71317	1.71317	0.010	-5.44735	20.00000	Averaged	
11 Freon-113	0.31078	0.30616	0.30616	0.010	-1.48663	20.00000	Averaged	
14 Methylene Chloride	0.72800	0.66175	0.66175	0.010	-9.10062	20.00000	Averaged	
15 Acetone	0.21644	0.21818	0.21818	0.010	0.80248	20.00000	Averaged	
17 trans-1,2-Dichloroethene	0.54600	0.52003	0.52003	0.010	-4.75762	20.00000	Averaged	
19 Methyl tert-butyl ether	1.62189	1.68473	1.68473	0.010	3.87434	20.00000	Averaged	
25 1,1-Dichloroethane	1.01408	1.00022	1.00022	0.100	-1.36615	20.00000	Averaged	
29 cis-1,2-Dichloroethene	0.67375	0.62892	0.62892	0.010	-6.65400	20.00000	Averaged	
33 Bromochloromethane	0.24996	0.24792	0.24792	0.010	-0.81737	20.00000	Averaged	
34 Chloroform	1.00836	1.02196	1.02196	0.010	1.34880	20.00000	Averaged	
35 Carbon Tetrachloride	0.33354	0.34850	0.34850	0.010	4.48549	20.00000	Averaged	
38 1,1,1-Trichloroethane	0.82665	0.84979	0.84979	0.010	2.79925	20.00000	Averaged	
40 2-Butanone	0.27912	0.27634	0.27634	0.010	-0.99368	20.00000	Averaged	
41 Benzene	1.22554	1.22373	1.22373	0.010	-0.14746	20.00000	Averaged	
43 Cyclohexane	0.96318	0.96501	0.96501	0.010	0.18982	20.00000	Averaged	
47 1,2-Dichloroethane	0.41640	0.43581	0.43581	0.010	4.66234	20.00000	Averaged	
48 Trichloroethene	0.30872	0.29735	0.29735	0.010	-3.68339	20.00000	Averaged	
51 1,2-Dichloropropane	0.31347	0.29830	0.29830	0.010	-4.83668	20.00000	Averaged	
52 Bromodichloromethane	0.41318	0.42084	0.42084	0.010	1.85328	20.00000	Averaged	
53 cis-1,3-dichloropropene	0.48433	0.49066	0.49066	0.010	1.30667	20.00000	Averaged	
57 Toluene	0.81262	0.78758	0.78758	0.010	-3.08129	20.00000	Averaged	
58 4-methyl-2-pentanone	0.29681	0.31568	0.31568	0.010	6.35939	20.00000	Averaged	
59 Tetrachloroethene	0.25007	0.23881	0.23881	0.010	-4.50065	20.00000	Averaged	
60 trans-1,3-Dichloropropene	0.40770	0.41551	0.41551	0.010	1.91459	20.00000	Averaged	
61 1,1,2-Trichloroethane	0.24171	0.23468	0.23468	0.010	-2.91192	20.00000	Averaged	
62 Dibromochloromethane	0.33420	0.33709	0.33709	0.010	0.86476	20.00000	Averaged	
64 1,2-Dibromoethane	0.28379	0.28391	0.28391	0.010	0.04128	20.00000	Averaged	
65 2-Hexanone	0.23148	0.24873	0.24873	0.010	7.45118	20.00000	Averaged	
67 Chlorobenzene	0.95254	0.93944	0.93944	0.300	-1.37601	20.00000	Averaged	
68 Ethylbenzene	0.52555	0.51669	0.51669	0.010	-1.68551	20.00000	Averaged	
70 Xylenes (total)	++++	0.63977	0.63977	0.010	++++	20.00000	Averaged	*
71 m+p-Xylenes	0.62497	0.64059	0.64059	0.010	2.49880	20.00000	Averaged	
72 o-Xylene	0.62951	0.63814	0.63814	0.010	1.37038	20.00000	Averaged	
73 Styrene	1.07434	1.11963	1.11963	0.010	4.21564	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG165024-4
Analytical Date: 06/18/15 08:54
Lab File ID : P1480.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/16/15 10:37 06/16/15 12:48
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
74 Bromoform	0.20381	0.20477	0.20477	0.100	0.46955	20.00000	Averaged
75 Isopropylbenzene	2.96023	3.08949	3.08949	0.010	4.36646	20.00000	Averaged
81 1,1,2,2-Tetrachloroethane	0.91849	0.87799	0.87799	0.300	-4.40929	20.00000	Averaged
84 1,2,3-Trichloropropane	0.71834	0.66867	0.66867	0.010	-6.91461	20.00000	Averaged
90 1,3-Dichlorobenzene	1.49975	1.50082	1.50082	0.010	0.07101	20.00000	Averaged
92 1,4-Dichlorobenzene	1.53623	1.52613	1.52613	0.010	-0.65692	20.00000	Averaged
95 1,2-Dichlorobenzene	1.47177	1.44480	1.44480	0.010	-1.83262	20.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.15870	0.16340	0.16340	0.010	2.96290	20.00000	Averaged
99 1,2,4-Trichlorobenzene	0.91499	0.95386	0.95386	0.010	4.24802	20.00000	Averaged
103 Methyl Acetate	0.47535	0.44303	0.44303	0.010	-6.79780	20.00000	Averaged
104 Methylcyclohexane	0.92675	0.91096	0.91096	0.010	-1.70344	20.00000	Averaged
37 Dibromofluoromethane	0.45952	0.52534	0.52534	0.010	14.32412	20.00000	Averaged
45 1,2-Dichloroethane-D4	0.59149	0.69991	0.69991	0.010	18.33138	20.00000	Averaged
55 Toluene-D8	0.95351	1.13339	1.13339	0.010	18.86546	20.00000	Averaged
76 P-Bromofluorobenzene	0.43323	0.48331	0.48331	0.010	11.56069	20.00000	Averaged

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

GCMS-P INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06/17/15 10:22

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB -3	PB292	1	-1	VOABFBAQ							Y	EME		
VSTD050P17A -4	P1455	1	1	P826A08							Y			
LCSA WG164966-1	56	1	2								Y			
VBLKA	57	1	3								N			
VBLKB	58	1	4								N			
VBLKC -2	59	1	5								Y			
MeOH BLK -5	60	1	6								Y			800uL→40mL ~~1SST~~ 06/16/15 REC
TCLPBLK -6	61	20	7		X		X				Y			2mL→40mL
SPLPBLK -7	62	5	8		X		1312				Y			8mL→40mL
SI3768-1 A	63	1	9		X			X			Y		L2	
↓ -2 B	64	1	10					↓			Y		Z	
SI4189-2 A	65	1	11						X		Y		L2	
↓ -1 A	66	1	12								Y		L2	
SI3916-1DL C	67	20	13				X				Y			2mL→40mL 1SST no target hits
↓ -2DL	68	20	14								Y			
SI4051-2DL	69	20	15								Y			
~~SI3862-1DL~~ SI3862-6DL	70	5	16		X		1312				Y			8mL→40mL
SI3862-7DL	71	5	17								Y			
SI3989-2DL2 D	72	1	18	06/17 KS	X	X		X			Y			800uL→40mL
SI3942-1DL D	73	1	19								Y			↓ 1SST
SI3862-6MS -8	74	5	20		X		1312		X		N			8mL→40mL not spiked
↓ -6MSD -9	75	5	21								N			↓ 20:16
Rinse	76	1	22								N			
Rinse	77	1	23								N			
Rinse	78	1	24								N			
Rinse	79	1	25								N			

STANDARD	CODE
BFB	V9879
CAL. STD.	V9897 V9899
LCS/MS MIX	V9900
EXTRAS MIX	V9898

STANDARD	CODE
IS MIX	V9901
SS MIX	V9885

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS546

VOA-024 – Revision 1 – 05/16/2014

KATAHDIN ANALYTICAL SERVICES

GCMS-P INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06-18-15/8:26

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ③	DB293	1	-1	V0ABFBAQ							Y	EME		
VSTD050P18A ④	P1480	1	1	P826A08							Y			
LCS A [VG165021] ①	81	1	2								Y			
VBLK A	82	1	3								N			
↓ B	83	1	4								N			
↓ C ②	84	1	5								Y			MeCl2 ~½ PAL
TCLP BLK(061815) ⑤ A	85	20	6								Y			
SI3927-1 A	86	1	7		X			X			Y		<2	
↓ -2 A	87	1	8					↓			Y			
SI4226-4 A	88	1	9						X		Y		<2	
SI4058-2RA B	89	1	10					X			Y		<2	
SI4219-1DL A	90	20	11				X		X		Y			
↓ -2DL A	91	20	12				↓		↓		Y			ISS↑ no 4,7,5 > PQL
↓ -3DL A	92	20	13						↓		Y			
SI4058-1DL C	93	20	14					X			Y		<2	
SI4226-3 A	94	1	15						X		Y		<2	
SI4058-1RA2 C	95	1	16					X			Y		<2	
SI3862-6MS ⑥ B	96	5	17				312		X		Y			
↓ -6MSD ⑦ B	97	5	18				↓		↓		Y			ISS↑
Rinse	98	1	19								N			
Rinse	99	1	20								N			
LOD@0.75 A	P1500	1	21											
↓ B	01	1	22											
LOD@0.5 A	02	1	23											
↓ B	03	1	24											19:39
Rinse x2	04-05	1	25-26								N			

STANDARD	CODE
BFB	V9879
CAL. STD.	V9897, V9899
LCS/MS MIX	V9900
EXTRAS MIX	V9898

STANDARD	CODE
IS MIX	V9901
SS MIX	V9885

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS546

(F)

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE ~~TCLP~~ SPLP EXTRACTION BENCH SHEET FOR SPLP - BLK

Dry Weight Determination 100% ✓ <0.5%_____ %Wet Solids_____

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Baked Sand Homogeneous ✓ Non-homogeneous_____

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 061615

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 061615 pH of Fluid Today 8.05 Extraction Fluid Batch # DI, H_2O

Extract Use Filter Paper Lot #: 102807-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste	_____g
2)	Weight Container 1 + Residue	_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)	_____g
4)	Weight of Pre-extraction Collection Device	_____g
5)	Weight of Device and Filtrate	_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))	

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1630 Time Stopped 1130 Hours Extracted 19

Room Temp @ Start 21.2 Room Temp @ End 21.4

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 061615 Rev 6/08

(B)

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR 57 3862-6

Dry Weight Determination 100%_____ <0.5%_____ %Wet Solids ✓

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Oily Sand Homogeneous_____ Non-homogeneous ✓

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	____/____	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 061615

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 061615 pH of Fluid Today 8.05 Extraction Fluid Batch # DI, H2O

Extract Use

Filter Paper Lot #: K2807-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste	_____g
2)	Weight Container 1 + Residue	_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)	_____g
4)	Weight of Pre-extraction Collection Device	_____g
5)	Weight of Device and Filtrate	_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))	

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1630 Time Stopped 1130 Hours Extracted 19

Room Temp @ Start 21.2 Room Temp @ End 21.4

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 061615 Rev 6/08

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR 513862 - 7

Dry Weight Determination 100%_____ <0.5%_____ %Wet Solids ✓

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description:_____Homogeneous_____ Non-homogeneous ✓

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 061615

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 061615 pH of Fluid Today 8.05 Extraction Fluid Batch # DI H2O

Extract Use

Filter Paper Lot #: 102807-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste	_____g
2)	Weight Container 1 + Residue	_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)	_____g
4)	Weight of Pre-extraction Collection Device	_____g
5)	Weight of Device and Filtrate	_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))	

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1630 Time Stopped 1130 Hours Extracted 19

Room Temp @ Start 21.2 Room Temp @ End 21.4

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 061615 Rev 6/08

KATAHDIN ANALYTICAL SERVICES

GCMS-P INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06/16/15 10:02

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB -10	P8291	1	-1	VOABFBAQ							Y	RECEIVED		
VSTD050P16A	P1429	1	1	P826A08							Y	06/15/15 REC		W6164916-4
VSTD020P16A	30	1	2								Y			-3
VSTD005P16A	31	1	3								Y			-2
VSTD001P16A	32	1	4								Y			Curve -1
VSTD200P16A	33	1	5								Y			Good -6
VSTD100P16A	34	1	6								Y			-5
LCSA -8	35	1	7								Y			IND -7
VBLKA	36	1	8								N			
VBLKB	37	1	9								N			
VBLKC -9	38	1	10								Y			
SI4007-6RA E	39	1	11		X				X		Y		<2	
SI4056-1 A	40	1	12					X			Y			
-2 A	41	1	13							06/17/15 REC	Y			
SI4058-1DL	42	20	14								Y			2mL→40mL CCl4 not PCL, narrate Chlorpyrifos interference
SI4056-3 D	43	1	15								Y			
-4 A	44	1	16								Y			
-5 A	45	1	17								Y			
-6 A	46	1	18								Y			
-7 A	47	1	19								Y			
-8 B	48	1	20								Y			
SI4107-5MS -11 B	49	1	21						X		Y			
-5MSD -12 C	50	1	22								Y			20:37
Rinse	51	1	23								N		Z	
Rinse	52	1	24								N			
Rinse x2	53-54	1	25-26								N		Z	

STANDARD	CODE
BFB	V9879
CAL. STD.	V9897 V9899
LCS/MS MIX	V9900
EXTRAS MIX	V9898

STANDARD	CODE
IS MIX	V9901
SS MIX	V9885

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS546

SIM SEMIVOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI3862

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SITE4TS-EB	SI3862-3		74.5		81.7		78.8	
Method Blank Sample	WG164250-1		67.1		74.5		86.7	
Laboratory Control S	WG164250-2		76.1		78.0		78.4	

		QC Limits
2MN	2-METHYLNAPHTHALENE-D10	43-92
FLO	FLUORENE-D10	29-101
PYR	PYRENE-D10	53-166

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI3862

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SITE4TS-FB	SI3862-1DL		0.00	D	0.00	D	0.00	D
SITE4TS-XX	SI3862-2DL		0.00	D	0.00	D	0.00	D
Method Blank Sample	WG164181-1		76.1		84.1		81.1	
Laboratory Control S	WG164181-2		91.0		78.4		63.4	

		QC Limits
PYR	PYRENE-D10	31-128
FLO	FLUORENE-D10	20-96
2MN	2-METHYLNAPHTHALENE-D10	19-94

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : N6425.D
Instrument ID : GCMS-N
Matrix : SL

SDG : SI3862
Lab Sample ID : WG164181-1
Date Extracted : 05-JUN-15
Date Analyzed : 08-JUN-15
Time Analyzed : 09:45

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG164181-2	N6426.D	06/08/15	10:13
SITE4TS-FB	SI3862-1DL	N6429.D	06/08/15	11:36
SITE4TS-XX	SI3862-2DL	N6430.D	06/08/15	12:04

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : N6432.D
Instrument ID : GCMS-N
Matrix : AQ

SDG : SI3862
Lab Sample ID : WG164250-1
Date Extracted : 05-JUN-15
Date Analyzed : 08-JUN-15
Time Analyzed : 12:59

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG164250-2	N6433.D	06/08/15	13:27
SITE4TS-EB	SI3862-3	N6434.D	06/08/15	13:54

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164181-1
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: N6425.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164181

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA
Report Date: 09-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10.	ug/Kgdrywt	1	20	20.	2.6	10.
Acenaphthylene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10.	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10.	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10.	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo(a)anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10.	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo(b)Fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10.	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10.	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno(1,2,3-cd)pyrene	U	10.	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo(a,h)anthracene	U	10.	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10.	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene-D10		76.1	%					
Fluorene-D10		84.1	%					
Pyrene-D10		81.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164250-1
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: N6432.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164250

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 09-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
Acenaphthylene	U	0.10	ug/L	1	.2	0.20	0.054	0.10
Acenaphthene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
Fluorene	U	0.10	ug/L	1	.2	0.20	0.061	0.10
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Benzo(b)Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Methylnaphthalene-D10		67.1	%					
Fluorene-D10		74.5	%					
pyrene-d10		86.7	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164181-2
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: N6426.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164181

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA
Report Date: 09-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Naphthalene	75.3	66.7	50.2	ug/Kgdrywt	10-129
Acenaphthylene	68.2	66.7	45.5	ug/Kgdrywt	25-94
Acenaphthene	72.0	66.7	48.0	ug/Kgdrywt	33-98
Fluorene	73.5	66.7	49.0	ug/Kgdrywt	40-92
Phenanthrene	73.5	66.7	49.0	ug/Kgdrywt	46-96
Anthracene	77.8	66.7	51.9	ug/Kgdrywt	34-96
Fluoranthene	82.2	66.7	54.8	ug/Kgdrywt	38-116
Pyrene	58.3	66.7	38.9	ug/Kgdrywt	35-111
Benzo(a)anthracene	80.6	66.7	53.8	ug/Kgdrywt	48-100
Chrysene	78.0	66.7	52.0	ug/Kgdrywt	46-101
Benzo(b)Fluoranthene	76.3	66.7	50.9	ug/Kgdrywt	53-100
Benzo(k)fluoranthene	71.5	66.7	47.7	ug/Kgdrywt	49-96
Benzo(a)pyrene	68.7	66.7	45.8	ug/Kgdrywt	61-101
Indeno(1,2,3-cd)pyrene	86.6	66.7	57.8	ug/Kgdrywt	50-105
Dibenzo(a,h)anthracene	95.0	66.7	63.4	ug/Kgdrywt	55-105
Benzo(g,h,i)perylene	79.6	66.7	53.1	ug/Kgdrywt	53-103
2-Methylnaphthalene-D10	91.0				19-94
Fluorene-D10	78.4				20-96
Pyrene-D10	63.4				31-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164250-2
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: N6433.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164250

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 09-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Naphthalene	75.5	2.00	1.51	ug/L	42-96
Acenaphthylene	69.0	2.00	1.38	ug/L	17-92
Acenaphthene	72.0	2.00	1.44	ug/L	34-92
Fluorene	75.5	2.00	1.51	ug/L	22-112
Phenanthrene	77.0	2.00	1.54	ug/L	60-107
Anthracene	83.0	2.00	1.66	ug/L	59-110
Fluoranthene	73.0	2.00	1.46	ug/L	69-119
Pyrene	73.5	2.00	1.47	ug/L	36-118
Benzo(a)anthracene	82.0	2.00	1.64	ug/L	57-107
Chrysene	82.0	2.00	1.64	ug/L	62-119
Benzo(b)Fluoranthene	72.5	2.00	1.45	ug/L	55-111
Benzo(k)fluoranthene	81.0	2.00	1.62	ug/L	47-107
Benzo(a)pyrene	70.0	2.00	1.40	ug/L	53-99
Indeno(1,2,3-cd)pyrene	72.5	2.00	1.45	ug/L	60-110
Dibenzo(a,h)anthracene	83.0	2.00	1.66	ug/L	62-115
Benzo(g,h,i)perylene	59.0	2.00	1.18	ug/L	55-103
2-Methylnaphthalene-D10	76.1				43-92
Fluorene-D10	78.0				29-101
pyrene-d10	78.4				53-166

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND946.D
Instrument ID : GCMS-N

SDG : SI3862
Date Analyzed : 05-JUN-15
Time Analyzed : 11:11

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	35.3		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	50.5		
70	Less than 2.0% of mass 69	0.3	0.51	1
127	40.0 - 60.0% of mass 198	55.6		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	23.9		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	12.6	81.66	2
442	40.0 - 100.0% of mass 198	78.7		
443	17.0 - 23.0% of mass 442	15.5	19.66	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG164187-4	N6392.D	06/05/15	11:28
Initial Calibration	WG164187-2	N6393.D	06/05/15	11:56
Initial Calibration	WG164187-3	N6394.D	06/05/15	12:23
Initial Calibration	WG164187-5	N6395.D	06/05/15	12:50
Initial Calibration	WG164187-6	N6396.D	06/05/15	13:18
Initial Calibration	WG164187-7	N6397.D	06/05/15	13:54
Independent Source	WG164187-8	N6398.D	06/05/15	14:21

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND947.D
Instrument ID : GCMS-N

SDG : SI3862
Date Analyzed : 08-JUN-15
Time Analyzed : 08:41

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	37.2		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	53.4		
70	Less than 2.0% of mass 69	0.2	0.36	1
127	40.0 - 60.0% of mass 198	54.9		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	23.8		
365	1.0 - 100.0% of mass 198	2.6		
441	0.0 - 100.0% of mass 443	12.4	80.70	2
442	40.0 - 100.0% of mass 198	77.9		
443	17.0 - 23.0% of mass 442	15.4	19.78	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG164347-2	N6424.D	06/08/15	09:17
Method Blank Sample	WG164181-1	N6425.D	06/08/15	09:45
Laboratory Control S	WG164181-2	N6426.D	06/08/15	10:13
SITE4TS-FB	SI3862-1DL	N6429.D	06/08/15	11:36
SITE4TS-XX	SI3862-2DL	N6430.D	06/08/15	12:04
Method Blank Sample	WG164250-1	N6432.D	06/08/15	12:59
Laboratory Control S	WG164250-2	N6433.D	06/08/15	13:27
SITE4TS-EB	SI3862-3	N6434.D	06/08/15	13:54

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164187-4
Lab File ID : N6392.D

SDG: SI3862
Analytical Date: 06/05/15 11:28
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	48698		4.54		146447		5.91		78111		7.97	
	Upper Limit	97396		5.04		292894		6.41		156222		8.47	
	Lower Limit	24349		4.04		73223.5		5.41		39055.5		7.47	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG164347-2	50523		4.53		148281		5.90		82754		7.97	
Method Blank Sample	WG164181-1	53994		4.54		170313		5.91		95778		7.97	
Laboratory Control S	WG164181-2	56980		4.54		180120		5.90		104786		7.96	
SITE4TS-FB	SI3862-1DL	58218		4.54		187319		5.91		111224		7.97	
SITE4TS-XX	SI3862-2DL	66710		4.53		211698		5.91		122786		7.97	
Method Blank Sample	WG164250-1	57789		4.53		174476		5.91		100591		7.97	
Laboratory Control S	WG164250-2	60806		4.53		174577		5.90		102120		7.97	
SITE4TS-EB	SI3862-3	64616		4.53		186472		5.91		109741		7.97	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164187-4
Lab File ID : N6392.D

SDG: SI3862
Analytical Date: 06/05/15 11:28
Instrument ID: GCMS-N

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT #	Area	#	RT #	Area	#	RT #
	Std .	109179		9.76	74082		13.16	47165		15.99
	Upper Limit	218358		10.26	148164		13.66	94330		16.49
	Lower Limit	54589.5		9.26	37041		12.66	23582.5		15.49
Client Sample ID	Lab Sample ID									
Continuing Calibrati	WG164347-2	122641		9.76	92517		13.16	71823		15.97
Method Blank Sample	WG164181-1	148057		9.77	111232		13.16	70638		15.97
Laboratory Control S	WG164181-2	161204		9.76	140202		13.15	103005	*	15.96
SITE4TS-FB	SI3862-1DL	159238		9.76	76298		13.16	34702		15.97
SITE4TS-XX	SI3862-2DL	165642		9.77	70444		13.16	36907		15.97
Method Blank Sample	WG164250-1	138831		9.77	66713		13.17	45824		15.97
Laboratory Control S	WG164250-2	151111		9.76	88438		13.15	53909		15.97
SITE4TS-EB	SI3862-3	159666		9.77	100496		13.16	68069		15.97

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-1DL
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: N6429.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164181

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 93.
Report Date: 09-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		1100	ug/Kgdrywt	10	20	1000	130	510
Acenaphthylene	U	510	ug/Kgdrywt	10	20	1000	61.	510
Acenaphthene	J	910	ug/Kgdrywt	10	20	1000	76.	510
Fluorene		1400	ug/Kgdrywt	10	20	1000	160	510
Phenanthrene		4400	ug/Kgdrywt	10	20	1000	92.	510
Anthracene		2800	ug/Kgdrywt	10	20	1000	61.	510
Fluoranthene	J	1000	ug/Kgdrywt	10	20	1000	92.	510
Pyrene		15000	ug/Kgdrywt	10	20	1000	110	510
Benzo(a)anthracene		2600	ug/Kgdrywt	10	20	1000	97.	510
Chrysene		4200	ug/Kgdrywt	10	20	1000	86.	510
Benzo(b)Fluoranthene	J	930	ug/Kgdrywt	10	20	1000	120	510
Benzo(k)fluoranthene	U	510	ug/Kgdrywt	10	20	1000	160	510
Benzo(a)pyrene		1800	ug/Kgdrywt	10	20	1000	170	510
Indeno(1,2,3-cd)pyrene	J	310	ug/Kgdrywt	10	20	1000	97.	510
Dibenzo(a,h)anthracene	J	270	ug/Kgdrywt	10	20	1000	92.	510
Benzo(g,h,i)perylene	J	1000	ug/Kgdrywt	10	20	1000	100	510
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-2DL
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: N6430.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164181

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 92.
Report Date: 09-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		1200	ug/Kgdrywt	10	20	1100	140	540
Acenaphthylene	U	540	ug/Kgdrywt	10	20	1100	65.	540
Acenaphthene	J	960	ug/Kgdrywt	10	20	1100	81.	540
Fluorene		1500	ug/Kgdrywt	10	20	1100	170	540
Phenanthrene		4200	ug/Kgdrywt	10	20	1100	98.	540
Anthracene		1900	ug/Kgdrywt	10	20	1100	65.	540
Fluoranthene	J	1100	ug/Kgdrywt	10	20	1100	98.	540
Pyrene		17000	ug/Kgdrywt	10	20	1100	110	540
Benzo(a)anthracene		2900	ug/Kgdrywt	10	20	1100	100	540
Chrysene		4000	ug/Kgdrywt	10	20	1100	92.	540
Benzo(b)Fluoranthene	J	840	ug/Kgdrywt	10	20	1100	130	540
Benzo(k)fluoranthene	U	540	ug/Kgdrywt	10	20	1100	170	540
Benzo(a)pyrene		1700	ug/Kgdrywt	10	20	1100	180	540
Indeno(1,2,3-cd)pyrene	J	340	ug/Kgdrywt	10	20	1100	100	540
Dibenzo(a,h)anthracene	J	230	ug/Kgdrywt	10	20	1100	98.	540
Benzo(g,h,i)perylene	J	860	ug/Kgdrywt	10	20	1100	110	540
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-3
Client ID: SITE4TS-EB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: N6434.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 05-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164250

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 09-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.099	ug/L	1	.2	0.20	0.063	0.099
Acenaphthylene	U	0.099	ug/L	1	.2	0.20	0.053	0.099
Acenaphthene	U	0.099	ug/L	1	.2	0.20	0.063	0.099
Fluorene	U	0.099	ug/L	1	.2	0.20	0.060	0.099
Phenanthrene	U	0.099	ug/L	1	.2	0.20	0.050	0.099
Anthracene	U	0.099	ug/L	1	.2	0.20	0.044	0.099
Fluoranthene	U	0.099	ug/L	1	.2	0.20	0.072	0.099
Pyrene	U	0.099	ug/L	1	.2	0.20	0.058	0.099
Benzo(a)anthracene	U	0.099	ug/L	1	.2	0.20	0.046	0.099
Chrysene	U	0.099	ug/L	1	.2	0.20	0.036	0.099
Benzo(b)Fluoranthene	U	0.099	ug/L	1	.2	0.20	0.088	0.099
Benzo(k)fluoranthene	U	0.099	ug/L	1	.2	0.20	0.048	0.099
Benzo(a)pyrene	U	0.099	ug/L	1	.2	0.20	0.065	0.099
Indeno(1,2,3-cd)pyrene	J	0.081	ug/L	1	.2	0.20	0.051	0.099
Dibenzo(a,h)anthracene	U	0.099	ug/L	1	.2	0.20	0.069	0.099
Benzo(g,h,i)perylene	J	0.082	ug/L	1	.2	0.20	0.064	0.099
2-Methylnaphthalene-D10		74.5	%					
Fluorene-D10		81.7	%					
pyrene-d10		78.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6393.D N6394.D N6392.D N6395.D N6396.D N6397.D **Column ID:**
Calibration Date(s): 05-JUN-15 11:28 05-JUN-15 13:54

	0.200000(Level 1	0.500000(Level 2	1.0000 Level 3	3.0000 Level 4	7.0000 Level 5	10.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Naphthalene	0.94693	0.99217	1.00383	0.98243	0.90376	0.84536	AVG		0.94575		6.46931	15.00000	O
Acenaphthylene	1.65471	1.71811	1.79549	1.72285	1.69520	1.60580	AVG		1.69869		3.80652	15.00000	O
Acenaphthene	1.06761	1.10401	1.11741	1.08398	1.09097	0.99594	AVG		1.07666		3.99820	15.00000	O
Fluorene	1.16631	1.16414	1.26852	1.22661	1.20387	1.15320	AVG		1.19711		3.73202	15.00000	O
Phenanthrene	1.05251	1.07407	1.13064	1.05309	1.05622	1.01203	AVG		1.06309		3.65535	15.00000	O
Anthracene	1.12854	1.07273	1.11514	1.07039	1.07225	1.00328	AVG		1.07705		4.07478	15.00000	O
Fluoranthene	1.09319	1.03376	1.13932	1.09596	1.13667	1.03291	AVG		1.08864		4.32168	15.00000	O
Pyrene	2.15102	1.99815	1.80146	1.75384	1.54217	1.46725	AVG		1.78565		14.61585	15.00000	O
Benzo(a)anthracene	0.98404	1.00064	1.04724	1.01158	1.03497	0.99563	AVG		1.01235		2.39852	15.00000	O
Chrysene	26145	48292	115504	351816	976758	1580779	LNR	-0.25656	0.99061		0.99769	0.99000	O
Benzo(b)fluoranthene	1.24381	1.09769	1.25045	1.15156	1.29505	1.23721	AVG		1.21263		6.03087	15.00000	O
Benzo(k)fluoranthene	20139	40770	95172	289233	820399	1329974	LNR	-0.24135	1.36508		0.99686	0.99000	O
Benzo(a)pyrene	1.28595	1.13162	1.10326	1.06166	1.10044	1.05904	AVG		1.12366		7.48582	15.00000	O
Indeno(1,2,3-cd)pyrene	0.85824	0.78022	0.76299	0.75240	0.79701	0.76105	AVG		0.78532		4.98130	15.00000	O
Dibenzo(a,h)anthracene	0.54145	0.54237	0.54037	0.54163	0.58588	0.56496	AVG		0.55278		3.39348	15.00000	O
Benzo(g,h,i)perylene	0.93508	0.83332	0.78628	0.75375	0.74962	0.69782	AVG		0.79265		10.45517	15.00000	O
2-Methylnaphthalene-D10	1.00905	1.02883	1.07957	1.01453	0.98828	0.92286	AVG		1.00719		5.10795	15.00000	
Fluorene-D10	0.87129	0.85247	0.92818	0.88195	0.88446	0.84062	AVG		0.87649		3.48128	15.00000	
Pyrene-D10	1.41829	1.37689	1.23514	1.23225	1.07061	1.03060	AVG		1.22730		12.73725	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N060515.b\N6398.D
Report Date: 08-Jun-2015 14:36

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG164187-8
Level: LOW
Data Type: MS DATA
SpikeList File: SIM_IND_CHK.spk
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N060515.b\NSPSIM44.m
Misc Info: WG164187,WG164187,WG164187-4,SI3862-3

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	2.01	100.59	80-120
3 Benzaldehyde	2.00	1.38	68.86*	80-120
4 Phenol	2.00	2.05	102.74	80-120
5 Bis(2-Chloroethyl)	2.00	1.73	86.74	80-120
6 2-Chlorophenol	2.00	1.96	97.85	80-120
7 1,3-Dichlorobenzen	2.00	2.05	102.38	80-120
9 1,4-Dichlorobenzen	2.00	2.15	107.63	80-120
10 1,2-Dichlorobenzen	2.00	2.08	103.94	80-120
11 2,2'-Oxybis(1-chlo	2.00	1.76	88.10	80-120
12 2-Methylphenol	2.00	2.20	110.29	80-120
13 Acetophenone	2.00	2.04	102.21	80-120
14 N-Nitroso-di-n-pro	2.00	1.90	94.81	80-120
16 Hexachloroethane	2.00	2.08	104.11	80-120
15 3&4-Methylphenol	2.00	1.82	90.83	80-120
17 Nitrobenzene	2.00	2.16	108.14	80-120
18 Isophorone	2.00	2.08	104.13	80-120
19 2-Nitrophenol	2.00	1.87	93.38	80-120
20 2,4-Dimethylphenol	2.00	1.80	89.96	80-120
21 bis(2-Chloroethoxy	2.00	1.99	99.58	80-120
22 2,4-Dichlorophenol	2.00	1.85	92.49	80-120
23 1,2,4-Trichloroben	2.00	2.04	101.88	80-120
25 Naphthalene	2.00	2.07	103.66	80-120
26 4-Chloroaniline	2.00	1.88	94.15	80-120
27 Hexachlorobutadien	2.00	2.04	102.12	80-120
28 Caprolactam	2.00	1.94	97.05	80-120
29 4-Chloro-3-Methylp	2.00	1.81	90.74	80-120
31 2-Methylnaphthalen	2.00	1.85	92.43	80-120
32 1-Methylnaphthalen	2.00	1.94	97.03	80-120
34 1,2,4,5-Tetrachlor	2.00	1.86	92.98	80-120
33 Hexachlorocyclopen	2.00	1.34	66.85*	80-120
36 2,4,6-Trichlorophe	2.00	1.75	87.60	80-120
37 2,4,5-Trichlorophe	2.00	1.83	91.52	80-120
39 2-Chloronaphthalen	2.00	1.85	92.72	80-120
38 1,1'-Biphenyl	2.00	1.93	96.49	80-120
40 2-Nitroaniline	2.00	1.91	95.36	80-120
41 Dimethyl Phthalate	2.00	1.88	93.80	80-120
43 Acenaphthylene	2.00	1.70	84.77	80-120
42 2,6-Dinitrotoluene	2.00	1.86	93.03	80-120
44 3-Nitroaniline	2.00	2.06	103.08	80-120
46 Acenaphthene	2.00	1.94	96.79	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N060515.b\N6398.D
Report Date: 08-Jun-2015 14:36

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 2,4-Dinitrophenol	2.00	1.52	75.77*	80-120
48 Dibenzofuran	2.00	1.88	94.09	80-120
49 2,4-Dinitrotoluene	2.00	1.73	86.38	80-120
50 4-Nitrophenol	2.00	1.51	75.52*	80-120
51 2,3,4,6-Tetrachlor	2.00	1.60	79.76*	80-120
52 Diethylphthalate	2.00	1.97	98.60	80-120
54 Fluorene	2.00	1.88	94.00	80-120
56 4-Nitroaniline	2.00	2.26	112.82	80-120
57 4,6-Dinitro-2-Meth	2.00	1.67	83.40	80-120
58 N-Nitrosodiphenyla	2.00	1.52	76.12*	80-120
59 4-Bromophenyl-phen	2.00	1.91	95.45	80-120
60 Hexachlorobenzene	2.00	1.91	95.71	80-120
61 Atrazine	2.00	1.78	88.94	80-120
62 Pentachlorophenol	2.00	1.60	79.86*	80-120
64 Phenanthrene	2.00	1.90	94.87	80-120
65 Anthracene	2.00	1.94	97.05	80-120
66 Carbazole	2.00	1.89	94.38	80-120
67 Di-n-butylphthalat	2.00	2.04	102.21	80-120
68 Fluoranthene	2.00	1.96	97.75	80-120
70 Pyrene	2.00	1.95	97.43	80-120
71 Butylbenzylphthala	2.00	1.74	87.09	80-120
72 Benzo(a)anthracene	2.00	1.76	88.23	80-120
75 Chrysene	2.00	1.95	97.73	80-120
73 3,3'-Dichlorobenzi	2.00	1.80	89.90	80-120
76 bis(2-Ethylhexyl)p	2.00	1.59	79.51*	80-120
77 Di-n-octylphthalat	2.00	1.88	93.80	80-120
78 Benzo(b)fluoranthe	2.00	1.89	94.51	80-120
79 Benzo(k)fluoranthe	2.00	1.95	97.75	80-120
80 Benzo(a)pyrene	2.00	1.61	80.47	80-120
82 Indeno(1,2,3-cd)py	2.00	1.72	85.85	80-120
83 Dibenzo(a,h)anthra	2.00	1.69	84.68	80-120
84 Benzo(g,h,i)peryle	2.00	1.75	87.30	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	10-93
$ 30 2-Methylnaphthale	2.00	0.000	*	43-92
$ 35 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 53 Fluorene-D10	2.00	0.000	*	29-101
$ 69 Pyrene-D10	2.00	0.000	*	53-166

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164347-2
Analytical Date: 06/08/15 09:17
Lab File ID : N6424.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/05/15 11:28 06/05/15 13:54
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
25 Naphthalene	0.94575	0.99720	0.99720	0.010	5.44031	20.00000	Averaged
43 Acenaphthylene	1.69869	1.76398	1.76398	0.010	3.84306	20.00000	Averaged
46 Acenaphthene	1.07666	1.12238	1.12238	0.010	4.24706	20.01000	Averaged
54 Fluorene	1.19711	1.23881	1.23881	0.010	3.48391	20.00000	Averaged
64 Phenanthrene	1.06309	1.06571	1.06571	0.010	0.24639	20.00000	Averaged
65 Anthracene	1.07705	1.15273	1.15273	0.010	7.02620	20.00000	Averaged
68 Fluoranthene	1.08864	1.12071	1.12071	0.010	2.94677	20.01000	Averaged
70 Pyrene	1.78565	1.56347	1.56347	0.010	-12.44225	20.00000	Averaged
72 Benzo(a)anthracene	1.01235	1.03978	1.03978	0.010	2.70989	20.00000	Averaged
75 Chrysene	1.00000	1.09227	1.28534	0.010	9.22741	20.00000	Linear
78 Benzo(b)fluoranthene	1.21263	1.19777	1.19777	0.010	-1.22563	20.00000	Averaged
79 Benzo(k)fluoranthene	1.00000	0.91165	1.50805	0.010	-8.83466	20.00000	Linear
80 Benzo(a)pyrene	1.12366	1.07931	1.07931	0.010	-3.94714	20.01000	Averaged
82 Indeno(1,2,3-cd)pyrene	0.78532	0.80019	0.80019	0.010	1.89342	20.00000	Averaged
83 Dibenzo(a,h)anthracene	0.55278	0.58868	0.58868	0.010	6.49511	20.00000	Averaged
84 Benzo(g,h,i)perylene	0.79265	0.76916	0.76916	0.010	-2.96319	20.00000	Averaged
30 2-Methylnaphthalene-D10	1.00719	1.00673	1.00673	0.010	-0.04518	20.00000	Averaged
53 Fluorene-D10	0.87649	0.90391	0.90391	0.010	3.12823	20.00000	Averaged
69 Pyrene-D10	1.22730	1.09148	1.09148	0.010	-11.06607	20.00000	Averaged

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 060515

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG164187-1	50ng DFTPP	N0946	1	1	DFTPP SVM	2.0	JLG	OK
-4	SSTD1.00 N0605	N6392		2	NSPSIM44			✓
-2	0.2	93		3				✓
-3	0.5	94		4				✓
-5	3.0	95		5				✓
-6	7.0	96		6				✓
-7	10.	97		7				✓
-8	(ND)	98		8				OK
2550	WG164111-1	99		9				OK
	-2	N6400		10				OK
	SI3800-7DL	01	3	11				OK DL1:5 100/300
	-13RA	02	1	12				OK
	-6	03		13				OK
	-9	04		14				OK
	WG164181-3	05		15				OK
	-4	06		16				OK
	SI3800-10	07		17				OK DL1:4
	-15	08		18				OK
	-16	09		19				OK
	-3	10		20				OK
	-7	11		21				OK
	-28	12		22				OK
	-8	13		23				— DL1:10
	-22RA	14		24				OK
	-23RA	15		25				OK
	-33	16		26				OK
	-5	17		27				OK
	Hellv	18-23		28				—

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52624
IS MIX	52615

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

Katahdin Analytical Services 0000182

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 060815

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG164347-1	50ng DFTPP	ND947	1	1	DFTPPSIM	2.0	JCL	ok
-2	SSTD1.00ND608	N6424		2	NSPSIM44			ok
3550	WG164181-1	25		3				~~1564~~ ok
	-2	26		4				ok 1564
	SI3862-1DL	27	100	5				– DL 1:10 (50/500)x2
	-2DL	28	100	6				–
	-1DL	29	10	7				ok 50/500
	-2DL	30	10	8				ok
–	MeCl2	31	1	9				–
3510	WG164250-1	32		10				ok
	-2	33		11				ok
	SI3862-3	34		12				
3550	SI3800-8DL	35	5	13				50/250
	-10DL	36	4	14				100/400
	-11RE	37	1	15				
	-18	38		16				
	-19	39		17				
	-20	40		18				
	-21	41		19				
	-24	42		20				
	-32	43		21				
	-35	44		22				
	-36	45		23				
	-37	46		24				
	-34	47		25				

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52624
IS MIX	52635

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

QAMS570

S/S

SOV

KATAHDIN ANALYTICAL SERVICES, INC.

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method:	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)	SW846 3580 (OIL / WIPES)
Analytical Method:	SW846 8270 ✓	OTHER		
Standards	Surrogate ID (1): SV 2717	Spike ID (1): SV 2716 (Sim)	Spike ID (3):	
	Surrogate ID (2):	Spike ID (2): SV 2715 (SV		
Solvents / Chemicals / Consumables	Solvent Lot # (Mecl2): DM824	Solvent Lot # (Acetone): DL474	Sodium Sulfate (granular) Lot # 27965001	
	Filter Paper Lot # (SON) P0009489	Filter Paper Lot # (KD) 96181511	Sodium Sulfate (powder) Lot # 27975002	
Misc.	Nitrogen Bath Temperature: 37°C	Sonicator Horns Tuned: 40%	Balance ID: Mettler PJ400	
Prep Start Time: 1047	Prep Stop Time: 1410	Sox Start Time: —	Sox End Time: —	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SCN	Fraction WS	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. SV833	Comments
6-5-15	WAS	WG-164181-1 WG-164216-1	30.00	1mL	NA	✓	✓				6-5-15	JMS	1mL	B9	Sim-R320334
		WG-164181-2	29.97		1mL									B10	SV-320463
		-3	30.43											C1	MS SD3800-9
		-4	33.12											2	usd -9
		WG-164216-2	29.99			✓								3	
		-3	32.08										5mL	PP217 C8	MS SD3862-1
		-4	31.87											C9	usd -1

EX-008 – Revision 2 – 12/05/2013

QAEX287

0000012

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SCN	Fraction WS	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. 30033	Comments
6-5-15	WAS	SF3800-3 c	31.50	1mL	NA		✓				6-5-15	JMS	1mL	C4	
		-6	30.90											5	
		-9	31.40											6	usld
		-10	30.15											7	
		-15	32.18											8	
		-16	30.26											9	
		-17	31.62											10	
		-18	31.60											D1	
		-19	30.00											2	
		-20	31.51											3	
		-21	30.58											4	
		-29	31.68											5	
		-32	30.36											6	
		-34	30.32											7	
		-35	30.58											8	
		-36	30.97											9	
		-37	32.18											10	
		-11	33.49											E1	re
		SD3862-1	31.77			✓	✓						5mL	PP217 C10	usld
		-2	30.59										5mL	C11	

Reviewed By_____ Date_____

EX-008 – Revision 2 – 12/05/2013

QAEX287

625/SV/SIM
SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625 ✓	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV2717		Spike ID (1): SV2715		
	Surrogate ID (2):		Spike ID (2): SIM: SV2716		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM804		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 27965002		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) 52		pH (2nd Extraction) 211
Prep Start Time: 1300	Prep End Time: 1525		CLLE Start Time:		CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
		WG164237-1 (625)								SVD33		625-R320366
6-5-15	KF	WG164249-1	1000	1mL	NR	✓	✓	1mL	6-5-15	E2	JMS	SV-R
		WG164250-1										SIM-R320464
		WG164237-2			1mL	✓				E3		
		WG164249-2										
		WG164250-2					✓			E4		
		WG164249-3	930			✓				E5		MS 513799-1W
		-4	970			✓				E6		MSD " -1X
		WG164250-3	1050				✓			E7		MS 513860-2M EM-SS
		-4	950				✓			E8		MSD " -2N EM-SS
									KF	6-5-15		

EX-007 – Revision 2 – 12/05/2013

QAEX284 0000072

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-5-15	KF	513810-1F	930	1mL	NR	✓		1mL	6-5-15	E9	JMS	625
		513799-1Y	890			✓	✓			E10		MS/D
		-2F	1020							SVD34 A1		
		-3F	950							A2		
		-4F	940							A3		
		513837-1J	1060				✓			A4		
		513860-1E	1060				✓			A5		
		-2P	930							A6		EM-S.S. cert
		-3F	800							A7		MS/D cert
		-4E	850							A8		cert
		-7E	800							A9		cert
		-8E	1030							A10		cert
		-9E	1050							B1		cert
		513862-3E	1010			✓	✓			B2		Sm-EM S.S.
									KF	6-5-15		

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

SEMIVOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI3862

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
SITE4TS-EB	SI3862-3		84.3		40.6		80.8		27.6		83.2		99.5	
Method Blank Sample	WG164249-1		75.4		30.8		72.0		21.5		62.0		93.0	
Laboratory Control S	WG164249-2		82.8		41.5		83.5		27.2		83.8		92.0	

		QC Limits
2FBP	2-FLUOROBIPHENYL	50-110
2FP	2-FLUOROPHENOL	20-110
PHL	PHENOL-D6	10-115
TPH	TERPHENYL-D14	50-135
NBZ	NITROBENZENE-D5	40-110
TBP	2,4,6-TRIBROMOPHENOL	40-125

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI3862

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
SITE4TS-FB	SI3862-1DL		0.00	D	0.00	D	0.00	D	0.00	D	0.00	D	0.00	D
SITE4TS-XX	SI3862-2DL		0.00	D	0.00	D	0.00	D	0.00	D	0.00	D	0.00	D
Method Blank Sample	WG164216-1		82.6		81.9		80.8		91.6		72.1		88.3	
Laboratory Control S	WG164216-2		78.7		83.5		84.4		81.9		88.4		83.9	

		QC Limits
TPH	TERPHENYL-D14	30-125
NBZ	NITROBENZENE-D5	35-100
PHL	PHENOL-D6	40-100
2FP	2-FLUOROPHENOL	35-105
TBP	2,4,6-TRIBROMOPHENOL	35-125
2FBP	2-FLUOROBIPHENYL	45-105

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0598.D
Instrument ID : GCMS-U
Matrix : SL

SDG : SI3862
Lab Sample ID : WG164216-1
Date Extracted : 05-JUN-15
Date Analyzed : 05-JUN-15
Time Analyzed : 18:07

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG164216-2	U0600.D	06/05/15	19:01
SITE4TS-FB	SI3862-1DL	U0614.D	06/08/15	13:10
SITE4TS-XX	SI3862-2DL	U0615.D	06/08/15	13:38

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0599.D
Instrument ID : GCMS-U
Matrix : AQ

SDG : SI3862
Lab Sample ID : WG164249-1
Date Extracted : 05-JUN-15
Date Analyzed : 05-JUN-15
Time Analyzed : 18:34

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG164249-2	U0601.D	06/05/15	19:28
SITE4TS-EB	SI3862-3	U0607.D	06/05/15	22:10

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164216-1
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: U0598.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164216

Analysis Date: 05-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	250	ug/Kgdrywt	1	330	330	160	250
Bis(2-Chloroethyl)Ether	U	250	ug/Kgdrywt	1	330	330	81.	250
2-Chlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
1,3-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	78.	250
1,4-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	86.	250
1,2-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	88.	250
Benzyl Alcohol	U	500	ug/Kgdrywt	1	660	660	57.	500
2-Methylphenol	U	250	ug/Kgdrywt	1	330	330	200	250
2,2'-Oxybis(1-Chloropropane)	U	250	ug/Kgdrywt	1	330	330	89.	250
3&4-Methylphenol	U	250	ug/Kgdrywt	1	330	330	190	250
N-Nitroso-Di-N-Propylamine	U	250	ug/Kgdrywt	1	330	330	83.	250
Hexachloroethane	U	250	ug/Kgdrywt	1	330	330	96.	250
Nitrobenzene	U	250	ug/Kgdrywt	1	330	330	91.	250
Isophorone	U	250	ug/Kgdrywt	1	330	330	75.	250
2-Nitrophenol	U	250	ug/Kgdrywt	1	330	330	170	250
2,4-Dimethylphenol	U	250	ug/Kgdrywt	1	330	330	160	250
Bis(2-Chloroethoxy)Methane	U	250	ug/Kgdrywt	1	330	330	96.	250
2,4-Dichlorophenol	U	250	ug/Kgdrywt	1	330	330	150	250
1,2,4-Trichlorobenzene	U	250	ug/Kgdrywt	1	330	330	81.	250
Benzoic Acid	U	620	ug/Kgdrywt	1	820	820	340	620
4-Chloroaniline	U	250	ug/Kgdrywt	1	330	330	120	250
Hexachlorobutadiene	U	250	ug/Kgdrywt	1	330	330	83.	250
4-Chloro-3-Methylphenol	U	250	ug/Kgdrywt	1	330	330	170	250
2,4,6-Trichlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
2,4,5-Trichlorophenol	U	620	ug/Kgdrywt	1	820	820	160	620
2-Chloronaphthalene	U	250	ug/Kgdrywt	1	330	330	87.	250
2-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	75.	620
Dimethyl Phthalate	U	250	ug/Kgdrywt	1	330	330	78.	250
2,6-Dinitrotoluene	U	250	ug/Kgdrywt	1	330	330	79.	250
3-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	94.	620
2,4-Dinitrophenol	U	620	ug/Kgdrywt	1	820	820	380	620
4-Nitrophenol	U	620	ug/Kgdrywt	1	820	820	310	620
Dibenzofuran	U	250	ug/Kgdrywt	1	330	330	79.	250
2,4-Dinitrotoluene	U	250	ug/Kgdrywt	1	330	330	85.	250

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164216-1
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: U0598.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164216

Analysis Date: 05-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethylphthalate	U	250	ug/Kgdrywt	1	330	330	80.	250
4-Chlorophenyl-Phenylether	U	250	ug/Kgdrywt	1	330	330	78.	250
4-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	130	620
4,6-Dinitro-2-Methylphenol	U	620	ug/Kgdrywt	1	820	820	340	620
N-Nitrosodiphenylamine	U	250	ug/Kgdrywt	1	330	330	220	250
1,2-Diphenylhydrazine	U	500	ug/Kgdrywt	1	660	660	140	500
4-Bromophenyl-Phenylether	U	250	ug/Kgdrywt	1	330	330	85.	250
Hexachlorobenzene	U	250	ug/Kgdrywt	1	330	330	82.	250
Pentachlorophenol	U	620	ug/Kgdrywt	1	820	820	240	620
Carbazole	U	250	ug/Kgdrywt	1	330	330	110	250
Di-N-Butylphthalate	U	250	ug/Kgdrywt	1	330	330	100	250
Benzidine	U	1100	ug/Kgdrywt	1	1500	1500	100	1100
Butylbenzylphthalate	U	250	ug/Kgdrywt	1	330	330	93.	250
3,3'-Dichlorobenzidine	U	250	ug/Kgdrywt	1	330	330	110	250
Bis(2-Ethylhexyl)Phthalate	U	250	ug/Kgdrywt	1	330	330	98.	250
Di-N-Octylphthalate	U	250	ug/Kgdrywt	1	330	330	210	250
1,1'-biphenyl	U	250	ug/Kgdrywt	1	330	330	73.	250
2,6-Dichlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
Caprolactam	U	250	ug/Kgdrywt	1	330	330	140	250
2-Fluorophenol		81.9	%					
Phenol-D6		91.6	%					
Nitrobenzene-d5		80.8	%					
2-Fluorobiphenyl		82.6	%					
2,4,6-Tribromophenol		72.1	%					
Terphenyl-d14		88.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164249-1
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: U0599.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164249

Analysis Date: 05-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
Bis(2-Chloroethyl)Ether	U	7.5	ug/L	1	10	10.	2.0	7.5
2-Chlorophenol	U	7.5	ug/L	1	10	10.	3.2	7.5
1,3-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
1,4-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.2	7.5
1,2-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.4	7.5
2,2'-Oxybis(1-Chloropropane)	U	7.5	ug/L	1	10	10.	2.1	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
n-Nitroso-di-n-propylamine	U	7.5	ug/L	1	10	10.	1.9	7.5
3&4-Methylphenol	U	7.5	ug/L	1	10	10.	5.6	7.5
Hexachloroethane	U	7.5	ug/L	1	10	10.	2.3	7.5
Nitrobenzene	U	7.5	ug/L	1	10	10.	3.1	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2-Nitrophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Bis(2-chloroethoxy)methane	U	7.5	ug/L	1	10	10.	2.1	7.5
2,4-Dichlorophenol	U	7.5	ug/L	1	10	10.	3.0	7.5
1,2,4-Trichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Chloroaniline	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobutadiene	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Chloro-3-methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2,4,6-Trichlorophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.9	7.5
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
2,6-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.0	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	1.0	19.
Dibenzofuran	U	7.5	ug/L	1	10	10.	1.6	7.5
2,4-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.2	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
4-Chlorophenyl-phenylether	U	7.5	ug/L	1	10	10.	2.2	7.5
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164249-1
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: U0599.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164249

Analysis Date: 05-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,6-Dinitro-2-methylphenol	U	19	ug/L	1	25	25.	2.0	19.
n-Nitrosodiphenylamine	U	7.5	ug/L	1	10	10.	3.7	7.5
4-Bromophenyl-phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
Di-n-butylphthalate	U	7.5	ug/L	1	10	10.	2.5	7.5
Butylbenzylphthalate	U	7.5	ug/L	1	10	10.	1.9	7.5
3,3'-Dichlorobenzidine	U	7.5	ug/L	1	10	10.	1.1	7.5
Bis(2-ethylhexyl)phthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Di-n-octylphthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.
1,1'-Biphenyl	U	7.5	ug/L	1	10	10.	2.7	7.5
1,2-Diphenylhydrazine	U	15	ug/L	1	20	20.	2.0	15.
2,6-Dichlorophenol	U	7.5	ug/L	1	10	10.	4.0	7.5
Benzidine	U	38	ug/L	1	50	50.	16.	38.
Benzoic Acid	U	19	ug/L	1	25	25.	3.0	19.
Benzyl Alcohol	U	15	ug/L	1	20	20.	1.2	15.
Caprolactam	U	7.5	ug/L	1	10	10.	0.40	7.5
2-Fluorophenol		30.8	%					
Phenol-d6		21.5	%					
Nitrobenzene-d5		72.0	%					
2-Fluorobiphenyl		75.4	%					
2,4,6-Tribromophenol		62.0	%					
Terphenyl-d14		93.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164216-2
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: U0600.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164216

Analysis Date: 05-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 24-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Phenol	75.4	3330	2510	ug/Kgdrywt	40-100
Bis(2-Chloroethyl)Ether	94.6	1670	1580	ug/Kgdrywt	40-105
2-Chlorophenol	77.8	3330	2590	ug/Kgdrywt	45-105
1,3-Dichlorobenzene	76.0	1670	1270	ug/Kgdrywt	40-100
1,4-Dichlorobenzene	79.6	1670	1330	ug/Kgdrywt	35-105
1,2-Dichlorobenzene	81.4	1670	1360	ug/Kgdrywt	45-100
Benzyl Alcohol	87.4	1670	1460	ug/Kgdrywt	20-125
2-Methylphenol	78.7	3330	2620	ug/Kgdrywt	40-105
2,2'-Oxybis(1-Chloropropane)	62.9	1670	1050	ug/Kgdrywt	20-115
3&4-Methylphenol	78.4	3330	2610	ug/Kgdrywt	40-105
N-Nitroso-Di-N-Propylamine	74.2	1670	1240	ug/Kgdrywt	40-115
Hexachloroethane	77.8	1670	1300	ug/Kgdrywt	35-110
Nitrobenzene	82.6	1670	1380	ug/Kgdrywt	40-115
Isophorone	68.3	1670	1140	ug/Kgdrywt	45-110
2-Nitrophenol	78.4	3330	2610	ug/Kgdrywt	40-110
2,4-Dimethylphenol	81.4	3330	2710	ug/Kgdrywt	30-105
Bis(2-Chloroethoxy)Methane	76.0	1670	1270	ug/Kgdrywt	45-110
2,4-Dichlorophenol	84.7	3330	2820	ug/Kgdrywt	45-110
1,2,4-Trichlorobenzene	81.4	1670	1360	ug/Kgdrywt	45-110
Benzoic Acid	17.1	3330	569.	ug/Kgdrywt	0-110
4-Chloroaniline	48.5	1670	810.	ug/Kgdrywt	10-100
Hexachlorobutadiene	83.8	1670	1400	ug/Kgdrywt	40-115
4-Chloro-3-Methylphenol	96.4	3330	3210	ug/Kgdrywt	45-115
2,4,6-Trichlorophenol	82.6	3330	2750	ug/Kgdrywt	45-110
2,4,5-Trichlorophenol	80.8	3330	2690	ug/Kgdrywt	50-110
2-Chloronaphthalene	71.8	1670	1200	ug/Kgdrywt	45-105
2-Nitroaniline	94.0	1670	1570	ug/Kgdrywt	45-120
Dimethyl Phthalate	85.6	1670	1430	ug/Kgdrywt	50-110
2,6-Dinitrotoluene	93.4	1670	1560	ug/Kgdrywt	50-110
3-Nitroaniline	71.2	1670	1190	ug/Kgdrywt	25-110
2,4-Dinitrophenol	35.1	3330	1170	ug/Kgdrywt	15-130
4-Nitrophenol	115.	3330	3830	ug/Kgdrywt	15-140
Dibenzofuran	89.2	1670	1490	ug/Kgdrywt	50-105
2,4-Dinitrotoluene	98.8	1670	1650	ug/Kgdrywt	50-115
Diethylphthalate	91.6	1670	1530	ug/Kgdrywt	50-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164216-2
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: U0600.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164216

Analysis Date: 05-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 24-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
4-Chlorophenyl-Phenylether	87.4	1670	1460	ug/Kgdrywt	45-110
4-Nitroaniline	100.	1670	1680	ug/Kgdrywt	35-115
4,6-Dinitro-2-Methylphenol	72.1	3330	2400	ug/Kgdrywt	30-135
N-Nitrosodiphenylamine	65.3	1670	1090	ug/Kgdrywt	50-115
1,2-Diphenylhydrazine	82.0	1670	1370	ug/Kgdrywt	50-110
4-Bromophenyl-Phenylether	91.0	1670	1520	ug/Kgdrywt	45-115
Hexachlorobenzene	84.4	1670	1410	ug/Kgdrywt	45-120
Pentachlorophenol	92.8	3330	3090	ug/Kgdrywt	25-120
Carbazole	102.	1670	1710	ug/Kgdrywt	45-115
Di-N-Butylphthalate	99.4	1670	1660	ug/Kgdrywt	55-110
Benzidine	42.6	3330	1420	ug/Kgdrywt	10-150
Butylbenzylphthalate	89.8	1670	1500	ug/Kgdrywt	50-125
3,3'-Dichlorobenzidine	76.3	3330	2540	ug/Kgdrywt	10-130
Bis(2-Ethylhexyl)Phthalate	91.0	1670	1520	ug/Kgdrywt	45-125
Di-N-Octylphthalate	85.6	1670	1430	ug/Kgdrywt	40-130
1,1'-biphenyl	88.6	1670	1480	ug/Kgdrywt	31-99
2,6-Dichlorophenol	92.2	3330	3070	ug/Kgdrywt	38-98
Caprolactam	51.5	1670	860.	ug/Kgdrywt	10-81
2-Fluorophenol	83.5				35-105
Phenol-D6	81.9				40-100
Nitrobenzene-d5	84.4				35-100
2-Fluorobiphenyl	78.7				45-105
2,4,6-Tribromophenol	88.4				35-125
Terphenyl-d14	83.9				30-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164249-2
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: U0601.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164249

Analysis Date: 05-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Phenol	29.3	100.	29.3	ug/L	0-115
Bis(2-Chloroethyl)Ether	89.6	50.0	44.8	ug/L	35-110
2-Chlorophenol	70.3	100.	70.3	ug/L	35-105
1,3-Dichlorobenzene	81.4	50.0	40.7	ug/L	30-100
1,4-Dichlorobenzene	85.6	50.0	42.8	ug/L	30-100
1,2-Dichlorobenzene	85.2	50.0	42.6	ug/L	35-100
2,2'-Oxybis(1-Chloropropane)	74.2	50.0	37.1	ug/L	25-130
2-Methylphenol	63.2	100.	63.2	ug/L	40-110
n-Nitroso-di-n-propylamine	83.4	50.0	41.7	ug/L	35-130
3&4-Methylphenol	55.4	100.	55.4	ug/L	30-110
Hexachloroethane	81.8	50.0	40.9	ug/L	30-100
Nitrobenzene	85.6	50.0	42.8	ug/L	45-110
Isophorone	68.4	50.0	34.2	ug/L	50-110
2-Nitrophenol	75.1	100.	75.1	ug/L	40-115
2,4-Dimethylphenol	80.8	100.	80.8	ug/L	30-110
Bis(2-chloroethoxy)methane	80.4	50.0	40.2	ug/L	45-105
2,4-Dichlorophenol	77.3	100.	77.3	ug/L	50-105
1,2,4-Trichlorobenzene	83.8	50.0	41.9	ug/L	35-105
4-Chloroaniline	71.8	50.0	35.9	ug/L	15-110
Hexachlorobutadiene	84.8	50.0	42.4	ug/L	25-105
4-Chloro-3-methylphenol	89.6	100.	89.6	ug/L	45-110
2,4,6-Trichlorophenol	73.9	100.	73.9	ug/L	50-115
2,4,5-Trichlorophenol	77.5	100.	77.5	ug/L	50-110
2-Chloronaphthalene	77.2	50.0	38.6	ug/L	50-105
2-Nitroaniline	90.4	50.0	45.2	ug/L	56-108
Dimethyl phthalate	93.0	50.0	46.5	ug/L	25-125
2,6-Dinitrotoluene	95.4	50.0	47.7	ug/L	50-115
3-Nitroaniline	80.2	50.0	40.1	ug/L	20-125
2,4-Dinitrophenol	74.1	100.	74.1	ug/L	15-140
Dibenzofuran	94.0	50.0	47.0	ug/L	55-105
2,4-Dinitrotoluene	93.6	50.0	46.8	ug/L	50-120
Diethylphthalate	99.0	50.0	49.5	ug/L	40-120
4-Chlorophenyl-phenylether	90.6	50.0	45.3	ug/L	50-110
4-Nitroaniline	91.4	50.0	45.7	ug/L	35-120
4,6-Dinitro-2-methylphenol	81.6	100.	81.6	ug/L	40-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164249-2
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: U0601.D

Sample Date:
Received Date:
Extract Date: 05-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164249

Analysis Date: 05-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
n-Nitrosodiphenylamine	67.4	50.0	33.7	ug/L	50-110
4-Bromophenyl-phenylether	96.8	50.0	48.4	ug/L	50-115
Hexachlorobenzene	86.0	50.0	43.0	ug/L	50-110
Pentachlorophenol	95.5	100.	95.5	ug/L	40-115
Carbazole	93.2	50.0	46.6	ug/L	50-115
Di-n-butylphthalate	96.6	50.0	48.3	ug/L	55-115
Butylbenzylphthalate	95.6	50.0	47.8	ug/L	45-115
3,3'-Dichlorobenzidine	84.1	100.	84.1	ug/L	20-110
Bis(2-ethylhexyl)phthalate	91.6	50.0	45.8	ug/L	40-125
Di-n-octylphthalate	88.4	50.0	44.2	ug/L	35-135
4-Nitrophenol	23.6	100.	23.6	ug/L	0-125
1,1'-Biphenyl	95.6	50.0	47.8	ug/L	51-105
1,2-Diphenylhydrazine	89.4	50.0	44.7	ug/L	55-115
2,6-Dichlorophenol	83.0	100.	83.0	ug/L	45-109
Benzidine	* 171.	50.0	85.4	ug/L	10-100
Benzoic Acid	27.0	100.	27.0	ug/L	0-125
Benzyl Alcohol	62.0	50.0	31.0	ug/L	30-110
Caprolactam	17.9	50.0	8.94	ug/L	10-86
2-Fluorophenol	41.5				20-110
Phenol-d6	27.2				10-115
Nitrobenzene-d5	83.5				40-110
2-Fluorobiphenyl	82.8				50-110
2,4,6-Tribromophenol	83.8				40-125
Terphenyl-d14	92.0				50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD381.D
Instrument ID : GCMS-U

SDG : SI3862
Date Analyzed : 05-JUN-15
Time Analyzed : 14:09

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	34.8		
68	Less than 2.0% of mass 69	0.5	1.29	1
69	Less than 100.0% of mass 198	37.4		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	47.7		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	7.1		
275	10.0 - 30.0% of mass 198	22.1		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	14.8	82.58	2
442	40.0 - 100.0% of mass 198	91.9		
443	17.0 - 23.0% of mass 442	17.9	19.48	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG164192-4	U0591.D	06/05/15	14:27
Initial Calibration	WG164192-2	U0592.D	06/05/15	15:26
Initial Calibration	WG164192-3	U0593.D	06/05/15	15:52
Initial Calibration	WG164192-5	U0594.D	06/05/15	16:19
Initial Calibration	WG164192-6	U0595.D	06/05/15	16:46
Initial Calibration	WG164192-7	U0596.D	06/05/15	17:12
Independent Source	WG164192-8	U0597.D	06/05/15	17:39
Method Blank Sample	WG164216-1	U0598.D	06/05/15	18:07
Method Blank Sample	WG164249-1	U0599.D	06/05/15	18:34
Laboratory Control S	WG164216-2	U0600.D	06/05/15	19:01
Laboratory Control S	WG164249-2	U0601.D	06/05/15	19:28
SITE4TS-EB	SI3862-3	U0607.D	06/05/15	22:10

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD382.D
Instrument ID : GCMS-U

SDG : SI3862
Date Analyzed : 08-JUN-15
Time Analyzed : 11:02

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.1		
68	Less than 2.0% of mass 69	0.4	1.24	1
69	Less than 100.0% of mass 198	35.5		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	46.7		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	20.7		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	13.9	83.46	2
442	40.0 - 100.0% of mass 198	87.5		
443	17.0 - 23.0% of mass 442	16.7	19.09	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG164360-2	U0611.D	06/08/15	11:20
SITE4TS-FB	SI3862-1DL	U0614.D	06/08/15	13:10
SITE4TS-XX	SI3862-2DL	U0615.D	06/08/15	13:38

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164192-4
Lab File ID : U0591.D

SDG: SI3862
Analytical Date: 06/05/15 14:27
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	298088		4.55		1167270		5.95		585203		8.03	
	Upper Limit	596176		5.05		2334540		6.45		1170406		8.53	
	Lower Limit	149044		4.05		583635		5.45		292601.5		7.53	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG164216-1	336664		4.57		1401801		5.95		706388		8.04	
Method Blank Sample	WG164249-1	335772		4.55		1395494		5.95		679281		8.04	
Laboratory Control S	WG164216-2	338179		4.57		1329051		5.95		701569		8.03	
Laboratory Control S	WG164249-2	305348		4.55		1216152		5.95		615731		8.03	
SITE4TS-EB	SI3862-3	331659		4.56		1364123		5.94		657837		8.04	
Continuing Calibrati	WG164360-2	349906		4.55		1303971		5.94		588916		8.03	
SITE4TS-FB	SI3862-1DL	427904		4.55		1569145		5.94		793973		8.04	
SITE4TS-XX	SI3862-2DL	455469		4.55		1699126		5.95		883333		8.04	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164192-4
Lab File ID : U0591.D

SDG: SI3862
Analytical Date: 06/05/15 14:27
Instrument ID: GCMS-U

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	Area	#	RT	Area	#	RT
	Std .	909618		9.84	432679		13.40	280169		16.37
	Upper Limit	1819236		10.34	865358		13.90	560338		16.87
	Lower Limit	454809		9.34	216339.5		12.90	140084.5		15.87
Client Sample ID	Lab Sample ID									
Method Blank Sample	WG164216-1	1141587		9.85	736992		13.41	415209		16.38
Method Blank Sample	WG164249-1	1054504		9.84	597622		13.40	304145		16.38
Laboratory Control S	WG164216-2	1186047		9.84	801086		13.41	540161		16.37
Laboratory Control S	WG164249-2	1006741		9.84	479545		13.40	283888		16.37
SITE4TS-EB	SI3862-3	1035611		9.84	523489		13.40	306280		16.39
Continuing Calibrati	WG164360-2	951012		9.84	549794		13.40	328992		16.37
SITE4TS-FB	SI3862-1DL	1032934		9.84	220061		13.40	73613	*	16.37
SITE4TS-XX	SI3862-2DL	1095073		9.85	219845		13.40	72296	*	16.37

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-1DL
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: U0614.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164216

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 93.
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	6300	ug/Kgdrywt	5	330	8400	4000	6300
Bis(2-Chloroethyl)Ether	U	6300	ug/Kgdrywt	5	330	8400	2100	6300
2-Chlorophenol	U	6300	ug/Kgdrywt	5	330	8400	4200	6300
1,3-Dichlorobenzene	U	6300	ug/Kgdrywt	5	330	8400	2000	6300
1,4-Dichlorobenzene	U	6300	ug/Kgdrywt	5	330	8400	2200	6300
1,2-Dichlorobenzene	U	6300	ug/Kgdrywt	5	330	8400	2200	6300
Benzyl Alcohol	U	12000	ug/Kgdrywt	5	660	17000	1400	12000
2-Methylphenol	U	6300	ug/Kgdrywt	5	330	8400	5100	6300
2,2'-Oxybis(1-Chloropropane)	U	6300	ug/Kgdrywt	5	330	8400	2300	6300
3&4-Methylphenol	U	6300	ug/Kgdrywt	5	330	8400	4800	6300
N-Nitroso-Di-N-Propylamine	U	6300	ug/Kgdrywt	5	330	8400	2100	6300
Hexachloroethane	U	6300	ug/Kgdrywt	5	330	8400	2400	6300
Nitrobenzene	U	6300	ug/Kgdrywt	5	330	8400	2300	6300
Isophorone	U	6300	ug/Kgdrywt	5	330	8400	1900	6300
2-Nitrophenol	U	6300	ug/Kgdrywt	5	330	8400	4200	6300
2,4-Dimethylphenol	U	6300	ug/Kgdrywt	5	330	8400	4200	6300
Bis(2-Chloroethoxy)Methane	U	6300	ug/Kgdrywt	5	330	8400	2400	6300
2,4-Dichlorophenol	U	6300	ug/Kgdrywt	5	330	8400	3800	6300
1,2,4-Trichlorobenzene	U	6300	ug/Kgdrywt	5	330	8400	2100	6300
Benzoic Acid	U	16000	ug/Kgdrywt	5	820	21000	8800	16000
4-Chloroaniline	U	6300	ug/Kgdrywt	5	330	8400	3000	6300
Hexachlorobutadiene	U	6300	ug/Kgdrywt	5	330	8400	2100	6300
4-Chloro-3-Methylphenol	U	6300	ug/Kgdrywt	5	330	8400	4200	6300
2,4,6-Trichlorophenol	U	6300	ug/Kgdrywt	5	330	8400	3900	6300
2,4,5-Trichlorophenol	U	16000	ug/Kgdrywt	5	820	21000	3900	16000
2-Chloronaphthalene	U	6300	ug/Kgdrywt	5	330	8400	2200	6300
2-Nitroaniline	U	16000	ug/Kgdrywt	5	820	21000	1900	16000
Dimethyl Phthalate	U	6300	ug/Kgdrywt	5	330	8400	2000	6300
2,6-Dinitrotoluene	U	6300	ug/Kgdrywt	5	330	8400	2000	6300
3-Nitroaniline	U	16000	ug/Kgdrywt	5	820	21000	2400	16000
2,4-Dinitrophenol	U	16000	ug/Kgdrywt	5	820	21000	9600	16000
4-Nitrophenol	U	16000	ug/Kgdrywt	5	820	21000	7900	16000
Dibenzofuran	U	6300	ug/Kgdrywt	5	330	8400	2000	6300
2,4-Dinitrotoluene	U	6300	ug/Kgdrywt	5	330	8400	2200	6300
Diethylphthalate	U	6300	ug/Kgdrywt	5	330	8400	2000	6300

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-1DL
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: U0614.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164216

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 93.
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Chlorophenyl-Phenylether	U	6300	ug/Kgdrywt	5	330	8400	2000	6300
4-Nitroaniline	U	16000	ug/Kgdrywt	5	820	21000	3400	16000
4,6-Dinitro-2-Methylphenol	U	16000	ug/Kgdrywt	5	820	21000	8600	16000
N-Nitrosodiphenylamine	U	6300	ug/Kgdrywt	5	330	8400	5600	6300
1,2-Diphenylhydrazine	U	12000	ug/Kgdrywt	5	660	17000	3600	12000
4-Bromophenyl-Phenylether	U	6300	ug/Kgdrywt	5	330	8400	2200	6300
Hexachlorobenzene	U	6300	ug/Kgdrywt	5	330	8400	2100	6300
Pentachlorophenol	U	16000	ug/Kgdrywt	5	820	21000	6000	16000
Carbazole	U	6300	ug/Kgdrywt	5	330	8400	2800	6300
Di-N-Butylphthalate	U	6300	ug/Kgdrywt	5	330	8400	2600	6300
Benzidine	U	29000	ug/Kgdrywt	5	1500	38000	2500	29000
Butylbenzylphthalate	U	6300	ug/Kgdrywt	5	330	8400	2400	6300
3,3'-Dichlorobenzidine	U	6300	ug/Kgdrywt	5	330	8400	2900	6300
Bis(2-Ethylhexyl)Phthalate	U	6300	ug/Kgdrywt	5	330	8400	2500	6300
Di-N-Octylphthalate	U	6300	ug/Kgdrywt	5	330	8400	5400	6300
1,1'-biphenyl	U	6300	ug/Kgdrywt	5	330	8400	1800	6300
2,6-Dichlorophenol	U	6300	ug/Kgdrywt	5	330	8400	4200	6300
Caprolactam	U	6300	ug/Kgdrywt	5	330	8400	3700	6300
2-Fluorophenol	D	0.00	%					
Phenol-D6	D	0.00	%					
Nitrobenzene-d5	D	0.00	%					
2-Fluorobiphenyl	D	0.00	%					
2,4,6-Tribromophenol	D	0.00	%					
Terphenyl-d14	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-2DL
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: U0615.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164216

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 92.
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	6700	ug/Kgdrywt	5	330	9000	4200	6700
Bis(2-Chloroethyl)Ether	U	6700	ug/Kgdrywt	5	330	9000	2200	6700
2-Chlorophenol	U	6700	ug/Kgdrywt	5	330	9000	4400	6700
1,3-Dichlorobenzene	U	6700	ug/Kgdrywt	5	330	9000	2100	6700
1,4-Dichlorobenzene	U	6700	ug/Kgdrywt	5	330	9000	2300	6700
1,2-Dichlorobenzene	U	6700	ug/Kgdrywt	5	330	9000	2400	6700
Benzyl Alcohol	U	13000	ug/Kgdrywt	5	660	18000	1500	13000
2-Methylphenol	U	6700	ug/Kgdrywt	5	330	9000	5400	6700
2,2'-Oxybis(1-Chloropropane)	U	6700	ug/Kgdrywt	5	330	9000	2400	6700
3&4-Methylphenol	U	6700	ug/Kgdrywt	5	330	9000	5100	6700
N-Nitroso-Di-N-Propylamine	U	6700	ug/Kgdrywt	5	330	9000	2200	6700
Hexachloroethane	U	6700	ug/Kgdrywt	5	330	9000	2600	6700
Nitrobenzene	U	6700	ug/Kgdrywt	5	330	9000	2500	6700
Isophorone	U	6700	ug/Kgdrywt	5	330	9000	2000	6700
2-Nitrophenol	U	6700	ug/Kgdrywt	5	330	9000	4500	6700
2,4-Dimethylphenol	U	6700	ug/Kgdrywt	5	330	9000	4500	6700
Bis(2-Chloroethoxy)Methane	U	6700	ug/Kgdrywt	5	330	9000	2600	6700
2,4-Dichlorophenol	U	6700	ug/Kgdrywt	5	330	9000	4100	6700
1,2,4-Trichlorobenzene	U	6700	ug/Kgdrywt	5	330	9000	2200	6700
Benzoic Acid	U	17000	ug/Kgdrywt	5	820	22000	9300	17000
4-Chloroaniline	U	6700	ug/Kgdrywt	5	330	9000	3200	6700
Hexachlorobutadiene	U	6700	ug/Kgdrywt	5	330	9000	2200	6700
4-Chloro-3-Methylphenol	U	6700	ug/Kgdrywt	5	330	9000	4500	6700
2,4,6-Trichlorophenol	U	6700	ug/Kgdrywt	5	330	9000	4200	6700
2,4,5-Trichlorophenol	U	17000	ug/Kgdrywt	5	820	22000	4200	17000
2-Chloronaphthalene	U	6700	ug/Kgdrywt	5	330	9000	2400	6700
2-Nitroaniline	U	17000	ug/Kgdrywt	5	820	22000	2000	17000
Dimethyl Phthalate	U	6700	ug/Kgdrywt	5	330	9000	2100	6700
2,6-Dinitrotoluene	U	6700	ug/Kgdrywt	5	330	9000	2100	6700
3-Nitroaniline	U	17000	ug/Kgdrywt	5	820	22000	2600	17000
2,4-Dinitrophenol	U	17000	ug/Kgdrywt	5	820	22000	10000	17000
4-Nitrophenol	U	17000	ug/Kgdrywt	5	820	22000	8400	17000
Dibenzofuran	U	6700	ug/Kgdrywt	5	330	9000	2100	6700
2,4-Dinitrotoluene	U	6700	ug/Kgdrywt	5	330	9000	2300	6700
Diethylphthalate	U	6700	ug/Kgdrywt	5	330	9000	2200	6700

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-2DL
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: U0615.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 05-JUN-15
Extracted By: WAS
Extraction Method: SW846 3550
Lab Prep Batch: WG164216

Analysis Date: 08-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 92.
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Chlorophenyl-Phenylether	U	6700	ug/Kgdrywt	5	330	9000	2100	6700
4-Nitroaniline	U	17000	ug/Kgdrywt	5	820	22000	3600	17000
4,6-Dinitro-2-Methylphenol	U	17000	ug/Kgdrywt	5	820	22000	9200	17000
N-Nitrosodiphenylamine	U	6700	ug/Kgdrywt	5	330	9000	5900	6700
1,2-Diphenylhydrazine	U	13000	ug/Kgdrywt	5	660	18000	3800	13000
4-Bromophenyl-Phenylether	U	6700	ug/Kgdrywt	5	330	9000	2300	6700
Hexachlorobenzene	U	6700	ug/Kgdrywt	5	330	9000	2200	6700
Pentachlorophenol	U	17000	ug/Kgdrywt	5	820	22000	6400	17000
Carbazole	U	6700	ug/Kgdrywt	5	330	9000	3000	6700
Di-N-Butylphthalate	U	6700	ug/Kgdrywt	5	330	9000	2700	6700
Benzidine	U	30000	ug/Kgdrywt	5	1500	41000	2700	30000
Butylbenzylphthalate	U	6700	ug/Kgdrywt	5	330	9000	2500	6700
3,3'-Dichlorobenzidine	U	6700	ug/Kgdrywt	5	330	9000	3100	6700
Bis(2-Ethylhexyl)Phthalate	U	6700	ug/Kgdrywt	5	330	9000	2700	6700
Di-N-Octylphthalate	U	6700	ug/Kgdrywt	5	330	9000	5700	6700
1,1'-biphenyl	U	6700	ug/Kgdrywt	5	330	9000	2000	6700
2,6-Dichlorophenol	U	6700	ug/Kgdrywt	5	330	9000	4500	6700
Caprolactam	U	6700	ug/Kgdrywt	5	330	9000	3900	6700
2-Fluorophenol	D	0.00	%					
Phenol-D6	D	0.00	%					
Nitrobenzene-d5	D	0.00	%					
2-Fluorobiphenyl	D	0.00	%					
2,4,6-Tribromophenol	D	0.00	%					
Terphenyl-d14	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-3
Client ID: SITE4TS-EB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: U0607.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 05-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164249

Analysis Date: 05-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.4	ug/L	1	10	9.9	1.8	7.4
Bis(2-Chloroethyl)Ether	U	7.4	ug/L	1	10	9.9	2.0	7.4
2-Chlorophenol	U	7.4	ug/L	1	10	9.9	3.2	7.4
1,3-Dichlorobenzene	U	7.4	ug/L	1	10	9.9	2.1	7.4
1,4-Dichlorobenzene	U	7.4	ug/L	1	10	9.9	2.2	7.4
1,2-Dichlorobenzene	U	7.4	ug/L	1	10	9.9	2.4	7.4
2,2'-Oxybis(1-Chloropropane)	U	7.4	ug/L	1	10	9.9	2.1	7.4
2-Methylphenol	U	7.4	ug/L	1	10	9.9	3.8	7.4
n-Nitroso-di-n-propylamine	U	7.4	ug/L	1	10	9.9	1.9	7.4
3&4-Methylphenol	U	7.4	ug/L	1	10	9.9	5.5	7.4
Hexachloroethane	U	7.4	ug/L	1	10	9.9	2.3	7.4
Nitrobenzene	U	7.4	ug/L	1	10	9.9	3.1	7.4
Isophorone	U	7.4	ug/L	1	10	9.9	1.7	7.4
2-Nitrophenol	U	7.4	ug/L	1	10	9.9	2.7	7.4
2,4-Dimethylphenol	U	7.4	ug/L	1	10	9.9	4.4	7.4
Bis(2-chloroethoxy)methane	U	7.4	ug/L	1	10	9.9	2.1	7.4
2,4-Dichlorophenol	U	7.4	ug/L	1	10	9.9	3.0	7.4
1,2,4-Trichlorobenzene	U	7.4	ug/L	1	10	9.9	2.1	7.4
4-Chloroaniline	U	7.4	ug/L	1	10	9.9	1.9	7.4
Hexachlorobutadiene	U	7.4	ug/L	1	10	9.9	1.8	7.4
4-Chloro-3-methylphenol	U	7.4	ug/L	1	10	9.9	3.6	7.4
2,4,6-Trichlorophenol	U	7.4	ug/L	1	10	9.9	2.7	7.4
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.4	ug/L	1	10	9.9	2.9	7.4
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl phthalate	U	7.4	ug/L	1	10	9.9	2.0	7.4
2,6-Dinitrotoluene	U	7.4	ug/L	1	10	9.9	2.0	7.4
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	0.99	19.
Dibenzofuran	U	7.4	ug/L	1	10	9.9	1.6	7.4
2,4-Dinitrotoluene	U	7.4	ug/L	1	10	9.9	2.2	7.4
Diethylphthalate	U	7.4	ug/L	1	10	9.9	2.0	7.4
4-Chlorophenyl-phenylether	U	7.4	ug/L	1	10	9.9	2.2	7.4
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.
4,6-Dinitro-2-methylphenol	U	19	ug/L	1	25	25.	2.0	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-3
Client ID: SITE4TS-EB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: U0607.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 05-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164249

Analysis Date: 05-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
n-Nitrosodiphenylamine	U	7.4	ug/L	1	10	9.9	3.7	7.4
4-Bromophenyl-phenylether	U	7.4	ug/L	1	10	9.9	1.9	7.4
Hexachlorobenzene	U	7.4	ug/L	1	10	9.9	2.1	7.4
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Carbazole	U	7.4	ug/L	1	10	9.9	2.1	7.4
Di-n-butylphthalate	U	7.4	ug/L	1	10	9.9	2.5	7.4
Butylbenzylphthalate	U	7.4	ug/L	1	10	9.9	1.9	7.4
3,3'-Dichlorobenzidine	U	7.4	ug/L	1	10	9.9	1.1	7.4
Bis(2-ethylhexyl)phthalate	J	2.5	ug/L	1	10	9.9	1.8	7.4
Di-n-octylphthalate	U	7.4	ug/L	1	10	9.9	1.8	7.4
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.
1,1'-Biphenyl	U	7.4	ug/L	1	10	9.9	2.7	7.4
1,2-Diphenylhydrazine	U	15	ug/L	1	20	20.	2.0	15.
2,6-Dichlorophenol	U	7.4	ug/L	1	10	9.9	4.0	7.4
Benzidine	UL	37	ug/L	1	50	50.	16.	37.
Benzoic Acid	U	19	ug/L	1	25	25.	3.0	19.
Benzyl Alcohol	U	15	ug/L	1	20	20.	1.2	15.
Caprolactam	U	7.4	ug/L	1	10	9.9	0.40	7.4
2-Fluorophenol		40.6	%					
Phenol-d6		27.6	%					
Nitrobenzene-d5		80.8	%					
2-Fluorobiphenyl		84.3	%					
2,4,6-Tribromophenol		83.2	%					
Terphenyl-d14		99.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0592.D U0593.D U0591.D U0594.D U0595.D U0596.D **Column ID:**
Calibration Date(s): 05-JUN-15 14:27 05-JUN-15 17:12

	Level 1 10.0000	Level 2 25.0000	Level 3 50.0000	Level 4 75.0000	Level 5 100.0000	Level 6 125.0000	Crv New	b	m1	m2	%RSD	Max %RSD	
N-Nitrosodimethylamine	0.56977	0.56103	0.60182	0.58771	0.56561	0.53864	AVG		0.57077		3.84308	15.00000	O
Phenol	1.65880	1.60566	1.64459	1.63752	1.56109	1.53520	AVG		1.60714		3.08520	30.00000	O
Bis(2-Chloroethyl)ether	1.25023	1.19353	1.10627	1.10192	1.09164	1.07214	AVG		1.13595		6.15596	15.00000	O
2-Chlorophenol	1.27191	1.25978	1.26092	1.23404	1.21054	1.19220	AVG		1.23823		2.55801	15.00000	O
1,3-Dichlorobenzene	1.47621	1.41907	1.43604	1.35807	1.30350	1.25035	AVG		1.37388		6.24795	15.00000	O
1,4-Dichlorobenzene	1.38928	1.40297	1.37554	1.29021	1.23972	1.19569	AVG		1.31557		6.57739	30.00000	O
1,2-Dichlorobenzene	1.40893	1.33511	1.30733	1.21201	1.17994	1.11430	AVG		1.25960		8.69694	15.00000	O
Benzyl alcohol	0.79641	0.78832	0.83879	0.74667	0.71353	0.77011	AVG		0.77564		5.56266	15.00000	O
2-Methylphenol	1.16610	1.09909	1.13965	1.17786	1.15182	1.17088	AVG		1.15090		2.50872	15.00000	O
2,2’-Oxybis(1-chloropropane	1.73549	1.73393	1.70309	1.63864	1.55808	1.47845	AVG		1.64128		6.37400	15.00000	O
N-Nitrosopyrrolidine	0.58836	0.57924	0.58315	0.54419	0.53257	0.51397	AVG		0.55691		5.54851	15.00000	O
N-Nitroso-di-n-propylamine	0.89529	0.81162	0.87023	0.79153	0.73220	0.73509	AVG		0.80599		8.38076	15.00000	O
3&4-Methylphenol	1.19349	1.31504	1.27305	1.25159	1.23230	1.18517	AVG		1.24177		3.95640	15.00000	O
Hexachloroethane	0.60213	0.58009	0.57560	0.53347	0.50704	0.48273	AVG		0.54684		8.52363	15.00000	O
Nitrobenzene	0.33128	0.32982	0.31399	0.27950	0.28610	0.25833	AVG		0.29984		9.90830	15.00000	O
Isophorone	0.64897	0.64810	0.61577	0.58729	0.59348	0.56147	AVG		0.60918		5.75418	15.00000	O
2-Nitrophenol	0.18085	0.18199	0.18707	0.16930	0.17650	0.17515	AVG		0.17847		3.46265	30.00000	O
2,4-Dimethylphenol	0.32705	0.32577	0.32275	0.29187	0.26713	0.26973	AVG		0.30072		9.37336	15.00000	O
Bis(2-Chloroethoxy)methane	0.48418	0.37801	0.40321	0.35414	0.33792	0.34546	AVG		0.38382		14.24232	15.00000	O
Benzoic acid	12656	47391	171532	325335	454541	549349	QUA	0.15743	7.37369	-1.24453	0.99205	0.99000	O
2,4-Dichlorophenol	0.25301	0.27109	0.27053	0.25444	0.24814	0.23622	AVG		0.25557		5.25600	30.00000	O
2,6-Dichlorophenol	0.24005	0.22743	0.20858	0.18882	0.17370	0.16955	AVG		0.20136		14.32964	15.00000	O
1,2,4-Trichlorobenzene	0.29791	0.29452	0.28023	0.25309	0.23874	0.22964	AVG		0.26569		10.99386	15.00000	O
4-Chloroaniline	0.37115	0.36940	0.34237	0.33698	0.29495	0.29094	AVG		0.33430		10.43983	15.00000	O
Hexachlorobutadiene	0.15899	0.16037	0.14995	0.13108	0.12306	0.11472	AVG		0.13970		13.88005	30.00000	O
Caprolactam	0.09146	0.09185	0.09171	0.09233	0.09133	0.09081	AVG		0.09158		0.56154	15.00000	O
4-Chloro-3-Methylphenol	0.27479	0.27785	0.26197	0.24059	0.23213	0.21759	AVG		0.25082		9.74592	30.00000	O
2-Methylnaphthalene	0.62366	0.62027	0.61663	0.53017	0.54650	0.51658	AVG		0.57564		8.64502	15.00000	O
2,4,6-Trichlorophenol	0.35868	0.34791	0.36922	0.32358	0.33700	0.30294	AVG		0.33989		7.10679	30.00000	O
2,4,5-Trichlorophenol	0.36712	0.37728	0.38497	0.36398	0.35509	0.33900	AVG		0.36457		4.47074	15.00000	O
1,1’-Biphenyl	1.37683	1.36102	1.23908	1.02806	1.03812	0.86758	AVG		1.15178		17.83743	15.00000	W(
2-Chloronaphthalene	1.17158	1.29051	1.00580	1.08457	0.92364	1.13248	AVG		1.10143		11.67470	15.00000	O
2-Nitroaniline	0.30627	0.31773	0.33051	0.31053	0.28701	0.29453	AVG		0.30776		5.10179	15.00000	O
Dimethyl Phthalate	1.26942	1.21900	1.23541	1.17894	1.15053	1.09520	AVG		1.19142		5.29072	15.00000	O
2,6-Dinitrotoluene	0.28442	0.28620	0.28137	0.26459	0.26951	0.21922	AVG		0.26755		9.41320	15.00000	O
3-Nitroaniline	0.27550	0.30303	0.29954	0.28214	0.27820	0.28144	AVG		0.28664		4.06242	15.00000	O
2,4-Dinitrophenol	14638	47040	114717	199332	256312	315036	LNR	0.06030	0.16171		0.99783	0.99000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0592.D U0593.D U0591.D U0594.D U0595.D U0596.D **Column ID:**
Calibration Date(s): 05-JUN-15 14:27 05-JUN-15 17:12

4-Nitrophenol	0.16915	0.19277	0.17691	0.18027	0.16952	0.16543	AVG		0.17567		5.69473	15.00000	O
Dibenzofuran	1.51744	1.45053	1.43146	1.28042	1.20378	1.07140	AVG		1.32584		12.84945	15.00000	O
2,4-Dinitrotoluene	0.34241	0.35643	0.33365	0.32936	0.32753	0.28582	AVG		0.32920		7.21472	15.00000	O
Diethylphthalate	1.33761	1.29246	1.22954	1.13597	1.07578	0.96640	AVG		1.17296		11.93972	15.00000	O
4-Chlorophenyl-phenylether	91427	197261	352314	500287	595758	697894	QUA	0.01905	1.21211	1.55793	0.99914	0.99000	O
4-Nitroaniline	0.22021	0.25058	0.22781	0.24823	0.23862	0.23947	AVG		0.23749		4.92623	15.00000	O
4,6-Dinitro-2-Methylphenol	0.10390	0.11287	0.12494	0.12323	0.12228	0.11225	AVG		0.11658		7.07161	15.00000	O
N-Nitrosodiphenylamine	0.59891	0.58732	0.61409	0.54875	0.50175	0.50991	AVG		0.56012		8.45559	30.00000	O
1,2-Diphenylhydrazine	0.76419	0.74810	0.74286	0.74851	0.66746	0.67333	AVG		0.72407		5.83238	15.00000	O
4-Bromophenyl-phenylether	0.20930	0.20257	0.20609	0.18534	0.18294	0.17522	AVG		0.19358		7.31512	15.00000	O
Hexachlorobenzene	0.24687	0.22971	0.23465	0.20329	0.21266	0.20237	AVG		0.22159		8.22158	15.00000	O
Pentachlorophenol	0.09189	0.09345	0.09785	0.09601	0.08967	0.08669	AVG		0.09259		4.42517	30.00000	O
Carbazole	0.79221	0.77417	0.73931	0.66321	0.67474	0.64695	AVG		0.71510		8.61746	15.00000	O
Di-n-butylphthalate	348758	738519	1210615	1885806	2196137	2594841	QUA	-0.00106	0.68349	0.18135	0.99916	0.99000	O
Benzidine	23689	78288	152324	287236	344499	460471	LNR	0.05435	0.28259		0.99846	0.99000	O
Butylbenzylphthalate	0.76323	0.71443	0.65664	0.60599	0.59293	0.58217	AVG		0.65257		11.21348	15.00000	O
3,3'-Dichlorobenzidine	0.21796	0.24217	0.26158	0.25634	0.26377	0.25175	AVG		0.24893		6.83562	15.00000	O
bis(2-Ethylhexyl)phthalate	1.04110	0.95875	0.86780	0.83329	0.82500	0.81310	AVG		0.88984		10.22660	15.00000	O
Di-n-octylphthalate	2.37847	2.07949	2.03205	2.18567	2.08464	2.20636	AVG		2.16111		5.81867	30.00000	O
2-Fluorophenol	1.17562	1.20290	1.18445	1.20074	1.22588	1.17173	AVG		1.19355		1.70259	15.00000	
Phenol-D6	1.44572	1.46478	1.44018	1.40919	1.34474	1.32454	AVG		1.40486		4.10048	15.00000	
Nitrobenzene-D5	0.33550	0.33905	0.32730	0.31663	0.30283	0.30003	AVG		0.32022		5.15240	15.00000	
2-Fluorobiphenyl	1.20810	1.15199	1.16435	0.96842	1.00091	0.94320	AVG		1.07283		10.69457	15.00000	
2,4,6-Tribromophenol	0.16926	0.16936	0.17446	0.15930	0.15587	0.15011	AVG		0.16306		5.76270	15.00000	
Terphenyl-D14	1.03876	1.04627	0.97491	0.85512	0.83198	0.80479	AVG		0.92531		11.65229	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-u.i\U060515.b\U0597.D
Report Date: 17-Jun-2015 13:15

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: WG164192-8
Level: LOW
Data Type: MS DATA
SpikeList File: INDcheck8270.spk
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U060515.b\U8270C77.m
Misc Info: WG164192,WG164192,WG164192-4,SI3942-1

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	50.6	101.31	80-120
3 Pyridine	50.0	58.4	116.79	80-120
2 N-Nitrosodimethyla	50.0	45.7	91.43	80-120
5 2-Picoline	50.0	61.5	123.09*	80-120
6 N-Nitrosomethyleth	50.0	55.0	109.96	80-120
7 Methyl Methanesulf	50.0	47.1	94.24	80-120
9 N-Nitrosodiethylam	50.0	54.5	108.99	80-120
10 Ethyl Methanesulfo	50.0	54.7	109.33	80-120
11 Benzaldehyde	50.0	21.9	43.73*	80-120
14 Aniline	50.0	55.5	111.10	80-120
13 Phenol	50.0	51.7	103.39	80-120
16 Bis(2-Chloroethyl)	50.0	59.8	119.64	80-120
17 2-Chlorophenol	50.0	54.6	109.27	80-120
18 1,3-Dichlorobenzen	50.0	54.5	109.03	80-120
20 1,4-Dichlorobenzen	50.0	55.5	111.09	80-120
22 Benzyl alcohol	50.0	51.5	103.09	80-120
21 1,2-Dichlorobenzen	50.0	55.4	110.73	80-120
25 2,2'-Oxybis(1-chlo	50.0	50.0	100.01	80-120
23 2-Methylphenol	50.0	56.6	113.21	80-120
26 Acetophenone	100	99.7	99.69	80-120
27 N-Nitrosopyrrolidi	50.0	54.9	109.79	80-120
30 N-Nitrosomorpholin	50.0	56.3	112.62	80-120
28 N-Nitroso-di-n-pro	50.0	50.2	100.50	80-120
29 3&4-Methylphenol	50.0	55.7	111.33	80-120
32 Hexachloroethane	50.0	53.9	107.88	80-120
31 o-Toluidine	50.0	54.4	108.86	80-120
34 Nitrobenzene	50.0	56.6	113.20	80-120
35 N-Nitrosopiperidin	50.0	54.0	108.01	80-120
36 Isophorone	50.0	53.1	106.20	80-120
37 2-Nitrophenol	50.0	53.4	106.77	80-120
38 2,4-Dimethylphenol	50.0	54.8	109.65	80-120
40 Bis(2-Chloroethoxy	50.0	49.8	99.62	80-120
39 O,O,O-Triethylphos	50.0	50.3	100.70	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	89.6	179.18*	80-120
42 2,4-Dichlorophenol	50.0	52.8	105.69	80-120
44 1,2,4-Trichloroben	50.0	53.0	106.05	80-120
46 Naphthalene	50.0	53.6	107.29	80-120
43 2,6-Dichlorophenol	50.0	54.2	108.44	80-120
47 4-Chloroaniline	50.0	51.6	103.17	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U060515.b\U0597.D
Report Date: 17-Jun-2015 13:15

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	53.4	106.87	80-120
49 Hexachlorobutadien	50.0	54.9	109.82	80-120
51 N-Nitroso-Di-N-But	50.0	51.5	102.97	80-120
53 Caprolactam	50.0	56.4	112.75	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	50.8	101.71	80-120
55 4-Chloro-3-Methylp	50.0	56.7	113.45	80-120
57 2-Methylnaphthalen	50.0	54.7	109.46	80-120
58 1-Methylnaphthalen	50.0	54.2	108.43	80-120
60 1,2,4,5-Tetrachlor	100	91.9	91.94	80-120
59 Hexachlorocyclopen	50.0	41.5	83.03	80-120
61 2,4,6-Trichlorophe	50.0	55.7	111.39	80-120
62 2,4,5-Trichlorophe	50.0	56.4	112.76	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	54.1	108.12	80-120
65 1,1'-Biphenyl	50.0	58.3	116.62	80-120
66 2-Chloronaphthalen	50.0	52.6	105.23	80-120
67 1-Chloronaphthalen	50.0	62.3	124.58*	80-120
69 2-Nitroaniline	50.0	56.6	113.24	80-120
70 1,4-Naphthoquinone	50.0	95.4	190.87*	80-120
72 Dimethyl Phthalate	50.0	54.7	109.48	80-120
73 1,3-Dinitrobenzene	50.0	53.6	107.18	80-120
75 Acenaphthylene	50.0	50.4	100.89	80-120
74 2,6-Dinitrotoluene	50.0	57.8	115.57	80-120
77 3-Nitroaniline	50.0	54.4	108.85	80-120
79 Acenaphthene	50.0	53.9	107.83	80-120
80 2,4-Dinitrophenol	50.0	54.9	109.81	80-120
83 Dibenzofuran	50.0	56.9	113.77	80-120
81 Pentachlorobenzene	50.0	55.0	109.93	80-120
82 4-Nitrophenol	50.0	55.7	111.46	80-120
84 2,4-Dinitrotoluene	50.0	53.3	106.63	80-120
85 1-Naphthylamine	50.0	48.9	97.87	80-120
88 2-Naphthylamine	50.0	55.4	110.80	80-120
87 2,3,4,6-Tetrachlor	50.0	53.6	107.13	80-120
89 Diethylphthalate	50.0	53.6	107.28	80-120
91 Fluorene	50.0	54.6	109.12	80-120
92 4-Chlorophenyl-phe	50.0	57.2	114.50	80-120
90 O,O-diethyl-o-2-py	50.0	56.2	112.50	80-120
93 5-Nitro-O-Toluidin	50.0	54.2	108.40	80-120
94 4-Nitroaniline	50.0	53.5	107.10	80-120
96 N-Nitrosodiphenyla	100	83.6	83.57	80-120
95 4,6-Dinitro-2-Meth	50.0	56.7	113.40	80-120
98 1,2-Diphenylhydraz	50.0	56.2	112.45	80-120
101 Sulfotepp	50.0	49.1	98.12	80-120
102 Diallate	50.0	56.1	112.17	80-120
103 Phorate	50.0	22.5	44.95*	80-120
105 4-Bromophenyl-phen	50.0	54.7	109.44	80-120
106 Phenacetin	50.0	47.4	94.73	80-120
104 1,3,5-Trinitrobenz	50.0	55.0	109.99	80-120
107 Hexachlorobenzene	50.0	55.1	110.21	80-120
108 Dimethoate	50.0	53.2	106.50	80-120
109 Atrazine	50.0	29.0	57.91*	80-120
110 4-Aminobiphenyl	50.0	45.1	90.13	80-120
111 Pentachlorophenol	50.0	54.4	108.86	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U060515.b\U0597.D
Report Date: 17-Jun-2015 13:15

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
113 Pronamide	50.0	54.3	108.55	80-120
112 Pentachloronitrobe	50.0	54.0	107.95	80-120
116 Phenanthrene	50.0	50.0	99.99	80-120
115 Disulfoton	50.0	47.8	95.50	80-120
118 Anthracene	50.0	52.2	104.39	80-120
117 Dinoseb	50.0	0.000	*	80-120
119 Carbazole	50.0	52.5	104.95	80-120
120 Methyl Parathion	50.0	51.0	101.98	80-120
121 Di-n-butylphthalat	50.0	54.8	109.70	80-120
122 Ethyl Parathion	50.0	45.8	91.70	80-120
123 4-Nitroquinoline-1	50.0	52.9	105.77	80-120
124 Methapyrilene	50.0	40.9	81.77	80-120
125 Isodrin	50.0	54.0	107.93	80-120
126 Fluoranthene	50.0	49.8	99.67	80-120
127 Benzidine	50.0	46.8	93.66	80-120
128 Pyrene	50.0	54.4	108.80	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	57.4	114.87	80-120
133 Chlorobenzilate	50.0	54.4	108.91	80-120
134 Famphur	50.0	30.8	61.54*	80-120
135 3,3'-Dimethylbenzi	50.0	97.0	194.05*	80-120
136 Butylbenzylphthala	50.0	53.5	107.09	80-120
137 Bis(2-ethylhexyl)a	50.0	51.9	103.89	80-120
138 2-Acetylaminofluor	50.0	57.1	114.25	80-120
140 Benzo(a)anthracene	50.0	51.9	103.74	80-120
139 3,3'-Dichlorobenzi	50.0	53.4	106.76	80-120
141 Chrysene	50.0	55.2	110.33	80-120
143 bis(2-Ethylhexyl)p	50.0	53.8	107.66	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	50.8	101.55	80-120
147 Benzo(b)fluoranthe	50.0	49.8	99.60	80-120
146 7,12-Dimethylbenz(	50.0	49.9	99.81	80-120
148 Benzo(k)fluoranthe	50.0	52.4	104.87	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	49.3	98.64	80-120
151 3-Methylcholanthre	50.0	53.3	106.54	80-120
152 Dibenz(a,j)acridin	50.0	51.0	101.98	80-120
153 Indeno(1,2,3-cd)py	50.0	53.8	107.55	80-120
155 Dibenzo(a,h)anthra	50.0	52.5	105.06	80-120
156 Benzo(g,h,i)peryle	50.0	52.5	104.96	80-120

SURROGATE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	35-105
$ 12 Phenol-D6	100	0.000	*	40-100
$ 33 Nitrobenzene-D5	50.0	0.000	*	35-100
$ 63 2-Fluorobiphenyl	50.0	0.000	*	45-105
$ 100 2,4,6-Tribromophe	100	0.000	*	35-125
$ 129 Terphenyl-D14	50.0	0.000	*	30-125

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164360-2
Analytical Date: 06/08/15 11:20
Lab File ID : U0611.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 06/05/15 14:27 06/05/15 17:12
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
13 Phenol	1.60714	1.63410	1.63410	0.010	1.67721	20.01000	Averaged	
16 Bis(2-Chloroethyl)ether	1.13595	1.15887	1.15887	0.010	2.01752	20.00000	Averaged	
17 2-Chlorophenol	1.23823	1.20567	1.20567	0.010	-2.63003	20.00000	Averaged	
18 1,3-Dichlorobenzene	1.37388	1.41556	1.41556	0.010	3.03409	20.00000	Averaged	
20 1,4-Dichlorobenzene	1.31557	1.34327	1.34327	0.010	2.10559	20.01000	Averaged	
21 1,2-Dichlorobenzene	1.25960	1.26754	1.26754	0.010	0.63041	20.00000	Averaged	
22 Benzyl alcohol	0.77564	0.80075	0.80075	0.010	3.23819	20.00000	Averaged	
23 2-Methylphenol	1.15090	1.11708	1.11708	0.010	-2.93886	20.00000	Averaged	
25 2,2'-Oxybis(1-chloropropane	1.64128	1.58612	1.58612	0.010	-3.36089	20.00000	Averaged	
28 N-Nitroso-di-n-propylamine	0.80599	0.77305	0.77305	0.050	-4.08729	20.00000	Averaged	
29 3&4-Methylphenol	1.24177	1.24773	1.24773	0.010	0.47972	20.00000	Averaged	
32 Hexachloroethane	0.54684	0.53565	0.53565	0.010	-2.04570	20.00000	Averaged	
34 Nitrobenzene	0.29984	0.30602	0.30602	0.010	2.06088	20.00000	Averaged	
36 Isophorone	0.60918	0.59356	0.59356	0.010	-2.56383	20.00000	Averaged	
37 2-Nitrophenol	0.17847	0.17594	0.17594	0.010	-1.42304	20.01000	Averaged	
38 2,4-Dimethylphenol	0.30072	0.31192	0.31192	0.010	3.72493	20.00000	Averaged	
40 Bis(2-Chloroethoxy)methane	0.38382	0.37773	0.37773	0.010	-1.58541	20.00000	Averaged	
41 Benzoic acid	50.00000	60.35744	0.15147	0.010	20.71487	20.00000	Quadratic	*
42 2,4-Dichlorophenol	0.25557	0.25990	0.25990	0.010	1.69455	20.01000	Averaged	
43 2,6-Dichlorophenol	0.20136	0.20161	0.20161	0.010	0.12616	20.00000	Averaged	
44 1,2,4-Trichlorobenzene	0.26569	0.27165	0.27165	0.010	2.24241	20.00000	Averaged	
47 4-Chloroaniline	0.33430	0.34140	0.34140	0.010	2.12487	20.00000	Averaged	
49 Hexachlorobutadiene	0.13970	0.14466	0.14466	0.010	3.55077	20.01000	Averaged	
53 Caprolactam	0.09158	0.08577	0.08577	0.010	-6.34908	20.00000	Averaged	
55 4-Chloro-3-Methylphenol	0.25082	0.24128	0.24128	0.010	-3.80389	20.01000	Averaged	
61 2,4,6-Trichlorophenol	0.33989	0.37379	0.37379	0.010	9.97339	20.01000	Averaged	
62 2,4,5-Trichlorophenol	0.36457	0.39336	0.39336	0.010	7.89496	20.00000	Averaged	
65 1,1'-Biphenyl	1.15178	1.28132	1.28132	0.010	11.24671	20.00000	Averaged	
66 2-Chloronaphthalene	1.10143	1.12520	1.12520	0.010	2.15828	20.00000	Averaged	
69 2-Nitroaniline	0.30776	0.30768	0.30768	0.010	-0.02755	20.00000	Averaged	
72 Dimethyl Phthalate	1.19142	1.19368	1.19368	0.010	0.18989	20.00000	Averaged	
74 2,6-Dinitrotoluene	0.26755	0.27305	0.27305	0.010	2.05517	20.00000	Averaged	
77 3-Nitroaniline	0.28664	0.29052	0.29052	0.010	1.35216	20.00000	Averaged	
80 2,4-Dinitrophenol	50.00000	55.47390	0.17161	0.050	10.94779	20.00000	Linear	
82 4-Nitrophenol	0.17567	0.19910	0.19910	0.050	13.33568	20.00000	Averaged	
83 Dibenzofuran	1.32584	1.45618	1.45618	0.010	9.83135	20.00000	Averaged	
84 2,4-Dinitrotoluene	0.32920	0.34568	0.34568	0.010	5.00662	20.00000	Averaged	
89 Diethylphthalate	1.17296	1.19657	1.19657	0.010	2.01244	20.00000	Averaged	
92 4-Chlorophenyl-phenylether	50.00000	50.06988	0.46548	0.010	0.13975	20.00000	Quadratic	
94 4-Nitroaniline	0.23749	0.26194	0.26194	0.010	10.29734	20.00000	Averaged	
95 4,6-Dinitro-2-Methylphenol	0.11658	0.12712	0.12712	0.010	9.04143	20.00000	Averaged	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164360-2
Analytical Date: 06/08/15 11:20
Lab File ID : U0611.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 06/05/15 14:27 06/05/15 17:12
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
96 N-Nitrosodiphenylamine	0.56012	0.55366	0.55366	0.010	-1.15261	20.01000	Averaged
98 1,2-Diphenylhydrazine	0.72407	0.70536	0.70536	0.010	-2.58413	20.00000	Averaged
105 4-Bromophenyl-phenylether	0.19358	0.18782	0.18782	0.010	-2.97537	20.00000	Averaged
107 Hexachlorobenzene	0.22159	0.21506	0.21506	0.010	-2.94874	20.00000	Averaged
111 Pentachlorophenol	0.09259	0.10355	0.10355	0.010	11.83599	20.01000	Averaged
119 Carbazole	0.71510	0.75439	0.75439	0.010	5.49441	20.00000	Averaged
121 Di-n-butylphthalate	50.00000	50.06418	1.07963	0.010	0.12836	20.00000	Quadratic
127 Benzidine	50.00000	49.83976	0.26940	0.010	-0.32048	20.00000	Linear
136 Butylbenzylphthalate	0.65257	0.63197	0.63197	0.010	-3.15619	20.00000	Averaged
139 3,3'-Dichlorobenzidine	0.24893	0.24114	0.24114	0.010	-3.12615	20.00000	Averaged
143 bis(2-Ethylhexyl)phthalate	0.88984	0.81862	0.81862	0.010	-8.00400	20.00000	Averaged
144 Di-n-octylphthalate	2.16111	2.04424	2.04424	0.010	-5.40810	20.01000	Averaged
8 2-Fluorophenol	1.19355	1.21832	1.21832	0.010	2.07516	20.00000	Averaged
12 Phenol-D6	1.40486	1.41055	1.41055	0.010	0.40533	20.00000	Averaged
33 Nitrobenzene-D5	0.32022	0.32652	0.32652	0.010	1.96476	20.00000	Averaged
63 2-Fluorobiphenyl	1.07283	1.19558	1.19558	0.010	11.44136	20.00000	Averaged
100 2,4,6-Tribromophenol	0.16306	0.17177	0.17177	0.010	5.34287	20.00000	Averaged
129 Terphenyl-D14	0.92531	0.90387	0.90387	0.010	-2.31641	20.00000	Averaged

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 050515

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG164192-1	50ng DFTPP	UD381	1	1	DFTPP 390	2.0	JCL	OK
-4	SSTD050	U0605		2	U8270C77	1.0		✓
-2	010	92		3				✓
-3	025	93		4				✓
-4	075	94		5				✓
-6	100	95		6				✓
-7	125	96		7				✓
-8	150	97		8				OK
3550	WG164216-1	98		9				OK
	WG164249-1	99		10				OK
3550	WG164216-2	U0600		11				OK
	WG164249-2	01		12				OK not needed
	SI3799-1	02		13				—
	-2	03		14				—
	-3	04		15				—
	-4	05		16				—
	SI3837-1	06		17				—
	SI3862-3	07		18				OK
	WG164249-3	08		19				— not needed
	-4	09		20				—
	SI3788-5	10		21				—
	-1DL	11	3	22				not run; inst fault
	-1	12	1	23				
	SI3862-1DL	13	10	24				
	-2DL	14		25				
	WG164216-3DL	15		26				
	-4DL	16		27				
	meOH	17-21	1	28				

STANDARD	CODE
DFTPP	52611
CAL. STD.	52615 STK4917
IS MIX	STK4944

REVIEWED AND APPROVED BY: _____
DATE: _____

DATE OF DFTPP INJECTION: 060815

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG1BY360-1	50ng DFTPP	UD382	1	1	DFTPP390	2.0	JLK	JK
-2	SSTD050U060815	U2611	1	2	U8270C77	1.0		JK
3550	SF3862-1DL	12	10	3				—
	-2DL	13	10	4				—
	-1DL	14	5	5				1562
	-2DL	15	5	6				1562
	MeOH	16-17	1	7				—
		18		8				

STANDARD	CODE
DFTPP	52611
CAL. STD.	52615 STK4917
IS MIX	STK4944

REVIEWED AND APPROVED BY: _____
DATE: _____

S/S

SOV

KATAHDIN ANALYTICAL SERVICES, INC.

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method:	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)	SW846 3580 (OIL / WIPES)
Analytical Method:	SW846 8270 ✓	OTHER		
Standards	Surrogate ID (1): SV 2717	Spike ID (1): SV 2716 (S.m)	Spike ID (3):	
	Surrogate ID (2):	Spike ID (2): SV 2715 (SV		
Solvents / Chemicals / Consumables	Solvent Lot # (MeCl2): DM824	Solvent Lot # (Acetone): DL474	Sodium Sulfate (granular) Lot # 27965001	
	Filter Paper Lot # (SON) F0094489	Filter Paper Lot # (KD) 96181511	Sodium Sulfate (powder) Lot # 27975002	
Misc.	Nitrogen Bath Temperature: 37°C	Sonicator Horns Tuned: 40%	Balance ID: Mettler PJ400	
Prep Start Time: 1047	Prep Stop Time: 1410	Sox Start Time: —	Sox End Time: —	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SON	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
															Co SV ext not [illegible]
6-5-15	WAS	WG-164181-1 WG-164216-1	30.00	1mL	NA	✓	✓				6-5-15	TMS	1mL	B9	Sim-R320334
		WG-164181-2	29.97		1mL									B10	SV-
		-3	30.43											C1	MS SD3800-9
		-4	33.12											2	usd -9
		WG-164216-2	29.99			✓								3	
		-3	32.08										5mL	PP217 C8	MS SD3862-1
		-4	31.87											C9	usd -1

EX-008 – Revision 2 – 12/05/2013

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SON	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
6-5-15	WAS	SD3800-3 C	31.50	1mL	NA		✓				6-5-15	TMS	1mL	C4	
		-6	30.90											5	
		-9	31.40											6	usld
		-10	30.15											7	
		-15	32.18											8	
		-16	30.26											9	
		-17	31.62											10	
		-18	31.60											D1	
		-19	30.00											2	
		-20	31.51											3	
		-21	30.58											4	
		-29	31.68											5	
		-32	30.36											6	
		-34	30.32											7	
		-35	30.58											8	
		-36	30.97											9	
		-37	32.18											10	
		-11	33.49				✓							E1	re
		SD3862-1	31.77			✓							5mL	PP217 C10	usld
		-2	30.09										5mL	C11	

Reviewed By_____ Date_____

EX-008 – Revision 2 – 12/05/2013

Katahdin Analytical Services 0000224

625/SV/SM
SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625 ✓	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV2717		Spike ID (1): SV2715		
	Surrogate ID (2):		Spike ID (2): SM: SV2716		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM824		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 2965002		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) 52		pH (2nd Extraction) 211
Prep Start Time: 1300	Prep End Time: 1525		CLLE Start Time:		CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SVD33	Initials	Comments 625-R320366
6-5-15	KF	WG164237-1 (625) WG164249-1 WG164250-1	1000	1mL	NR	✓	✓	1mL	6-5-15	E2	JMS	SV-R SM-R320464
		WG164237-2 WG164249-2			1mL	✓				E3		
		WG164250-2					✓			E4		
		WG164249-3	930			✓				E5		MS 513799-1W
		-4	970			✓				E6		MSD " -1X
		WG164250-3	1050				✓			E7		MS 513860-2M EM-SS
		-4	950				✓			E8		MSD " -2N EM-SS
									KF	6-5-15		

EX-007 – Revision 2 – 12/05/2013

QAEX284 0000072

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-5-15	KF	513810-1F	930	1mL	NR	✓		1mL	6-5-15	E9	JMS	625
		513799-1Y	890			✓	✓			E10		MS/D
		-2F	1020							SVD34 A1		
		-3F	950							A2		
		-4F	940							A3		
		513837-1J	1060				✓			A4		
		513860-1E	1060				✓			A5		EM-S.S. cert
		-2P	930							A6		MS/D cert
		-3F	800							A7		cert
		-4E	850							A8		cert
		-7E	800							A9		cert
		-8E	1030							A10		cert
		-9E	1050							B1		Sm-em S.S.
		513862-3E	1010			✓	✓			B2		
									KF	6-5-15		

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

SPLP SEMIVOLATILE SIM DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI3862

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	DBP	#	FLO	#	PYR	#
SITE4TS-FB	SI3862-6		73.4		88.5		90.4		64.7	
SITE4TS-XX	SI3862-7		67.2		70.8		80.1		64.6	
Method Blank Sample	WG164595-1RA		67.8		67.2		66.9		97.6	
Laboratory Control S	WG164595-2RA		68.2		57.6		65.5		80.6	
Method Blank Sample	WG165249-1		76.6		80.6		75.0		102.	
Laboratory Control S	WG165249-2		65.9		73.7		69.5		85.8	
Laboratory Control S	WG165249-3		61.5		66.5		63.8		85.2	
SPLP Blank	WG165249-4		63.2		71.4		65.9		87.1	
Matrix Spike	WG165249-5		70.7		86.9		88.8		65.5	
Matrix Spike Duplica	WG165249-6		63.0		90.3		103.	*	76.6	

		QC Limits
DBP	2,4-DIBROMOPHENOL	10-130
2MN	2-METHYLNAPHTHALENE-D10	43-92
FLO	FLUORENE-D10	29-101
PYR	PYRENE-D10	53-166

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : N6599.D
Instrument ID : GCMS-N
Matrix : AQ

SDG : SI3862
Lab Sample ID : WG164595-1RA
Date Extracted : 11-JUN-15
Date Analyzed : 15-JUN-15
Time Analyzed : 13:21

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG164595-2RA	N6600.D	06/15/15	13:48
SITE4TS-FB	SI3862-6	N6630.D	06/16/15	11:20
SITE4TS-XX	SI3862-7	N6631.D	06/16/15	11:48

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : N6785.D
Instrument ID : GCMS-N
Matrix : AQ

SDG : SI3862
Lab Sample ID : WG165249-1
Date Extracted : 22-JUN-15
Date Analyzed : 23-JUN-15
Time Analyzed : 16:20

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
SPLP Blank	WG165249-4	N6786.D	06/23/15	16:48
Laboratory Control S	WG165249-2	N6787.D	06/23/15	17:16
Laboratory Control S	WG165249-3	N6788.D	06/23/15	17:45
Matrix Spike	WG165249-5	N6789.D	06/23/15	18:13
Matrix Spike Duplica	WG165249-6	N6790.D	06/23/15	18:41

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164595-1RA
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: N6599.D

Sample Date:
Received Date:
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164595

Analysis Date: 15-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.10	ug/L	1	.2	0.20	0.041	0.10
2-Chlorophenol	U	0.50	ug/L	1	1	1.0	0.28	0.50
2,2'-Oxybis(1-Chloropropane)	U	0.15	ug/L	1	.2	0.20	0.12	0.15
3&4-Methylphenol	U	0.50	ug/L	1	1	1.0	0.44	0.50
N-Nitroso-Di-N-Propylamine	U	0.10	ug/L	1	.2	0.20	0.072	0.10
Hexachloroethane	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Nitrobenzene	U	0.15	ug/L	1	.2	0.20	0.13	0.15
2-Nitrophenol	U	1.0	ug/L	1	2	2.0	0.81	1.0
Bis(2-Chloroethoxy)Methane	U	0.25	ug/L	1	.5	0.50	0.18	0.25
2,4-Dichlorophenol	U	1.0	ug/L	1	2	2.0	0.89	1.0
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
4-Chloroaniline	U	1.5	ug/L	1	3	3.0	1.4	1.5
Hexachlorobutadiene	U	0.10	ug/L	1	.2	0.20	0.087	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
Hexachlorocyclopentadiene	U	0.10	ug/L	1	.2	0.20	0.067	0.10
2,4,6-Trichlorophenol	U	0.50	ug/L	1	1	1.0	0.12	0.50
2,4,5-Trichlorophenol	U	0.50	ug/L	1	1	1.0	0.078	0.50
1,1'-Biphenyl	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Nitroaniline	U	0.15	ug/L	1	.2	0.20	0.12	0.15
2,6-Dinitrotoluene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
2,4-Dinitrophenol	U	0.50	ug/L	1	1	1.0	0.24	0.50
4-Nitrophenol	U	0.50	ug/L	1	1	1.0	0.23	0.50
Dibenzofuran	U	0.10	ug/L	1	.2	0.20	0.068	0.10
2,4-Dinitrotoluene	U	0.10	ug/L	1	.2	0.20	0.035	0.10
4-Chlorophenyl-Phenylether	U	0.25	ug/L	1	.5	0.50	0.16	0.25
4-Nitroaniline	U	0.10	ug/L	1	.2	0.20	0.065	0.10
4,6-Dinitro-2-Methylphenol	U	0.75	ug/L	1	1	1.0	0.50	0.75
N-Nitrosodiphenylamine	U	0.10	ug/L	1	.2	0.20	0.071	0.10
1,2,4,5-Tetrachlorobenzene	U	0.10	ug/L	1	.2	0.20	0.037	0.10
Hexachlorobenzene	U	0.10	ug/L	1	.2	0.20	0.055	0.10
Atrazine	U	0.10	ug/L	1	.2	0.20	0.038	0.10
Pentachlorophenol	U	0.50	ug/L	1	1	1.0	0.33	0.50
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164595-1RA
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: N6599.D

Sample Date:
Received Date:
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164595

Analysis Date: 15-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-N-Butylphthalate	U	1.0	ug/L	1	2	2.0	0.83	1.0
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Butylbenzylphthalate	U	0.50	ug/L	1	1	1.0	0.13	0.50
3,3'-Dichlorobenzidine	U	0.10	ug/L	1	.2	0.20	0.056	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Bis(2-Ethylhexyl)Phthalate	U	0.50	ug/L	1	1	1.0	0.50	0.50
Di-N-Octylphthalate	U	0.50	ug/L	1	1	1.0	0.079	0.50
Benzo(b)Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2,3,4,6-Tetrachlorophenol	U	0.50	ug/L	1	1	1.0	0.071	0.50
2-Methylnaphthalene-D10		67.8	%					
Fluorene-D10		66.9	%					
Pyrene-D10		97.6	%					
2,4-Dibromophenol		67.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165249-1
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: N6785.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165249

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.10	ug/L	1	.2	0.20	0.041	0.10
2-Chlorophenol	U	0.50	ug/L	1	1	1.0	0.28	0.50
2,2'-Oxybis(1-Chloropropane)	U	0.15	ug/L	1	.2	0.20	0.12	0.15
3&4-Methylphenol	U	0.50	ug/L	1	1	1.0	0.44	0.50
N-Nitroso-Di-N-Propylamine	U	0.10	ug/L	1	.2	0.20	0.072	0.10
Hexachloroethane	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Nitrobenzene	U	0.15	ug/L	1	.2	0.20	0.13	0.15
2-Nitrophenol	U	1.0	ug/L	1	2	2.0	0.81	1.0
Bis(2-Chloroethoxy)Methane	U	0.25	ug/L	1	.5	0.50	0.18	0.25
2,4-Dichlorophenol	U	1.0	ug/L	1	2	2.0	0.89	1.0
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
4-Chloroaniline	U	1.5	ug/L	1	3	3.0	1.4	1.5
Hexachlorobutadiene	U	0.10	ug/L	1	.2	0.20	0.087	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
Hexachlorocyclopentadiene	U	0.10	ug/L	1	.2	0.20	0.067	0.10
2,4,6-Trichlorophenol	U	0.50	ug/L	1	1	1.0	0.12	0.50
2,4,5-Trichlorophenol	U	0.50	ug/L	1	1	1.0	0.078	0.50
1,1'-Biphenyl	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Nitroaniline	U	0.15	ug/L	1	.2	0.20	0.12	0.15
2,6-Dinitrotoluene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
2,4-Dinitrophenol	U	0.50	ug/L	1	1	1.0	0.24	0.50
4-Nitrophenol	U	0.50	ug/L	1	1	1.0	0.23	0.50
Dibenzofuran	U	0.10	ug/L	1	.2	0.20	0.068	0.10
2,4-Dinitrotoluene	U	0.10	ug/L	1	.2	0.20	0.035	0.10
4-Chlorophenyl-Phenylether	U	0.25	ug/L	1	.5	0.50	0.16	0.25
4-Nitroaniline	U	0.10	ug/L	1	.2	0.20	0.065	0.10
4,6-Dinitro-2-Methylphenol	U	0.75	ug/L	1	1	1.0	0.50	0.75
N-Nitrosodiphenylamine	U	0.10	ug/L	1	.2	0.20	0.071	0.10
1,2,4,5-Tetrachlorobenzene	U	0.10	ug/L	1	.2	0.20	0.037	0.10
Hexachlorobenzene	U	0.10	ug/L	1	.2	0.20	0.055	0.10
Atrazine	U	0.10	ug/L	1	.2	0.20	0.038	0.10
Pentachlorophenol	U	0.50	ug/L	1	1	1.0	0.33	0.50
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165249-1
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: N6785.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165249

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-N-Butylphthalate	U	1.0	ug/L	1	2	2.0	0.83	1.0
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Butylbenzylphthalate	U	0.50	ug/L	1	1	1.0	0.13	0.50
3,3'-Dichlorobenzidine	U	0.10	ug/L	1	.2	0.20	0.056	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Bis(2-Ethylhexyl)Phthalate	U	0.50	ug/L	1	1	1.0	0.50	0.50
Di-N-Octylphthalate	U	0.50	ug/L	1	1	1.0	0.079	0.50
Benzo(b)Fluoranthene	J	0.16	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	J	0.065	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2,3,4,6-Tetrachlorophenol	U	0.50	ug/L	1	1	1.0	0.071	0.50
2-Methylnaphthalene-D10		76.6	%					
Fluorene-D10		75.0	%					
Pyrene-D10		102.	%					
2,4-Dibromophenol		80.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165249-4
Client ID: SPLP Blank
Project:
SDG: SI3862
Lab File ID: N6786.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.099	ug/L	1	.2	0.20	0.040	0.099
2-Chlorophenol	U	0.50	ug/L	1	1	0.99	0.28	0.50
2,2'-Oxybis(1-Chloropropane)	U	0.15	ug/L	1	.2	0.20	0.12	0.15
3&4-Methylphenol	U	0.50	ug/L	1	1	0.99	0.44	0.50
N-Nitroso-Di-N-Propylamine	U	0.099	ug/L	1	.2	0.20	0.071	0.099
Hexachloroethane	U	0.099	ug/L	1	.2	0.20	0.072	0.099
Nitrobenzene	U	0.15	ug/L	1	.2	0.20	0.13	0.15
2-Nitrophenol	U	0.99	ug/L	1	2	2.0	0.80	0.99
Bis(2-Chloroethoxy)Methane	U	0.25	ug/L	1	.5	0.50	0.18	0.25
2,4-Dichlorophenol	U	0.99	ug/L	1	2	2.0	0.88	0.99
Naphthalene	U	0.099	ug/L	1	.2	0.20	0.063	0.099
4-Chloroaniline	U	1.5	ug/L	1	3	3.0	1.4	1.5
Hexachlorobutadiene	U	0.099	ug/L	1	.2	0.20	0.086	0.099
2-Methylnaphthalene	U	0.099	ug/L	1	.2	0.20	0.076	0.099
Hexachlorocyclopentadiene	U	0.099	ug/L	1	.2	0.20	0.066	0.099
2,4,6-Trichlorophenol	U	0.50	ug/L	1	1	0.99	0.12	0.50
2,4,5-Trichlorophenol	U	0.50	ug/L	1	1	0.99	0.077	0.50
1,1'-Biphenyl	U	0.099	ug/L	1	.2	0.20	0.064	0.099
2-Nitroaniline	U	0.15	ug/L	1	.2	0.20	0.12	0.15
2,6-Dinitrotoluene	U	0.099	ug/L	1	.2	0.20	0.069	0.099
2,4-Dinitrophenol	U	0.50	ug/L	1	1	0.99	0.24	0.50
4-Nitrophenol	U	0.50	ug/L	1	1	0.99	0.23	0.50
Dibenzofuran	U	0.099	ug/L	1	.2	0.20	0.067	0.099
2,4-Dinitrotoluene	U	0.099	ug/L	1	.2	0.20	0.035	0.099
4-Chlorophenyl-Phenylether	U	0.25	ug/L	1	.5	0.50	0.16	0.25
4-Nitroaniline	U	0.099	ug/L	1	.2	0.20	0.064	0.099
4,6-Dinitro-2-Methylphenol	U	0.74	ug/L	1	1	0.99	0.50	0.74
N-Nitrosodiphenylamine	U	0.099	ug/L	1	.2	0.20	0.070	0.099
1,2,4,5-Tetrachlorobenzene	U	0.099	ug/L	1	.2	0.20	0.037	0.099
Hexachlorobenzene	U	0.099	ug/L	1	.2	0.20	0.054	0.099
Atrazine	U	0.099	ug/L	1	.2	0.20	0.038	0.099
Pentachlorophenol	U	0.50	ug/L	1	1	0.99	0.33	0.50
Phenanthrene	U	0.099	ug/L	1	.2	0.20	0.050	0.099
Anthracene	U	0.099	ug/L	1	.2	0.20	0.044	0.099

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165249-4
Client ID: SPLP Blank
Project:
SDG: SI3862
Lab File ID: N6786.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-N-Butylphthalate	U	0.99	ug/L	1	2	2.0	0.82	0.99
Fluoranthene	U	0.099	ug/L	1	.2	0.20	0.072	0.099
Pyrene	U	0.099	ug/L	1	.2	0.20	0.058	0.099
Butylbenzylphthalate	U	0.50	ug/L	1	1	0.99	0.13	0.50
3,3'-Dichlorobenzidine	U	0.099	ug/L	1	.2	0.20	0.055	0.099
Benzo(a)anthracene	U	0.099	ug/L	1	.2	0.20	0.046	0.099
Chrysene	U	0.099	ug/L	1	.2	0.20	0.036	0.099
Bis(2-Ethylhexyl)Phthalate	U	0.50	ug/L	1	1	0.99	0.50	0.50
Di-N-Octylphthalate	U	0.50	ug/L	1	1	0.99	0.078	0.50
Benzo(b)Fluoranthene	U	0.099	ug/L	1	.2	0.20	0.088	0.099
Benzo(k)fluoranthene	U	0.099	ug/L	1	.2	0.20	0.048	0.099
Benzo(a)pyrene	U	0.099	ug/L	1	.2	0.20	0.065	0.099
Indeno(1,2,3-cd)pyrene	U	0.099	ug/L	1	.2	0.20	0.051	0.099
Dibenzo(a,h)anthracene	U	0.099	ug/L	1	.2	0.20	0.069	0.099
Benzo(g,h,i)perylene	U	0.099	ug/L	1	.2	0.20	0.064	0.099
2,3,4,6-Tetrachlorophenol	U	0.50	ug/L	1	1	0.99	0.070	0.50
2-Methylnaphthalene-D10		63.2	%					
Fluorene-D10		65.9	%					
Pyrene-D10		87.1	%					
2,4-Dibromophenol		71.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164595-2RA
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: N6600.D

Sample Date:
Received Date:
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164595

Analysis Date: 15-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Bis(2-Chloroethyl)Ether	81.5	2.00	1.63	ug/L	56-87
2-Chlorophenol	50.0	4.00	2.00	ug/L	30-112
2,2'-Oxybis(1-Chloropropane)	60.5	2.00	1.21	ug/L	57-90
3&4-Methylphenol	50.0	4.00	2.00	ug/L	31-78
N-Nitroso-Di-N-Propylamine	58.0	2.00	1.16	ug/L	43-86
Hexachloroethane	56.5	2.00	1.13	ug/L	48-80
Nitrobenzene	* 116.	2.00	2.32	ug/L	43-89
2-Nitrophenol	51.8	4.00	2.07	ug/L	30-113
Bis(2-Chloroethoxy)Methane	72.5	2.00	1.45	ug/L	53-93
2,4-Dichlorophenol	48.5	4.00	1.94	ug/L	31-106
Naphthalene	61.0	2.00	1.22	ug/L	46-84
4-Chloroaniline	55.0	2.00	1.10	ug/L	38-122
Hexachlorobutadiene	53.0	2.00	1.06	ug/L	48-95
2-Methylnaphthalene	67.5	2.00	1.35	ug/L	51-114
Hexachlorocyclopentadiene	32.1	2.00	0.642	ug/L	10-96
2,4,6-Trichlorophenol	45.8	4.00	1.83	ug/L	19-139
2,4,5-Trichlorophenol	55.0	4.00	2.20	ug/L	20-133
1,1'-Biphenyl	61.5	2.00	1.23	ug/L	56-96
2-Nitroaniline	77.5	2.00	1.55	ug/L	54-105
2,6-Dinitrotoluene	58.5	2.00	1.17	ug/L	47-86
2,4-Dinitrophenol	51.2	4.00	2.05	ug/L	10-95
4-Nitrophenol	25.5	4.00	1.02	ug/L	10-160
Dibenzofuran	60.0	2.00	1.20	ug/L	56-98
2,4-Dinitrotoluene	63.5	2.00	1.27	ug/L	48-95
4-Chlorophenyl-Phenylether	59.0	2.00	1.18	ug/L	57-95
4-Nitroaniline	84.5	2.00	1.69	ug/L	42-152
4,6-Dinitro-2-Methylphenol	52.0	4.00	2.08	ug/L	10-77
N-Nitrosodiphenylamine	53.0	2.00	1.06	ug/L	48-82
1,2,4,5-Tetrachlorobenzene	55.0	2.00	1.10	ug/L	30-150
Hexachlorobenzene	* 58.0	2.00	1.16	ug/L	62-90
Atrazine	76.5	2.00	1.53	ug/L	66-126
Pentachlorophenol	* 66.5	4.00	2.66	ug/L	10-66
Phenanthrene	* 71.0	2.00	1.42	ug/L	73-100
Anthracene	75.5	2.00	1.51	ug/L	70-95
Di-N-Butylphthalate	87.5	2.00	1.75	ug/L	46-163

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164595-2RA
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: N6600.D

Sample Date:
Received Date:
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164595

Analysis Date: 15-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Fluoranthene	* 80.0	2.00	1.60	ug/L	81-109
Pyrene	77.0	2.00	1.54	ug/L	71-104
Butylbenzylphthalate	76.0	2.00	1.52	ug/L	30-119
3,3'-Dichlorobenzidine	* 144.	2.00	2.87	ug/L	10-118
Benzo(a)anthracene	82.0	2.00	1.64	ug/L	70-110
Chrysene	87.0	2.00	1.74	ug/L	70-95
Bis(2-Ethylhexyl)Phthalate	* 77.5	2.00	1.55	ug/L	97-188
Di-N-Octylphthalate	98.5	2.00	1.97	ug/L	56-122
Benzo(b)Fluoranthene	74.5	2.00	1.49	ug/L	67-102
Benzo(k)fluoranthene	89.5	2.00	1.79	ug/L	68-103
Benzo(a)pyrene	72.5	2.00	1.45	ug/L	63-98
Indeno(1,2,3-cd)pyrene	63.0	2.00	1.26	ug/L	61-112
Dibenzo(a,h)anthracene	66.0	2.00	1.32	ug/L	66-108
Benzo(g,h,i)perylene	* 57.0	2.00	1.14	ug/L	62-106
2,3,4,6-Tetrachlorophenol	49.5	4.00	1.98	ug/L	10-101
2-Methylnaphthalene-D10	68.2				43-92
Fluorene-D10	65.5				29-101
Pyrene-D10	80.6				53-166
2,4-Dibromophenol	57.6				10-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165249-2
LCSD ID: WG165249-3
Project:
SDG: SI3862
Report Date: 24-JUN-15
LCS File ID: N6787.D

Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165249
LCSD File ID: N6788.D

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Bis(2-Chloroethyl)Ether	2.00	1.05	52.5*	0.981	49.0*	ug/L	7	30	56-87
2-Chlorophenol	4.00	2.59	64.8	2.27	56.8	ug/L	13	30	30-112
2,2'-Oxybis(1-Chloropropane)	2.00	1.00	50.0*	0.879	44.0*	ug/L	13	30	57-90
3&4-Methylphenol	4.00	1.87	46.8	1.66	41.5	ug/L	12	30	31-78
N-Nitroso-Di-N-Propylamine	2.00	0.883	44.2	0.652	32.6*	ug/L	30*	30	43-86
Hexachloroethane	2.00	1.06	53.0	0.950	47.5*	ug/L	11	30	48-80
Nitrobenzene	2.00	1.80	90.0*	1.52	76.0	ug/L	17	30	43-89
2-Nitrophenol	4.00	2.72	68.0	2.39	59.8	ug/L	13	30	30-113
Bis(2-Chloroethoxy)Methane	2.00	1.26	63.0	1.16	58.0	ug/L	8	30	53-93
2,4-Dichlorophenol	4.00	2.69	67.2	2.39	59.8	ug/L	12	30	31-106
Naphthalene	2.00	1.25	62.5	1.07	53.5	ug/L	16	30	46-84
4-Chloroaniline	2.00	1.21	60.5	1.07	53.5	ug/L	12	30	38-122
Hexachlorobutadiene	2.00	1.19	59.5	1.04	52.0	ug/L	13	30	48-95
2-Methylnaphthalene	2.00	1.40	70.0	1.15	57.5	ug/L	20	30	51-114
Hexachlorocyclopentadiene	2.00	0.739	37.0	0.687	34.4	ug/L	7	30	10-96
2,4,6-Trichlorophenol	4.00	2.52	63.0	2.26	56.5	ug/L	11	30	19-139
2,4,5-Trichlorophenol	4.00	2.84	71.0	2.74	68.5	ug/L	4	30	20-133
1,1'-Biphenyl	2.00	1.22	61.0	1.10	55.0*	ug/L	10	30	56-96
2-Nitroaniline	2.00	1.20	60.0	1.17	58.5	ug/L	2	30	54-105
2,6-Dinitrotoluene	2.00	1.15	57.5	1.10	55.0	ug/L	4	30	47-86
2,4-Dinitrophenol	4.00	2.34	58.5	2.42	60.5	ug/L	3	30	10-95
4-Nitrophenol	4.00	1.18	29.5	1.09	27.2	ug/L	8	30	10-160
Dibenzofuran	2.00	1.17	58.5	1.10	55.0*	ug/L	6	30	56-98
2,4-Dinitrotoluene	2.00	1.27	63.5	1.14	57.0	ug/L	11	30	48-95
4-Chlorophenyl-Phenylether	2.00	1.22	61.0	1.17	58.5	ug/L	4	30	57-95
4-Nitroaniline	2.00	1.69	84.5	1.61	80.5	ug/L	5	30	42-152
4,6-Dinitro-2-Methylphenol	4.00	1.97	49.2	2.16	54.0	ug/L	9	30	10-77
N-Nitrosodiphenylamine	2.00	0.914	45.7*	0.852	42.6*	ug/L	7	30	48-82
1,2,4,5-Tetrachlorobenzene	2.00	1.17	58.5	1.05	52.5	ug/L	11	30	30-150
Hexachlorobenzene	2.00	1.08	54.0*	1.02	51.0*	ug/L	6	30	62-90
Atrazine	2.00	1.25	62.5*	1.27	63.5*	ug/L	2	30	66-126
Pentachlorophenol	4.00	2.72	68.0*	2.93	73.2*	ug/L	7	30	10-66
Phenanthrene	2.00	1.12	56.0*	1.10	55.0*	ug/L	2	30	73-100
Anthracene	2.00	1.47	73.5	1.34	67.0*	ug/L	9	30	70-95

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165249-2
LCSD ID: WG165249-3
Project:
SDG: SI3862
Report Date: 24-JUN-15
LCS File ID: N6787.D

Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165249
LCSD File ID: N6788.D

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Di-N-Butylphthalate	2.00	1.58	79.0	1.59	79.5	ug/L	1	30	46-163
Fluoranthene	2.00	1.40	70.0*	1.40	70.0*	ug/L	0	30	81-109
Pyrene	2.00	1.33	66.5*	1.35	67.5*	ug/L	1	30	71-104
Butylbenzylphthalate	2.00	1.23	61.5	1.27	63.5	ug/L	3	30	30-119
3,3'-Dichlorobenzidine	2.00	3.28	164.*	2.20	110.	ug/L	39*	30	10-118
Benzo(a)anthracene	2.00	1.16	58.0*	1.15	57.5*	ug/L	1	30	70-110
Chrysene	2.00	2.05	102.*	1.88	94.0	ug/L	9	30	70-95
Bis(2-Ethylhexyl)Phthalate	2.00	1.21	60.5*	1.26	63.0*	ug/L	4	30	97-188
Di-N-Octylphthalate	2.00	1.35	67.5	1.79	89.5	ug/L	28	30	56-122
Benzo(b)Fluoranthene	2.00	1.06	53.0*	0.863	43.2*	ug/L	20	30	67-102
Benzo(k)fluoranthene	2.00	2.10	105.*	2.09	104.*	ug/L	0	30	68-103
Benzo(a)pyrene	2.00	1.51	75.5	1.50	75.0	ug/L	1	30	63-98
Indeno(1,2,3-cd)pyrene	2.00	1.43	71.5	1.46	73.0	ug/L	2	30	61-112
Dibenzo(a,h)anthracene	2.00	1.45	72.5	1.51	75.5	ug/L	4	30	66-108
Benzo(g,h,i)perylene	2.00	1.54	77.0	1.54	77.0	ug/L	0	30	62-106
2,3,4,6-Tetrachlorophenol	4.00	2.39	59.8	2.31	57.8	ug/L	3	30	10-101
2-Methylnaphthalene-D10			65.9		61.5				43-92
Fluorene-D10			69.5		63.8				29-101
Pyrene-D10			85.8		85.2				53-166
2,4-Dibromophenol			73.7		66.5				10-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG165249-5
MSD ID: WG165249-6
Sample ID: SI3862-6
Client ID: SITE4TS-FB
Project:
SDG: SI3862
MS File ID: N6789.D

Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249
Report Date: 01-JUL-15
MSD File ID: N6790.D

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Bis(2-Chloroethyl)Ether	2.67	1.94	ug/L	JMM0.09	1.5	0.78	55.9*	40.4*	62*	30	56-87
2-Chlorophenol	5.33	3.88	ug/L	U0.48	3.6	2.3	67.7	58.2	46*	30	30-112
2,2'-Oxybis(1-Chloropropane)	2.67	1.94	ug/L	UM0.14	1.6	0.95	58.5	48.8*	49*	30	57-90
3&4-Methylphenol	5.33	3.88	ug/L	U0.48	2.7	2.0	50.2	50.7	30	30	31-78
N-Nitroso-Di-N-Propylamine	2.67	1.94	ug/L	U0.095	1.7	1.1	65.2	58.7	42*	30	43-86
Hexachloroethane	2.67	1.94	ug/L	U0.095	1.7	1.1	64.9	54.6	48*	30	48-80
Nitrobenzene	2.67	1.94	ug/L	ULM0.14	2.9	1.4	108.*	71.1	71*	30	43-89
2-Nitrophenol	5.33	3.88	ug/L	U0.95	3.8	2.2	70.5	57.4	51*	30	30-113
Bis(2-Chloroethoxy)Methane	2.67	1.94	ug/L	U0.24	1.9	1.1	70.5	57.2	52*	30	53-93
2,4-Dichlorophenol	5.33	3.88	ug/L	U0.95	4.6	2.9	85.7	73.9	46*	30	31-106
Naphthalene	2.67	1.94	ug/L	M2.8	4.8	3.3	75.4	29.4*	35*	30	46-84
4-Chloroaniline	2.67	1.94	ug/L	UMM1.4	2.0	1.4	37.5*	16.2*	104*	30	38-122
Hexachlorobutadiene	2.67	1.94	ug/L	U0.095	1.9	1.1	71.6	57.2	53*	30	48-95
2-Methylnaphthalene	2.67	1.94	ug/L	M3.7	6.3	4.7	96.4	49.4*	29	30	51-114
Hexachlorocyclopentadiene	2.67	1.94	ug/L	U0.095	1.1	0.77	42.0	39.7	37*	30	10-96
2,4,6-Trichlorophenol	5.33	3.88	ug/L	U0.48	4.2	3.4	79.3	88.6	20	30	19-139
2,4,5-Trichlorophenol	5.33	3.88	ug/L	U0.48	4.2	3.0	78.9	77.0	34*	30	20-133
1,1'-Biphenyl	2.67	1.94	ug/L	U0.095	1.9	1.4	69.7	71.1	30	30	56-96
2-Nitroaniline	2.67	1.94	ug/L	U0.14	2.4	1.9	90.7	99.9	22	30	54-105
2,6-Dinitrotoluene	2.67	1.94	ug/L	U0.095	1.9	1.4	72.7	72.6	32*	30	47-86
2,4-Dinitrophenol	5.33	3.88	ug/L	JMM0.48	6.2	4.3	117.*	110.*	37*	30	10-95
4-Nitrophenol	5.33	3.88	ug/L	U0.48	2.7	2.6	51.4	65.7	7	30	10-160
Dibenzofuran	2.67	1.94	ug/L	0.21	2.0	1.6	67.6	70.6	24	30	56-98
2,4-Dinitrotoluene	2.67	1.94	ug/L	U0.095	2.0	1.5	76.5	79.3	28	30	48-95
4-Chlorophenyl-Phenylether	2.67	1.94	ug/L	U0.24	1.8	1.4	69.0	71.1	28	30	57-95
4-Nitroaniline	2.67	1.94	ug/L	U0.095	2.4	1.5	88.1	75.2	47*	30	42-152
4,6-Dinitro-2-Methylphenol	5.33	3.88	ug/L	JMM0.71	5.4	4.0	101.*	103.*	30	30	10-77
N-Nitrosodiphenylamine	2.67	1.94	ug/L	U0.095	1.6	1.2	59.6	60.8	30	30	48-82
1,2,4,5-Tetrachlorobenzene	2.67	1.94	ug/L	U0.095	1.6	1.1	61.9	58.2	37*	30	30-150
Hexachlorobenzene	2.67	1.94	ug/L	UL0.095	1.8	1.4	68.2	69.5	30	30	62-90
Atrazine	2.67	1.94	ug/L	U0.095	2.3	1.5	86.2	77.8	41*	30	66-126
Pentachlorophenol	5.33	3.88	ug/L	ULMM0.	5.9	4.0	111.*	104.*	38*	30	10-66
Phenanthrene	2.67	1.94	ug/L	L0.82	3.2	2.5	89.9	87.4	24	30	73-100

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG165249-5
MSD ID: WG165249-6
Sample ID: SI3862-6
Client ID: SITE4TS-FB
Project:
SDG: SI3862
MS File ID: N6789.D

Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249
Report Date: 01-JUL-15
MSD File ID: N6790.D

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Anthracene	2.67	1.94	ug/L	JMM0.18	2.0	1.4	66.8*	64.9*	30	30	70-95
Di-N-Butylphthalate	2.67	1.94	ug/L	U0.95	2.6	1.8	98.2	91.2	39*	30	46-163
Fluoranthene	2.67	1.94	ug/L	JLMM0.1	2.2	1.6	76.7*	71.4*	35*	30	81-109
Pyrene	2.67	1.94	ug/L	MM0.30	1.7	1.5	52.5*	60.3*	14	30	71-104
Butylbenzylphthalate	2.67	1.94	ug/L	U0.48	1.3	1.1	47.2	56.6	14	30	30-119
3,3'-Dichlorobenzidine	2.67	1.94	ug/L	ULMM0.	0.15	U0.1	5.66*	0*	200*	30	10-118
Benzo(a)anthracene	2.67	1.94	ug/L	JMM0.05	1.9	1.4	67.6*	67.5*	30	30	70-110
Chrysene	2.67	1.94	ug/L	U0.095	2.0	1.7	73.9	88.6	14	30	70-95
Bis(2-Ethylhexyl)Phthalate	2.67	1.94	ug/L	ULMM0.	1.1	0.75	40.1*	38.7*	35*	30	97-188
Di-N-Octylphthalate	2.67	1.94	ug/L	JMM0.08	1.3	0.71	46.2*	31.9*	61*	30	56-122
Benzo(b)Fluoranthene	2.67	1.94	ug/L	JMM0.09	1.6	1.0	60.0*	53.6*	42*	30	67-102
Benzo(k)fluoranthene	2.67	1.94	ug/L	U0.095	2.6	1.6	95.6	82.4	46*	30	68-103
Benzo(a)pyrene	2.67	1.94	ug/L	U0.095	2.1	1.4	77.2	70.0	41*	30	63-98
Indeno(1,2,3-cd)pyrene	2.67	1.94	ug/L	M0.22	2.0	1.3	65.4	53.8*	43*	30	61-112
Dibenzo(a,h)anthracene	2.67	1.94	ug/L	JLM0.13	2.0	1.2	71.0	57.4*	48*	30	66-108
Benzo(g,h,i)perylene	2.67	1.94	ug/L	UL0.095	2.1	1.3	77.6	68.0	44*	30	62-106
2,3,4,6-Tetrachlorophenol	5.33	3.88	ug/L	U0.48	4.0	2.9	75.2	73.6	33*	30	10-101
2-Methylnaphthalene-D10							70.7	63.0			43-92
Fluorene-D10							88.8	103.*			29-101
Pyrene-D10							65.5	76.6			53-166
2,4-Dibromophenol							86.9	90.3			10-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND946.D
Instrument ID : GCMS-N

SDG : SI3862
Date Analyzed : 05-JUN-15
Time Analyzed : 11:11

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	35.3		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	50.5		
70	Less than 2.0% of mass 69	0.3	0.51	1
127	40.0 - 60.0% of mass 198	55.6		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	23.9		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	12.6	81.66	2
442	40.0 - 100.0% of mass 198	78.7		
443	17.0 - 23.0% of mass 442	15.5	19.66	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG164187-4	N6392.D	06/05/15	11:28
Initial Calibration	WG164187-2	N6393.D	06/05/15	11:56
Initial Calibration	WG164187-3	N6394.D	06/05/15	12:23
Initial Calibration	WG164187-5	N6395.D	06/05/15	12:50
Initial Calibration	WG164187-6	N6396.D	06/05/15	13:18
Initial Calibration	WG164187-7	N6397.D	06/05/15	13:54
Independent Source	WG164187-8	N6398.D	06/05/15	14:21

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND952.D
Instrument ID : GCMS-N

SDG : SI3862
Date Analyzed : 15-JUN-15
Time Analyzed : 12:17

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	42.5		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	60.7		
70	Less than 2.0% of mass 69	0.4	0.60	1
127	40.0 - 60.0% of mass 198	57.4		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.4		
275	10.0 - 30.0% of mass 198	23.5		
365	1.0 - 100.0% of mass 198	2.7		
441	0.0 - 100.0% of mass 443	12.4	81.68	2
442	40.0 - 100.0% of mass 198	77.7		
443	17.0 - 23.0% of mass 442	15.2	19.52	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG164825-2	N6598.D	06/15/15	12:52
Method Blank Sample	WG164595-1RA	N6599.D	06/15/15	13:21
Laboratory Control S	WG164595-2RA	N6600.D	06/15/15	13:48

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND953.D
Instrument ID : GCMS-N

SDG : SI3862
Date Analyzed : 16-JUN-15
Time Analyzed : 08:37

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	43.8		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	63.3		
70	Less than 2.0% of mass 69	0.4	0.61	1
127	40.0 - 60.0% of mass 198	57.6		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.5		
275	10.0 - 30.0% of mass 198	23.3		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	12.3	82.00	2
442	40.0 - 100.0% of mass 198	77.8		
443	17.0 - 23.0% of mass 442	15.0	19.33	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG164883-2	N6525.D	06/16/15	09:00
SITE4TS-FB	SI3862-6	N6630.D	06/16/15	11:20
SITE4TS-XX	SI3862-7	N6631.D	06/16/15	11:48

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND958.D
Instrument ID : GCMS-N

SDG : SI3862
Date Analyzed : 23-JUN-15
Time Analyzed : 12:11

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.1		
68	Less than 2.0% of mass 69	0.7	1.60	1
69	Less than 100.0% of mass 198	40.7		
70	Less than 2.0% of mass 69	0.2	0.55	1
127	40.0 - 60.0% of mass 198	60.0		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	22.8		
365	1.0 - 100.0% of mass 198	2.3		
441	0.0 - 100.0% of mass 443	11.0	73.31	2
442	40.0 - 100.0% of mass 198	78.5		
443	17.0 - 23.0% of mass 442	15.0	19.11	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165324-4	N6778.D	06/23/15	13:03
Initial Calibration	WG165324-2	N6779.D	06/23/15	13:31
Initial Calibration	WG165324-3	N6780.D	06/23/15	13:59
Initial Calibration	WG165324-5	N6781.D	06/23/15	14:27
Initial Calibration	WG165324-6	N6782.D	06/23/15	14:55
Initial Calibration	WG165324-7	N6783.D	06/23/15	15:23
Independent Source	WG165324-8	N6784.D	06/23/15	15:51
Method Blank Sample	WG165249-1	N6785.D	06/23/15	16:20
SPLP Blank	WG165249-4	N6786.D	06/23/15	16:48
Laboratory Control S	WG165249-2	N6787.D	06/23/15	17:16
Laboratory Control S	WG165249-3	N6788.D	06/23/15	17:45
Matrix Spike	WG165249-5	N6789.D	06/23/15	18:13
Matrix Spike Duplica	WG165249-6	N6790.D	06/23/15	18:41

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164187-4
Lab File ID : N6392.D

SDG: SI3862
Analytical Date: 06/05/15 11:28
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	48698		4.54		146447		5.91		78111		7.97	
	Upper Limit	97396		5.04		292894		6.41		156222		8.47	
	Lower Limit	24349		4.04		73223.5		5.41		39055.5		7.47	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG164825-2	55671		4.53		181026		5.90		93513		7.95	
Method Blank Sample	WG164595-1RA	54302		4.52		170712		5.92		91631		7.97	
Laboratory Control S	WG164595-2RA	57194		4.51		179572		5.89		98465		7.95	
Continuing Calibrati	WG164883-2	49544		4.47		150743		5.85		80287		7.92	
SITE4TS-FB	SI3862-6	52046		4.47		147756		5.85		88388		7.92	
SITE4TS-XX	SI3862-7	51124		4.47		150621		5.85		91415		7.92	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164187-4
Lab File ID : N6392.D

SDG: SI3862
Analytical Date: 06/05/15 11:28
Instrument ID: GCMS-N

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	109179		9.76		74082		13.16		47165		15.99	
	Upper Limit	218358		10.26		148164		13.66		94330		16.49	
	Lower Limit	54589.5		9.26		37041		12.66		23582.5		15.49	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG164825-2	137357		9.77		80561		13.15		40075		15.98	
Method Blank Sample	WG164595-1RA	115281		9.78		63419		13.18		32228		15.99	
Laboratory Control S	WG164595-2RA	137613		9.76		87452		13.15		45079		15.98	
Continuing Calibrati	WG164883-2	119536		9.71		73200		13.09		46131		15.87	
SITE4TS-FB	SI3862-6	135279		9.71		115720		13.09		61533		15.88	
SITE4TS-XX	SI3862-7	127038		9.71		107885		13.09		53427		15.88	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI3862
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	88250		4.40		265068		5.77		116126		7.83	
	Upper Limit	176500		4.90		530136		6.27		232252		8.33	
	Lower Limit	44125		3.90		132534		5.27		58063		7.33	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165249-1	76424		4.40		237826		5.82		105148		7.86	
SPLP Blank	WG165249-4	66927		4.41		210573		5.82		93995		7.86	
Laboratory Control S	WG165249-2	69452		4.39		211977		5.78		100687		7.84	
Laboratory Control S	WG165249-3	72113		4.39		221532		5.78		102574		7.84	
Matrix Spike	WG165249-5	71197		4.39		217503		5.77		110148		7.83	
Matrix Spike Duplica	WG165249-6	67983		4.39		216920		5.77		96446		7.83	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI3862
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	156981		9.62		75747		12.97		36246		15.72	
	Upper Limit	313962		10.12		151494		13.47		72492		16.22	
	Lower Limit	78490.5		9.12		37873.5		12.47		18123		15.22	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165249-1	156520		9.64		63274		13.00		24386		15.76	
SPLP Blank	WG165249-4	137170		9.65		58386		13.00		26183		15.76	
Laboratory Control S	WG165249-2	158809		9.63		77607		12.98		35763		15.75	
Laboratory Control S	WG165249-3	162888		9.62		77562		12.98		28169		15.75	
Matrix Spike	WG165249-5	150266		9.61		101857		12.96		42463		15.73	
Matrix Spike Duplica	WG165249-6	136936		9.61		79189		12.96		38781		15.72	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-6
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: N6630.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164595

Analysis Date: 16-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	UMM	0.095	ug/L	1	.2	0.19	0.039	0.095
2-Chlorophenol	U	0.48	ug/L	1	1	0.95	0.27	0.48
2,2'-Oxybis(1-Chloropropane)	UM	0.14	ug/L	1	.2	0.19	0.11	0.14
3&4-Methylphenol	U	0.48	ug/L	1	1	0.95	0.42	0.48
N-Nitroso-Di-N-Propylamine	U	0.095	ug/L	1	.2	0.19	0.068	0.095
Hexachloroethane	U	0.095	ug/L	1	.2	0.19	0.070	0.095
Nitrobenzene	ULM	0.14	ug/L	1	.2	0.19	0.12	0.14
2-Nitrophenol	U	0.95	ug/L	1	2	1.9	0.77	0.95
Bis(2-Chloroethoxy)Methane	U	0.24	ug/L	1	.5	0.48	0.17	0.24
2,4-Dichlorophenol	U	0.95	ug/L	1	2	1.9	0.85	0.95
Naphthalene	M	2.8	ug/L	1	.2	0.19	0.061	0.095
4-Chloroaniline	UMM	1.4	ug/L	1	3	2.8	1.3	1.4
Hexachlorobutadiene	U	0.095	ug/L	1	.2	0.19	0.083	0.095
2-Methylnaphthalene	M	3.7	ug/L	1	.2	0.19	0.073	0.095
Hexachlorocyclopentadiene	U	0.095	ug/L	1	.2	0.19	0.064	0.095
2,4,6-Trichlorophenol	U	0.48	ug/L	1	1	0.95	0.11	0.48
2,4,5-Trichlorophenol	U	0.48	ug/L	1	1	0.95	0.074	0.48
1,1'-Biphenyl	U	0.095	ug/L	1	.2	0.19	0.062	0.095
2-Nitroaniline	U	0.14	ug/L	1	.2	0.19	0.11	0.14
2,6-Dinitrotoluene	U	0.095	ug/L	1	.2	0.19	0.067	0.095
2,4-Dinitrophenol	UMM	0.48	ug/L	1	1	0.95	0.23	0.48
4-Nitrophenol	U	0.48	ug/L	1	1	0.95	0.22	0.48
Dibenzofuran		0.21	ug/L	1	.2	0.19	0.065	0.095
2,4-Dinitrotoluene	U	0.095	ug/L	1	.2	0.19	0.033	0.095
4-Chlorophenyl-Phenylether	U	0.24	ug/L	1	.5	0.48	0.15	0.24
4-Nitroaniline	U	0.095	ug/L	1	.2	0.19	0.062	0.095
4,6-Dinitro-2-Methylphenol	UMM	0.71	ug/L	1	1	0.95	0.48	0.71
N-Nitrosodiphenylamine	U	0.095	ug/L	1	.2	0.19	0.068	0.095
1,2,4,5-Tetrachlorobenzene	U	0.095	ug/L	1	.2	0.19	0.035	0.095
Hexachlorobenzene	UL	0.095	ug/L	1	.2	0.19	0.052	0.095
Atrazine	U	0.095	ug/L	1	.2	0.19	0.036	0.095
Pentachlorophenol	ULMM	0.48	ug/L	1	1	0.95	0.31	0.48
Phenanthrene	L	0.82	ug/L	1	.2	0.19	0.048	0.095
Anthracene	JMM	0.18	ug/L	1	.2	0.19	0.042	0.095
Di-N-Butylphthalate	U	0.95	ug/L	1	2	1.9	0.79	0.95

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-6
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: N6630.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164595

Analysis Date: 16-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Fluoranthene	JLMM	0.16	ug/L	1	.2	0.19	0.070	0.095
Pyrene	MM	0.30	ug/L	1	.2	0.19	0.056	0.095
Butylbenzylphthalate	U	0.48	ug/L	1	1	0.95	0.12	0.48
3,3'-Dichlorobenzidine	ULMM	0.095	ug/L	1	.2	0.19	0.053	0.095
Benzo(a)anthracene	JMM	0.058	ug/L	1	.2	0.19	0.044	0.095
Chrysene	U	0.095	ug/L	1	.2	0.19	0.034	0.095
Bis(2-Ethylhexyl)Phthalate	ULMM	0.48	ug/L	1	1	0.95	0.48	0.48
Di-N-Octylphthalate	JMM	0.087	ug/L	1	1	0.95	0.075	0.48
Benzo(b)Fluoranthene	UMM	0.095	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene	U	0.095	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	U	0.095	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	M	0.22	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	JLM	0.13	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	UL	0.095	ug/L	1	.2	0.19	0.062	0.095
2,3,4,6-Tetrachlorophenol	U	0.48	ug/L	1	1	0.95	0.068	0.48
2-Methylnaphthalene-D10		73.4	%					
Fluorene-D10		90.4	%					
Pyrene-D10		64.7	%					
2,4-Dibromophenol		88.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-7
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: N6631.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164595

Analysis Date: 16-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.12	ug/L	1	.2	0.24	0.049	0.12
2-Chlorophenol	U	0.60	ug/L	1	1	1.2	0.34	0.60
2,2'-Oxybis(1-Chloropropane)	U	0.18	ug/L	1	.2	0.24	0.14	0.18
3&4-Methylphenol	U	0.60	ug/L	1	1	1.2	0.53	0.60
N-Nitroso-Di-N-Propylamine	U	0.12	ug/L	1	.2	0.24	0.087	0.12
Hexachloroethane	U	0.12	ug/L	1	.2	0.24	0.088	0.12
Nitrobenzene	UL	0.18	ug/L	1	.2	0.24	0.16	0.18
2-Nitrophenol	U	1.2	ug/L	1	2	2.4	0.98	1.2
Bis(2-Chloroethoxy)Methane	U	0.30	ug/L	1	.5	0.60	0.22	0.30
2,4-Dichlorophenol	U	1.2	ug/L	1	2	2.4	1.1	1.2
Naphthalene		2.4	ug/L	1	.2	0.24	0.077	0.12
4-Chloroaniline	U	1.8	ug/L	1	3	3.6	1.7	1.8
Hexachlorobutadiene	U	0.12	ug/L	1	.2	0.24	0.10	0.12
2-Methylnaphthalene	U	0.12	ug/L	1	.2	0.24	0.093	0.12
Hexachlorocyclopentadiene	U	0.12	ug/L	1	.2	0.24	0.081	0.12
2,4,6-Trichlorophenol	U	0.60	ug/L	1	1	1.2	0.14	0.60
2,4,5-Trichlorophenol	U	0.60	ug/L	1	1	1.2	0.094	0.60
1,1'-Biphenyl	U	0.12	ug/L	1	.2	0.24	0.078	0.12
2-Nitroaniline	U	0.18	ug/L	1	.2	0.24	0.14	0.18
2,6-Dinitrotoluene	U	0.12	ug/L	1	.2	0.24	0.084	0.12
2,4-Dinitrophenol	U	0.60	ug/L	1	1	1.2	0.29	0.60
4-Nitrophenol	U	0.60	ug/L	1	1	1.2	0.28	0.60
Dibenzofuran	J	0.17	ug/L	1	.2	0.24	0.082	0.12
2,4-Dinitrotoluene	U	0.12	ug/L	1	.2	0.24	0.042	0.12
4-Chlorophenyl-Phenylether	U	0.30	ug/L	1	.5	0.60	0.19	0.30
4-Nitroaniline	U	0.12	ug/L	1	.2	0.24	0.078	0.12
4,6-Dinitro-2-Methylphenol	U	0.90	ug/L	1	1	1.2	0.60	0.90
N-Nitrosodiphenylamine	U	0.12	ug/L	1	.2	0.24	0.086	0.12
1,2,4,5-Tetrachlorobenzene	U	0.12	ug/L	1	.2	0.24	0.044	0.12
Hexachlorobenzene	UL	0.12	ug/L	1	.2	0.24	0.066	0.12
Atrazine	U	0.12	ug/L	1	.2	0.24	0.046	0.12
Pentachlorophenol	UL	0.60	ug/L	1	1	1.2	0.40	0.60
Phenanthrene	L	0.79	ug/L	1	.2	0.24	0.061	0.12
Anthracene	J	0.20	ug/L	1	.2	0.24	0.053	0.12
Di-N-Butylphthalate	U	1.2	ug/L	1	2	2.4	1.0	1.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-7
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: N6631.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164595

Analysis Date: 16-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Fluoranthene	JL	0.14	ug/L	1	.2	0.24	0.088	0.12
Pyrene		0.35	ug/L	1	.2	0.24	0.071	0.12
Butylbenzylphthalate	U	0.60	ug/L	1	1	1.2	0.16	0.60
3,3'-Dichlorobenzidine	UL	0.12	ug/L	1	.2	0.24	0.067	0.12
Benzo(a)anthracene	J	0.081	ug/L	1	.2	0.24	0.055	0.12
Chrysene	U	0.12	ug/L	1	.2	0.24	0.043	0.12
Bis(2-Ethylhexyl)Phthalate	UL	0.60	ug/L	1	1	1.2	0.60	0.60
Di-N-Octylphthalate	J	0.10	ug/L	1	1	1.2	0.095	0.60
Benzo(b)Fluoranthene	U	0.12	ug/L	1	.2	0.24	0.11	0.12
Benzo(k)fluoranthene	U	0.12	ug/L	1	.2	0.24	0.059	0.12
Benzo(a)pyrene	U	0.12	ug/L	1	.2	0.24	0.080	0.12
Indeno(1,2,3-cd)pyrene	U	0.12	ug/L	1	.2	0.24	0.063	0.12
Dibenzo(a,h)anthracene	UL	0.12	ug/L	1	.2	0.24	0.084	0.12
Benzo(g,h,i)perylene	UL	0.12	ug/L	1	.2	0.24	0.078	0.12
2,3,4,6-Tetrachlorophenol	U	0.60	ug/L	1	1	1.2	0.086	0.60
2-Methylnaphthalene-D10		67.2	%					
Fluorene-D10		80.1	%					
Pyrene-D10		64.6	%					
2,4-Dibromophenol		70.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6393.D N6394.D N6392.D N6395.D N6396.D N6397.D **Column ID:**
Calibration Date(s): 05-JUN-15 11:28 05-JUN-15 13:54

	0.200000(Level 1	0.500000(Level 2	1.0000 Level 3	3.0000 Level 4	7.0000 Level 5	10.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Bis(2-Chloroethyl)ether	1.83735	1.26521	1.33224	1.41312	1.33463	1.28077	AVG		1.41055		15.27197	15.00000	W(
2-Chlorophenol	1.13482	1.53783	1.23664	1.41325	1.33426	1.24168	AVG		1.31641		10.93701	15.00000	O
2,2'-Oxybis(1-chloropropane	0.75453	0.82238	0.82900	0.90658	0.85822	0.83053	AVG		0.83354		5.96031	15.00000	O
N-Nitroso-di-n-propylamine	0.74485	0.92750	0.82620	0.95524	0.92923	0.88808	AVG		0.87852		9.04213	15.00000	O
3&4-Methylphenol	0.96247	1.31950	1.00422	1.22680	1.21692	1.08755	AVG		1.13624		12.33953	15.00000	O
Hexachloroethane	0.66942	0.71662	0.71835	0.82807	0.73386	0.68637	AVG		0.72545		7.64948	15.00000	O
Nitrobenzene	20954	34784	67770	220795	597365	986130	LNR	-0.06745	0.37170		0.99875	0.99000	O
2-Nitrophenol	0.16774	0.23828	0.19590	0.19086	0.18696	0.18042	AVG		0.19336		12.44509	15.00000	O
bis(2-Chloroethoxy)methane	0.40449	0.46434	0.49070	0.47207	0.45665	0.41479	AVG		0.45051		7.49624	15.00000	O
2,4-Dichlorophenol	0.33751	0.46832	0.37965	0.38227	0.36585	0.34868	AVG		0.38038		12.21335	15.00000	O
Naphthalene	0.94693	0.99217	1.00383	0.98243	0.90376	0.84536	AVG		0.94575		6.46931	15.00000	O
4-Chloroaniline	0.34018	0.39812	0.42231	0.41459	0.38918	0.36724	AVG		0.38860		7.89266	15.00000	O
Hexachlorobutadiene	0.19280	0.20765	0.20261	0.19850	0.18675	0.17263	AVG		0.19349		6.49667	15.00000	O
2-Methylnaphthalene	0.80464	0.76169	0.69738	0.67193	0.59987	0.56138	AVG		0.68282		13.58437	15.00000	O
Hexachlorocyclopentadiene	2368	7459	20088	75457	237580	419993	LNR	0.30453	0.30267		0.99747	0.99000	O
1,2,4,5-Tetrachlorobenzene	0.67714	0.70934	0.71937	0.67699	0.66087	0.62830	AVG		0.67867		4.86756	15.00000	O
2,4,6-Trichlorophenol	0.39979	0.55635	0.47703	0.46804	0.47640	0.45624	AVG		0.47231		10.64439	15.00000	O
2,4,5-Trichlorophenol	0.52889	0.66153	0.56573	0.52969	0.52509	0.51698	AVG		0.55465		9.91637	15.00000	O
1,1'-Biphenyl	1.36225	1.37066	1.43916	1.31393	1.30283	1.23272	AVG		1.33693		5.26605	15.00000	O
2-Nitroaniline	0.26775	0.27714	0.33082	0.32536	0.33753	0.33025	AVG		0.31148		9.83221	15.00000	O
2,6-Dinitrotoluene	0.25300	0.26671	0.32204	0.32477	0.33039	0.31183	AVG		0.30146		10.96915	15.00000	O
2,4-Dinitrophenol	3774	12121	24557	51440	104008	198078	QUA	0.66507	9.68015	-1.73711	0.99034	0.99000	O
Dibenzofuran	1.49475	1.48956	1.59595	1.51404	1.48657	1.41780	AVG		1.49978		3.82774	15.00000	O
2,4-Dinitrotoluene	5388	14664	36119	117408	321183	561725	LNR	0.11281	0.40080		0.99972	0.99000	O
4-Nitrophenol	0.12396	0.16682	0.16960	0.16295	0.18044	0.19264	AVG		0.16607		14.01541	15.00000	O
2,3,4,6-Tetrachlorophenol	0.28255	0.36155	0.32409	0.33374	0.35581	0.35527	AVG		0.33550		8.86119	15.00000	O
4-Chlorophenyl-phenylether	0.62061	0.64766	0.69374	0.65928	0.66072	0.63291	AVG		0.65249		3.90048	15.00000	O
4-Nitroaniline	0.17017	0.14779	0.16552	0.15696	0.16815	0.15492	AVG		0.16058		5.44403	15.00000	O
4,6-Dinitro-2-Methylphenol	9137	27233	46211	91252	165974	311947	QUA	0.29768	8.48450	-0.99875	0.99762	0.99000	O
N-Nitrosodiphenylamine	0.67846	0.70980	0.72434	0.67092	0.64033	0.62165	AVG		0.67425		5.82744	15.00000	O
Hexachlorobenzene	0.33295	0.33307	0.31650	0.29162	0.29042	0.27433	AVG		0.30648		8.01895	15.00000	O
Atrazine	0.15749	0.16111	0.17283	0.17086	0.17837	0.16495	AVG		0.16760		4.66235	15.00000	O
Pentachlorophenol	0.12710	0.15842	0.14739	0.12561	0.13310	0.13719	AVG		0.13814		9.16737	15.00000	O
Phenanthrene	1.05251	1.07407	1.13064	1.05309	1.05622	1.01203	AVG		1.06309		3.65535	15.00000	O
Anthracene	1.12854	1.07273	1.11514	1.07039	1.07225	1.00328	AVG		1.07705		4.07478	15.00000	O
Di-n-butylphthalate	1.59236	2.04219	1.63110	1.59836	1.61501	1.49449	AVG		1.66225		11.56138	15.00000	O
Fluoranthene	1.09319	1.03376	1.13932	1.09596	1.13667	1.03291	AVG		1.08864		4.32168	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6393.D N6394.D N6392.D N6395.D N6396.D N6397.D **Column ID:**
Calibration Date(s): 05-JUN-15 11:28 05-JUN-15 13:54

Pyrene	2.15102	1.99815	1.80146	1.75384	1.54217	1.46725	AVG		1.78565		14.61585	15.00000	O
Butylbenzylphthalate	76927	179879	264405	488553	797964	1304707	QUA	0.00544	0.81689	0.04124	0.99483	0.99000	O
Benzo(a)anthracene	0.98404	1.00064	1.04724	1.01158	1.03497	0.99563	AVG		1.01235		2.39852	15.00000	O
3,3'-Dichlorobenzidine	0.23801	0.24967	0.26576	0.24985	0.26842	0.23477	AVG		0.25108		5.50928	15.00000	O
Chrysene	26145	48292	115504	351816	976758	1580779	LNR	-0.25656	0.99061		0.99769	0.99000	O
bis(2-Ethylhexyl)phthalate	119779	275690	408351	724332	1164639	1852361	QUA	0.04173	0.46800	0.02767	0.99527	0.99000	O
Di-n-octylphthalate	3.32714	4.08916	3.24547	3.39140	2.90206	2.73365	AVG		3.28148		14.37068	15.00000	O
Benzo(b)fluoranthene	1.24381	1.09769	1.25045	1.15156	1.29505	1.23721	AVG		1.21263		6.03087	15.00000	O
Benzo(k)fluoranthene	20139	40770	95172	289233	820399	1329974	LNR	-0.24135	1.36508		0.99686	0.99000	O
Benzo(a)pyrene	1.28595	1.13162	1.10326	1.06166	1.10044	1.05904	AVG		1.12366		7.48582	15.00000	O
Indeno(1,2,3-cd)pyrene	0.85824	0.78022	0.76299	0.75240	0.79701	0.76105	AVG		0.78532		4.98130	15.00000	O
Dibenzo(a,h)anthracene	0.54145	0.54237	0.54037	0.54163	0.58588	0.56496	AVG		0.55278		3.39348	15.00000	O
Benzo(g,h,i)perylene	0.93508	0.83332	0.78628	0.75375	0.74962	0.69782	AVG		0.79265		10.45517	15.00000	O
2-Methylnaphthalene-D10	1.00905	1.02883	1.07957	1.01453	0.98828	0.92286	AVG		1.00719		5.10795	15.00000	
2,4-Dibromophenol	0.27128	0.30704	0.33026	0.31306	0.31992	0.31107	AVG		0.30877		6.50692	15.00000	
Fluorene-D10	0.87129	0.85247	0.92818	0.88195	0.88446	0.84062	AVG		0.87649		3.48128	15.00000	
Pyrene-D10	1.41829	1.37689	1.23514	1.23225	1.07061	1.03060	AVG		1.22730		12.73725	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N060515.b\N6398.D
Report Date: 08-Jun-2015 14:36

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG164187-8
Level: LOW
Data Type: MS DATA
SpikeList File: SIM_IND_CHK.spk
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N060515.b\NSPSIM44.m
Misc Info: WG164187,WG164187,WG164187-4,SI3862-3

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	2.01	100.59	80-120
3 Benzaldehyde	2.00	1.38	68.86*	80-120
4 Phenol	2.00	2.05	102.74	80-120
5 Bis(2-Chloroethyl)	2.00	1.73	86.74	80-120
6 2-Chlorophenol	2.00	1.96	97.85	80-120
7 1,3-Dichlorobenzen	2.00	2.05	102.38	80-120
9 1,4-Dichlorobenzen	2.00	2.15	107.63	80-120
10 1,2-Dichlorobenzen	2.00	2.08	103.94	80-120
11 2,2'-Oxybis(1-chlo	2.00	1.76	88.10	80-120
12 2-Methylphenol	2.00	2.20	110.29	80-120
13 Acetophenone	2.00	2.04	102.21	80-120
14 N-Nitroso-di-n-pro	2.00	1.90	94.81	80-120
16 Hexachloroethane	2.00	2.08	104.11	80-120
15 3&4-Methylphenol	2.00	1.82	90.83	80-120
17 Nitrobenzene	2.00	2.16	108.14	80-120
18 Isophorone	2.00	2.08	104.13	80-120
19 2-Nitrophenol	2.00	1.87	93.38	80-120
20 2,4-Dimethylphenol	2.00	1.80	89.96	80-120
21 bis(2-Chloroethoxy	2.00	1.99	99.58	80-120
22 2,4-Dichlorophenol	2.00	1.85	92.49	80-120
23 1,2,4-Trichloroben	2.00	2.04	101.88	80-120
25 Naphthalene	2.00	2.07	103.66	80-120
26 4-Chloroaniline	2.00	1.88	94.15	80-120
27 Hexachlorobutadien	2.00	2.04	102.12	80-120
28 Caprolactam	2.00	1.94	97.05	80-120
29 4-Chloro-3-Methylp	2.00	1.81	90.74	80-120
31 2-Methylnaphthalen	2.00	1.85	92.43	80-120
32 1-Methylnaphthalen	2.00	1.94	97.03	80-120
34 1,2,4,5-Tetrachlor	2.00	1.86	92.98	80-120
33 Hexachlorocyclopen	2.00	1.34	66.85*	80-120
36 2,4,6-Trichlorophe	2.00	1.75	87.60	80-120
37 2,4,5-Trichlorophe	2.00	1.83	91.52	80-120
39 2-Chloronaphthalen	2.00	1.85	92.72	80-120
38 1,1'-Biphenyl	2.00	1.93	96.49	80-120
40 2-Nitroaniline	2.00	1.91	95.36	80-120
41 Dimethyl Phthalate	2.00	1.88	93.80	80-120
43 Acenaphthylene	2.00	1.70	84.77	80-120
42 2,6-Dinitrotoluene	2.00	1.86	93.03	80-120
44 3-Nitroaniline	2.00	2.06	103.08	80-120
46 Acenaphthene	2.00	1.94	96.79	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N060515.b\N6398.D
Report Date: 08-Jun-2015 14:36

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 2,4-Dinitrophenol	2.00	1.52	75.77*	80-120
48 Dibenzofuran	2.00	1.88	94.09	80-120
49 2,4-Dinitrotoluene	2.00	1.73	86.38	80-120
50 4-Nitrophenol	2.00	1.51	75.52*	80-120
51 2,3,4,6-Tetrachlor	2.00	1.60	79.76*	80-120
52 Diethylphthalate	2.00	1.97	98.60	80-120
54 Fluorene	2.00	1.88	94.00	80-120
56 4-Nitroaniline	2.00	2.26	112.82	80-120
57 4,6-Dinitro-2-Meth	2.00	1.67	83.40	80-120
58 N-Nitrosodiphenyla	2.00	1.52	76.12*	80-120
59 4-Bromophenyl-phen	2.00	1.91	95.45	80-120
60 Hexachlorobenzene	2.00	1.91	95.71	80-120
61 Atrazine	2.00	1.78	88.94	80-120
62 Pentachlorophenol	2.00	1.60	79.86*	80-120
64 Phenanthrene	2.00	1.90	94.87	80-120
65 Anthracene	2.00	1.94	97.05	80-120
66 Carbazole	2.00	1.89	94.38	80-120
67 Di-n-butylphthalat	2.00	2.04	102.21	80-120
68 Fluoranthene	2.00	1.96	97.75	80-120
70 Pyrene	2.00	1.95	97.43	80-120
71 Butylbenzylphthala	2.00	1.74	87.09	80-120
72 Benzo(a)anthracene	2.00	1.76	88.23	80-120
75 Chrysene	2.00	1.95	97.73	80-120
73 3,3'-Dichlorobenzi	2.00	1.80	89.90	80-120
76 bis(2-Ethylhexyl)p	2.00	1.59	79.51*	80-120
77 Di-n-octylphthalat	2.00	1.88	93.80	80-120
78 Benzo(b)fluoranthe	2.00	1.89	94.51	80-120
79 Benzo(k)fluoranthe	2.00	1.95	97.75	80-120
80 Benzo(a)pyrene	2.00	1.61	80.47	80-120
82 Indeno(1,2,3-cd)py	2.00	1.72	85.85	80-120
83 Dibenzo(a,h)anthra	2.00	1.69	84.68	80-120
84 Benzo(g,h,i)peryle	2.00	1.75	87.30	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	10-93
$ 30 2-Methylnaphthale	2.00	0.000	*	43-92
$ 35 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 53 Fluorene-D10	2.00	0.000	*	29-101
$ 69 Pyrene-D10	2.00	0.000	*	53-166

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6779.D N6780.D N6778.D N6781.D N6782.D N6783.D **Column ID:**
Calibration Date(s): 23-JUN-15 13:03 23-JUN-15 15:23

	0.200000(Level 1	0.500000(Level 2	1.0000 Level 3	3.0000 Level 4	7.0000 Level 5	10.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Bis(2-Chloroethyl)ether	1.83775	1.76222	1.71511	1.56607	1.50589	1.38524	AVG		1.62871		10.5374(	15.00000	O
2-Chlorophenol	1.18120	1.20951	1.23275	1.28905	1.41854	1.34827	AVG		1.27989		7.06628	15.00000	O
2,2'-Oxybis(1-chloropropane	0.79441	0.85727	0.88883	0.92184	0.98219	0.90240	AVG		0.89116		7.07353	15.00000	O
N-Nitroso-di-n-propylamine	0.66603	0.67707	0.70862	0.76129	0.80587	0.75482	AVG		0.72895		7.43714	15.00000	O
3&4-Methylphenol	1.04630	1.06067	1.10049	1.17084	1.29956	1.26416	AVG		1.15700		9.20604	15.00000	O
Hexachloroethane	0.50797	0.46548	0.39326	0.46447	0.51162	0.47073	AVG		0.46892		9.10121	15.00000	O
Nitrobenzene	41105	76586	151588	372977	773419	1097223	LNR	-0.35787	0.31489		0.99610	0.99000	O
2-Nitrophenol	0.19944	0.20357	0.21578	0.20312	0.21261	0.19933	AVG		0.20564		3.37051	15.00000	O
bis(2-Chloroethoxy)methane	0.39950	0.42629	0.43196	0.42087	0.41116	0.37180	AVG		0.41026		5.37991	15.00000	O
2,4-Dichlorophenol	0.24346	0.26248	0.27822	0.26807	0.28407	0.26593	AVG		0.26704		5.27984	15.00000	O
Naphthalene	1.14657	0.96464	1.00870	0.97468	0.94567	0.88692	AVG		0.98786		8.86019	15.00000	O
4-Chloroaniline	0.40587	0.43745	0.44855	0.42744	0.43428	0.40986	AVG		0.42724		3.87013	15.00000	O
Hexachlorobutadiene	0.19445	0.18175	0.18895	0.17904	0.17417	0.15892	AVG		0.17955		6.91204	15.00000	O
2-Methylnaphthalene	60910	143297	275312	724702	1544385	2210172	LNR	-0.25197	0.63698		0.99737	0.99000	O
Hexachlorocyclopentadiene	2266	8616	24159	94850	272351	419176	LNR	0.38848	0.29712		0.99576	0.99000	O
1,2,4,5-Tetrachlorobenzene	0.60341	0.63862	0.64036	0.60794	0.63952	0.59515	AVG		0.62083		3.36033	15.00000	O
2,4,6-Trichlorophenol	0.26568	0.31159	0.35205	0.34763	0.38685	0.37164	AVG		0.33924		13.00105	15.00000	O
2,4,5-Trichlorophenol	0.53115	0.50255	0.49462	0.44106	0.47523	0.44828	AVG		0.48215		7.09812	15.00000	O
1,1'-Biphenyl	1.76129	1.81933	1.82538	1.73784	1.78730	1.68333	AVG		1.76908		3.03523	15.00000	O
2-Nitroaniline	0.26661	0.30108	0.32503	0.32210	0.35003	0.33656	AVG		0.31690		9.31494	15.00000	O
2,6-Dinitrotoluene	0.30899	0.35345	0.38076	0.37356	0.41112	0.38602	AVG		0.36898		9.44002	15.00000	O
2,4-Dinitrophenol	0.04431	0.07834	0.10103	0.11871	0.16917	0.18009	AVG		0.11528		45.44248	15.00000	W(
Dibenzofuran	1.77759	1.84398	1.90833	1.81617	1.91940	1.79845	AVG		1.84399		3.16992	15.00000	O
2,4-Dinitrotoluene	0.35636	0.42498	0.46011	0.44373	0.49852	0.48449	AVG		0.44470		11.4272(	15.00000	O
4-Nitrophenol	0.18464	0.19877	0.22329	0.20933	0.25972	0.25118	AVG		0.22116		13.36357	15.00000	O
2,3,4,6-Tetrachlorophenol	0.32387	0.34375	0.36720	0.36967	0.42044	0.39482	AVG		0.36996		9.35233	15.00000	O
4-Chlorophenyl-phenylether	0.65810	0.69070	0.71499	0.67377	0.70175	0.65047	AVG		0.68163		3.70351	15.00000	O
4-Nitroaniline	0.21473	0.24232	0.24298	0.20472	0.23311	0.22579	AVG		0.22728		6.74735	15.00000	O
4,6-Dinitro-2-Methylphenol	13724	37602	73097	129926	215973	331901	QUA	0.37425	7.63949	-0.75686	0.99411	0.99000	O
N-Nitrosodiphenylamine	0.84479	0.86017	0.87388	0.77148	0.80612	0.74726	AVG		0.81728		6.22067	15.00000	O
Hexachlorobenzene	0.32176	0.33213	0.32847	0.29509	0.30385	0.27815	AVG		0.30991		6.83628	15.00000	O
Atrazine	0.17045	0.18312	0.19182	0.17346	0.18655	0.17466	AVG		0.18001		4.68017	15.00000	O
Pentachlorophenol	0.15294	0.15400	0.16814	0.14576	0.16018	0.15965	AVG		0.15678		4.88089	15.00000	O
Phenanthrene	1.25216	1.23333	1.28818	1.22719	1.28422	1.21678	AVG		1.25031		2.40849	15.00000	O
Anthracene	1.50554	1.61772	1.53726	1.33509	1.42329	1.27865	AVG		1.44959		8.84014	15.00000	O
Di-n-butylphthalate	2.24719	2.23762	2.25564	1.97310	2.18807	1.97746	AVG		2.14651		6.27534	15.00000	O
Fluoranthene	1.25300	1.20210	1.24336	1.11653	1.24233	1.16556	AVG		1.20381		4.48136	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6779.D N6780.D N6778.D N6781.D N6782.D N6783.D **Column ID:**
Calibration Date(s): 23-JUN-15 13:03 23-JUN-15 15:23

Pyrene	49747	118527	258919	728876	1818636	2584079	QUA	-0.03154	0.35532	0.00654	0.99994	0.99000	O
Butylbenzylphthalate	140561	300858	501251	773352	1213502	1744498	QUA	-0.07383	0.49108	0.01704	0.99936	0.99000	O
Benzo(a)anthracene	27521	56401	132357	366200	1069947	1681282	LNR	-0.04547	1.25158		0.99949	0.99000	O
3,3'-Dichlorobenzidine	0.26659	0.27549	0.27834	0.28168	0.28328	0.28992	AVG		0.27922		2.82612	15.00000	O
Chrysene	40645	84668	138690	434554	1133242	1688346	LNR	-0.27845	1.26064		0.99861	0.99000	O
bis(2-Ethylhexyl)phthalate	229661	463778	745091	1132682	1735941	2510966	QUA	-0.14342	0.32257	0.00926	0.99842	0.99000	O
Di-n-octylphthalate	284339	612568	1018407	1557782	2475073	3647767	QUA	-0.11686	0.12880	0.00087	0.99429	0.99000	O
Benzo(b)fluoranthene	18197	34502	75742	213765	703846	998280	QUA	0.05333	0.59674	0.00295	0.99109	0.99000	O
Benzo(k)fluoranthene	23958	53018	104578	316787	780100	1296802	LNR	-0.15933	1.87606		0.99926	0.99000	O
Benzo(a)pyrene	1.75015	1.62696	1.30023	1.23861	1.35856	1.30267	AVG		1.42953		14.54197	15.00000	O
Indeno(1,2,3-cd)pyrene	1.16040	0.94659	0.95291	0.84337	0.88721	0.82105	AVG		0.93525		13.08892	15.00000	O
Dibenzo(a,h)anthracene	0.80886	0.66139	0.68002	0.60210	0.64051	0.60032	AVG		0.66553		11.57493	15.00000	O
Benzo(g,h,i)perylene	7694	19553	41765	129813	338222	494804	LNR	-0.18495	0.74765		0.99618	0.99000	O
2-Methylnaphthalene-D10	1.09203	1.13690	1.13834	1.07092	1.10734	1.01694	AVG		1.09374		4.18158	15.00000	
2,4-Dibromophenol	0.33531	0.34989	0.36407	0.35348	0.37563	0.35369	AVG		0.35534		3.82815	15.00000	
Fluorene-D10	0.89557	0.92877	0.93832	0.88861	0.91713	0.85627	AVG		0.90411		3.33644	15.00000	
Pyrene-D10	23587	66268	142886	419789	1048907	1494345	LNR	-0.29475	1.13914		0.99509	0.99000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N062315.b\N6784.D
Report Date: 24-Jun-2015 10:51

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: WG165324-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: SIM_IND_CHK.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N062315.b\NSPSIM45.m
Misc Info: WG165324,WG165324,WG164324-4

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	2.53	126.35*	80-120
3 Benzaldehyde	2.00	1.77	88.57	80-120
4 Phenol	2.00	2.25	112.68	80-120
5 Bis(2-Chloroethyl)	2.00	2.14	107.22	80-120
6 2-Chlorophenol	2.00	2.13	106.73	80-120
7 1,3-Dichlorobenzen	2.00	1.84	92.21	80-120
9 1,4-Dichlorobenzen	2.00	2.26	113.04	80-120
10 1,2-Dichlorobenzen	2.00	2.18	108.83	80-120
11 2,2'-Oxybis(1-chlo	2.00	1.95	97.30	80-120
12 2-Methylphenol	2.00	1.98	99.13	80-120
13 Acetophenone	2.00	2.09	104.41	80-120
14 N-Nitroso-di-n-pro	2.00	1.97	98.53	80-120
16 Hexachloroethane	2.00	2.04	101.82	80-120
15 3&4-Methylphenol	2.00	2.46	123.08*	80-120
17 Nitrobenzene	2.00	2.61	130.61*	80-120
18 Isophorone	2.00	2.33	116.47	80-120
19 2-Nitrophenol	2.00	2.06	102.76	80-120
20 2,4-Dimethylphenol	2.00	1.97	98.32	80-120
21 bis(2-Chloroethoxy	2.00	2.17	108.45	80-120
22 2,4-Dichlorophenol	2.00	2.08	103.83	80-120
23 1,2,4-Trichloroben	2.00	2.18	109.15	80-120
25 Naphthalene	2.00	2.14	107.06	80-120
26 4-Chloroaniline	2.00	2.10	105.16	80-120
27 Hexachlorobutadien	2.00	2.15	107.44	80-120
28 Caprolactam	2.00	2.00	100.00	80-120
29 4-Chloro-3-Methylp	2.00	2.07	103.67	80-120
31 2-Methylnaphthalen	2.00	2.19	109.72	80-120
32 1-Methylnaphthalen	2.00	2.46	122.85*	80-120
34 1,2,4,5-Tetrachlor	2.00	1.92	96.28	80-120
33 Hexachlorocyclopen	2.00	1.26	63.04*	80-120
36 2,4,6-Trichlorophe	2.00	1.84	91.86	80-120
37 2,4,5-Trichlorophe	2.00	2.08	104.07	80-120
39 2-Chloronaphthalen	2.00	1.99	99.46	80-120
38 1,1'-Biphenyl	2.00	1.98	99.12	80-120
40 2-Nitroaniline	2.00	2.03	101.59	80-120
41 Dimethyl Phthalate	2.00	2.06	102.80	80-120
43 Acenaphthylene	2.00	1.75	87.71	80-120
42 2,6-Dinitrotoluene	2.00	1.88	93.93	80-120
44 3-Nitroaniline	2.00	2.08	103.95	80-120
46 Acenaphthene	2.00	2.03	101.73	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N062315.b\N6784.D
Report Date: 24-Jun-2015 10:51

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 2,4-Dinitrophenol	2.00	1.33	66.50*	80-120
48 Dibenzofuran	2.00	2.02	101.30	80-120
49 2,4-Dinitrotoluene	2.00	1.96	97.87	80-120
50 4-Nitrophenol	2.00	1.67	83.66	80-120
51 2,3,4,6-Tetrachlor	2.00	1.57	78.72*	80-120
52 Diethylphthalate	2.00	2.16	107.99	80-120
54 Fluorene	2.00	1.98	99.24	80-120
56 4-Nitroaniline	2.00	2.49	124.55*	80-120
57 4,6-Dinitro-2-Meth	2.00	1.81	90.39	80-120
58 N-Nitrosodiphenyla	2.00	1.60	80.24	80-120
59 4-Bromophenyl-phen	2.00	1.96	98.19	80-120
60 Hexachlorobenzene	2.00	1.92	95.76	80-120
61 Atrazine	2.00	1.74	86.93	80-120
62 Pentachlorophenol	2.00	1.77	88.66	80-120
64 Phenanthrene	2.00	1.90	94.98	80-120
65 Anthracene	2.00	2.03	101.62	80-120
66 Carbazole	2.00	2.00	99.96	80-120
67 Di-n-butylphthalat	2.00	2.13	106.62	80-120
68 Fluoranthene	2.00	1.96	98.04	80-120
70 Pyrene	2.00	1.92	96.03	80-120
71 Butylbenzylphthala	2.00	1.83	91.33	80-120
72 Benzo(a)anthracene	2.00	1.92	95.98	80-120
75 Chrysene	2.00	2.13	106.34	80-120
73 3,3'-Dichlorobenzi	2.00	2.18	109.20	80-120
76 bis(2-Ethylhexyl)p	2.00	1.72	85.90	80-120
77 Di-n-octylphthalat	2.00	1.78	88.98	80-120
78 Benzo(b)fluoranthe	2.00	1.68	83.84	80-120
79 Benzo(k)fluoranthe	2.00	2.17	108.47	80-120
80 Benzo(a)pyrene	2.00	1.73	86.35	80-120
82 Indeno(1,2,3-cd)py	2.00	1.81	90.36	80-120
83 Dibenzo(a,h)anthra	2.00	1.83	91.58	80-120
84 Benzo(g,h,i)peryle	2.00	2.03	101.53	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	10-93
$ 30 2-Methylnaphthale	2.00	0.000	*	43-92
$ 35 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 53 Fluorene-D10	2.00	0.000	*	29-101
$ 69 Pyrene-D10	2.00	0.000	*	53-166

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164883-2
Analytical Date: 06/16/15 09:00
Lab File ID : N6525.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/05/15 11:28 06/05/15 13:54
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
5 Bis(2-Chloroethyl)ether	1.41055	1.46817	1.46817	0.010	4.08487	20.00000	Averaged	
6 2-Chlorophenol	1.31641	1.26746	1.26746	0.010	-3.71871	20.00000	Averaged	
11 2,2'-Oxybis(1-chloropropane	0.83354	1.01587	1.01587	0.010	21.87476	20.00000	Averaged	*
14 N-Nitroso-di-n-propylamine	0.87852	0.98250	0.98250	0.050	11.83573	20.00000	Averaged	
15 3&4-Methylphenol	1.13624	1.10131	1.10131	0.010	-3.07429	20.00000	Averaged	
16 Hexachloroethane	0.72545	0.66462	0.66462	0.010	-8.38500	20.00000	Averaged	
17 Nitrobenzene	1.00000	1.00023	0.39184	0.010	0.02306	20.00000	Linear	
19 2-Nitrophenol	0.19336	0.19518	0.19518	0.010	0.93958	20.01000	Averaged	
21 bis(2-Chloroethoxy)methane	0.45051	0.54521	0.54521	0.010	21.02167	20.00000	Averaged	*
22 2,4-Dichlorophenol	0.38038	0.36199	0.36199	0.010	-4.83535	20.01000	Averaged	
25 Naphthalene	0.94575	0.95607	0.95607	0.010	1.09147	20.00000	Averaged	
26 4-Chloroaniline	0.38860	0.41777	0.41777	0.010	7.50473	20.00000	Averaged	
27 Hexachlorobutadiene	0.19349	0.16749	0.16749	0.010	-13.44033	20.01000	Averaged	
31 2-Methylnaphthalene	0.68282	0.69539	0.69539	0.010	1.84194	20.00000	Averaged	
33 Hexachlorocyclopentadiene	1.00000	0.84247	0.18125	0.050	-15.75346	20.00000	Linear	
34 1,2,4,5-Tetrachlorobenzene	0.67867	0.61666	0.61666	0.010	-9.13692	20.00000	Averaged	
36 2,4,6-Trichlorophenol	0.47231	0.43860	0.43860	0.010	-7.13727	20.01000	Averaged	
37 2,4,5-Trichlorophenol	0.55465	0.54217	0.54217	0.010	-2.25014	20.00000	Averaged	
38 1,1'-Biphenyl	1.33693	1.36405	1.36405	0.010	2.02860	20.00000	Averaged	
40 2-Nitroaniline	0.31148	0.42357	0.42357	0.010	35.98831	20.00000	Averaged	*
42 2,6-Dinitrotoluene	0.30146	0.30568	0.30568	0.010	1.40145	20.00000	Averaged	
47 2,4-Dinitrophenol	3.00000	3.83199	0.12398	0.050	27.73287	20.00000	Quadratic	*
48 Dibenzofuran	1.49978	1.51274	1.51274	0.010	0.86444	20.00000	Averaged	
49 2,4-Dinitrotoluene	1.00000	1.02382	0.37418	0.010	2.38204	20.00000	Linear	
50 4-Nitrophenol	0.16607	0.20766	0.20766	0.050	25.04524	20.00000	Averaged	*
51 2,3,4,6-Tetrachlorophenol	0.33550	0.32906	0.32906	0.010	-1.92096	20.00000	Averaged	
55 4-Chlorophenyl-phenylether	0.65249	0.62864	0.62864	0.010	-3.65395	20.00000	Averaged	
56 4-Nitroaniline	0.16058	0.22972	0.22972	0.010	43.04975	20.00000	Averaged	*
57 4,6-Dinitro-2-Methylphenol	3.00000	3.11720	0.11940	0.010	3.90655	20.00000	Quadratic	
58 N-Nitrosodiphenylamine	0.67425	0.65602	0.65602	0.010	-2.70422	20.01000	Averaged	
60 Hexachlorobenzene	0.30648	0.26461	0.26461	0.010	-13.66244	20.00000	Averaged	
61 Atrazine	0.16760	0.15971	0.15971	0.010	-4.70925	20.00000	Averaged	
62 Pentachlorophenol	0.13814	0.15482	0.15482	0.010	12.07777	20.01000	Averaged	
64 Phenanthrene	1.06309	1.03939	1.03939	0.010	-2.23002	20.00000	Averaged	
65 Anthracene	1.07705	1.08109	1.08109	0.010	0.37440	20.00000	Averaged	
67 Di-n-butylphthalate	1.66225	1.53255	1.53255	0.010	-7.80253	20.00000	Averaged	
68 Fluoranthene	1.08864	1.12150	1.12150	0.010	3.01856	20.01000	Averaged	
70 Pyrene	1.78565	1.83317	1.83317	0.010	2.66119	20.00000	Averaged	
71 Butylbenzylphthalate	3.00000	2.77717	0.95780	0.010	-7.42761	20.00000	Quadratic	
72 Benzo(a)anthracene	1.01235	0.95926	0.95926	0.010	-5.24449	20.00000	Averaged	
73 3,3'-Dichlorobenzidine	0.25108	0.28217	0.28217	0.010	12.38449	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164883-2
Analytical Date: 06/16/15 09:00
Lab File ID : N6525.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/05/15 11:28 06/05/15 13:54
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
75 Chrysene	1.00000	0.95585	1.15020	0.010	-4.41520	20.00000	Linear	
76 bis(2-Ethylhexyl)phthalate	3.00000	2.80805	1.48644	0.010	-6.39840	20.00000	Quadratic	
77 Di-n-octylphthalate	3.28148	3.42047	3.42047	0.010	4.23564	20.01000	Averaged	
78 Benzo(b)fluoranthene	1.21263	1.15072	1.15072	0.010	-5.10512	20.00000	Averaged	
79 Benzo(k)fluoranthene	1.00000	0.75317	1.29171	0.010	-24.68271	20.00000	Linear	*
80 Benzo(a)pyrene	1.12366	0.96986	0.96986	0.010	-13.68715	20.01000	Averaged	
82 Indeno(1,2,3-cd)pyrene	0.78532	0.76299	0.76299	0.010	-2.84312	20.00000	Averaged	
83 Dibenzo(a,h)anthracene	0.55278	0.62197	0.62197	0.010	12.51696	20.00000	Averaged	
84 Benzo(g,h,i)perylene	0.79265	0.71740	0.71740	0.010	-9.49285	20.00000	Averaged	
30 2-Methylnaphthalene-D10	1.00719	1.00981	1.00981	0.010	0.26004	20.00000	Averaged	
35 2,4-Dibromophenol	0.30877	0.29918	0.29918	0.010	-3.10773	20.00000	Averaged	
53 Fluorene-D10	0.87649	0.87021	0.87021	0.010	-0.71717	20.00000	Averaged	
69 Pyrene-D10	1.22730	1.19036	1.19036	0.010	-3.00959	20.00000	Averaged	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164825-2
Analytical Date: 06/15/15 12:52
Lab File ID : N6598.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/05/15 11:28 06/05/15 13:54
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
5 Bis(2-Chloroethyl)ether	1.41055	2.59104	2.59104	0.010	83.68923	20.00000	Averaged	*
6 2-Chlorophenol	1.31641	1.27758	1.27758	0.010	-2.95000	20.00000	Averaged	
11 2,2'-Oxybis(1-chloropropane	0.83354	0.95288	0.95288	0.010	14.31796	20.00000	Averaged	
14 N-Nitroso-di-n-propylamine	0.87852	1.04206	1.04206	0.050	18.61632	20.00000	Averaged	
15 3&4-Methylphenol	1.13624	1.25213	1.25213	0.010	10.19919	20.00000	Averaged	
16 Hexachloroethane	0.72545	0.52875	0.52875	0.010	-27.11435	20.00000	Averaged	*
17 Nitrobenzene	1.00000	1.55768	0.59904	0.010	55.76792	20.00000	Linear	*
19 2-Nitrophenol	0.19336	0.17722	0.17722	0.010	-8.34761	20.01000	Averaged	
21 bis(2-Chloroethoxy)methane	0.45051	0.53427	0.53427	0.010	18.59148	20.00000	Averaged	
22 2,4-Dichlorophenol	0.38038	0.31337	0.31337	0.010	-17.61736	20.01000	Averaged	
25 Naphthalene	0.94575	1.06855	1.06855	0.010	12.98468	20.00000	Averaged	
26 4-Chloroaniline	0.38860	0.39800	0.39800	0.010	2.41910	20.00000	Averaged	
27 Hexachlorobutadiene	0.19349	0.15935	0.15935	0.010	-17.64268	20.01000	Averaged	
31 2-Methylnaphthalene	0.68282	0.73391	0.73391	0.010	7.48288	20.00000	Averaged	
33 Hexachlorocyclopentadiene	1.00000	0.86837	0.18909	0.050	-13.16300	20.00000	Linear	
34 1,2,4,5-Tetrachlorobenzene	0.67867	0.62227	0.62227	0.010	-8.30987	20.00000	Averaged	
36 2,4,6-Trichlorophenol	0.47231	0.36866	0.36866	0.010	-21.94434	20.01000	Averaged	*
37 2,4,5-Trichlorophenol	0.55465	0.62911	0.62911	0.010	13.42355	20.00000	Averaged	
38 1,1'-Biphenyl	1.33693	1.34226	1.34226	0.010	0.39936	20.00000	Averaged	
40 2-Nitroaniline	0.31148	0.38242	0.38242	0.010	22.77534	20.00000	Averaged	*
42 2,6-Dinitrotoluene	0.30146	0.28688	0.28688	0.010	-4.83534	20.00000	Averaged	
47 2,4-Dinitrophenol	3.00000	3.52815	0.11154	0.050	17.60516	20.00000	Quadratic	
48 Dibenzofuran	1.49978	1.45652	1.45652	0.010	-2.88400	20.00000	Averaged	
49 2,4-Dinitrotoluene	1.00000	0.98894	0.36020	0.010	-1.10586	20.00000	Linear	
50 4-Nitrophenol	0.16607	0.17727	0.17727	0.050	6.74473	20.00000	Averaged	
51 2,3,4,6-Tetrachlorophenol	0.33550	0.36885	0.36885	0.010	9.93920	20.00000	Averaged	
55 4-Chlorophenyl-phenylether	0.65249	0.61404	0.61404	0.010	-5.89215	20.00000	Averaged	
56 4-Nitroaniline	0.16058	0.17117	0.17117	0.010	6.59031	20.00000	Averaged	
57 4,6-Dinitro-2-Methylphenol	3.00000	3.00745	0.11460	0.010	0.24847	20.00000	Quadratic	
58 N-Nitrosodiphenylamine	0.67425	0.67537	0.67537	0.010	0.16657	20.01000	Averaged	
60 Hexachlorobenzene	0.30648	0.26053	0.26053	0.010	-14.99366	20.00000	Averaged	
61 Atrazine	0.16760	0.14207	0.14207	0.010	-15.23420	20.00000	Averaged	
62 Pentachlorophenol	0.13814	0.14825	0.14825	0.010	7.32253	20.01000	Averaged	
64 Phenanthrene	1.06309	0.93675	0.93675	0.010	-11.88471	20.00000	Averaged	
65 Anthracene	1.07705	1.22890	1.22890	0.010	14.09849	20.00000	Averaged	
67 Di-n-butylphthalate	1.66225	1.51229	1.51229	0.010	-9.02183	20.00000	Averaged	
68 Fluoranthene	1.08864	1.01740	1.01740	0.010	-6.54342	20.01000	Averaged	
70 Pyrene	1.78565	1.84697	1.84697	0.010	3.43395	20.00000	Averaged	
71 Butylbenzylphthalate	3.00000	2.84207	0.97718	0.010	-5.26443	20.00000	Quadratic	
72 Benzo(a)anthracene	1.01235	0.98742	0.98742	0.010	-2.46295	20.00000	Averaged	
73 3,3'-Dichlorobenzidine	0.25108	0.21710	0.21710	0.010	-13.53445	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164825-2
Analytical Date: 06/15/15 12:52
Lab File ID : N6598.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/05/15 11:28 06/05/15 13:54
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
75 Chrysene	1.00000	0.95958	1.15390	0.010	-4.04153	20.00000	Linear	
76 bis(2-Ethylhexyl)phthalate	3.00000	2.78200	1.47524	0.010	-7.26668	20.00000	Quadratic	
77 Di-n-octylphthalate	3.28148	4.41921	4.41921	0.010	34.67129	20.01000	Averaged	*
78 Benzo(b)fluoranthene	1.21263	1.25391	1.25391	0.010	3.40416	20.00000	Averaged	
79 Benzo(k)fluoranthene	1.00000	1.05290	1.70087	0.010	5.29043	20.00000	Linear	
80 Benzo(a)pyrene	1.12366	1.09525	1.09525	0.010	-2.52878	20.01000	Averaged	
82 Indeno(1,2,3-cd)pyrene	0.78532	0.70180	0.70180	0.010	-10.63462	20.00000	Averaged	
83 Dibenzo(a,h)anthracene	0.55278	0.52402	0.52402	0.010	-5.20274	20.00000	Averaged	
84 Benzo(g,h,i)perylene	0.79265	0.66200	0.66200	0.010	-16.48232	20.00000	Averaged	
30 2-Methylnaphthalene-D10	1.00719	1.01502	1.01502	0.010	0.77762	20.00000	Averaged	
35 2,4-Dibromophenol	0.30877	0.29543	0.29543	0.010	-4.32165	20.00000	Averaged	
53 Fluorene-D10	0.87649	0.87603	0.87603	0.010	-0.05318	20.00000	Averaged	
69 Pyrene-D10	1.22730	1.23749	1.23749	0.010	0.83067	20.00000	Averaged	

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

625/SV/SIM
SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625 ✓	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV8717		Spike ID (1): SV8715		
	Surrogate ID (2):		Spike ID (2): SIM: SV8718		
Solvents/Acid/Base	Solvent Lot # (MeCl2): DM804		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96/8/511		$NaSO_4$ Lot # 2796500		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) ≥11		pH (2nd Extraction) ≤2
Prep Start Time: 1000	Prep End Time: 14:40		CLLE Start Time: —		CLLE End Time: —

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV0036	Initials	Comments
		WG164593-1 625										625-R
6-1-15	KF	WG164594-1 SV WG164595-1 SIM	1000	1mL	NR	✓	✓	1mL	6-1-15	C8	JMS	SV-R SIM-R
		WG164593-2 WG164594-2			1mL	✓				C9		
		WG164595-2					✓			C10		
		-3	1060				✓			D1		MS S14024-5D
		-4	1060				✓			D2		MSD " -5E
		WG164594-3	~~1000~~ 1060	2mL	NR	✓				D3		SPLP Blank PBT12350 diluted to 1000mL
		WG164595 -4S WG164595 -5S	1060	1mL	1mL	✗	✓			D4		MS S14050-2S
		-5S	1060			✓	✓			D5		MSD -2F

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000080

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-1-15	KF	S13987-2A	1060	1mL	NR	✓		1mL	6-1-15	D6	JMS	625 em-SS -cont
		S13988-2A	1060							D7		
		S14018-3A	1060							D8		cont
		S14022-2A	1060							D9		em-SS
		S14023-2A	1060							D10		
		S14028-1D	1060							E1		
		S14029-1F	1020							E2		cont
		S13862-6P	1050	2mL		✓				E3		SPLP
		S13862-7F	830	2mL		✓				E4		SPLP
		S13907-2F	1060	1mL		✓				E5		em-S.S.
		S14024-1B	1060				✓			E6		
		-2B	1060							E7		
		-3B	1020							E8		
		-4B	1030							E9		
		-5G	1050							E10		MSD
		S14050-2E	1060							SV037		
		-3C								F2		em-SS
		-4G								F3		
		-5F	1030							F4		

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000081

S|S|625
sep

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)	SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625 ✓	CLP OLM04.2 / CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV2721		Spike ID (1): SV2715(SV)	
	Surrogate ID (2):		Spike ID (2): SV2716(SIM)	
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM824		H_2SO_4 Lot # 71333	NaOH Lot # 62534
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 27965002	
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) ≤2	pH (2nd Extraction) ≥11
Prep Start Time: 1130	Prep End Time: 1330		CLLE Start Time:	CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SVD39	Initials	Comments R_{SV} 322505
6-22-15	WAS	WG165248-1 248-1 251-1	1000	1mL	NR	✓	✓	1mL	6-22-15	A1	KF	R_{SIM} 322506
		WG165248-2 251-2			1mL					A2		R_{625} 322507
		248-3 251-3								3		
		WG165248-4	1010		NR					4		SPLP Blank 1251A
		-5	200							5		TCLP Blank 1250A → 200mL w/DI
		-6	900		1mL					6		MS SD3862-6
		-7	880							7		MSD -6
		WG165249-2	~~750~~ 1000				✓			8		
		-3	~~703~~							9		
		-4	1010		NR					A10		SPLP Blank 1251A
		-5	750		1mL					B1		MS SD3862-6
		-6	1030							B2		MSD -6

EX-007 – Revision 2 – 12/05/2013 QAEX284 000008

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-22-15	WAS	SD4240-1	200	1mL	NR	✓		1mL	6-22-15	B3	KF	TCLP → 200mL w/DI
		SD4291-2	1020				✓			4		SPLP
		-4								5		
		-6	960							6		
		-9	880							7		
		SD4306-7 H	1050			✓				8		
		SD4319-1 F	1060			✓				9		625
		SD4332-1 H	980				✓			B10		
		-3 H	1010							C1		emulsion → SS
		-5 H	1050							2		
		-7 H	1600							3		
		-9 G	1060							4		Continuous
		-10 F	1010							5		
		-11 H	1050			✓	✓			C6		
									KF	6-22-15		

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 060515

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG164187-1	50ng DFTPP	N0946	1	1	DFTPP SVM	2.0	JLL	OK
-4	SSTD1.00 N0605	N6392		2	NSPSIM44			✓
-2	0.2	93		3				✓
-3	0.5	94		4				✓
-5	3.0	95		5				✓
-6	7.0	96		6				✓
-7	10.	97		7				✓
-8	100	98		8				OK
7550	WG164111-1	99		9				OK
	-2	N6400		10				OK
	SI3800-7DL	01	3	11				OK DL1:5 100/300
	-13RA	02	1	12				OK
	-6	03		13				OK
	-9	04		14				OK
	WG164181-3	05		15				OK
	-4	06		16				OK
	SI3800-10	07		17				OK DL1:4
	-15	08		18				OK
	-16	09		19				OK
	-3	10		20				OK
	-17	11		21				OK
	-28	12		22				OK
	-8	13		23				— DL1:10
	-22RA	14		24				OK
	-23RA	15		25				OK
	-33	16		26				OK
	-5	17		27				OK
	Heller	18-23		28				—

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52624
IS MIX	52615

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 061515

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WH164825-1	50ng DFTPP	ND952	1	1	DFTPP SIM	20	JM	OK
-2	SSTD1.00 N0615	N6598		2	NSPSIM#4			OK
3550	WH164595-1RA	99		3				OK
	-2RA	N6600		4				OK
	SI4050-2	01		5				~~SS~~ OK
	-3	02		6				SS
	-4	03		7				SS
	-5	04		8				SS
	WH164595-5	05		9				OK
	-6	06		10				OK
3550	SI3897-5DL	07	8	11				OK 50/400
	-8DL2	08	50	12				— DL 1:150 50/500 → 50/250
	-9DL2	09	100	13				OK (50/500)X2
	-10DL	10	25	14				— DL 1:75 (50/250)X2
	-13DL	11	3	15				OK 100/300
	-14DL	12	4	16				OK 100/400
	-18DL2	13	30	17				— DL 1:100 50/250 → 50/300
	-20DL	14	10	18				OK 50/500
	-17DL	15	10	19				OK
	-8DL	16	10	20				OK
	-9DL	17	10	21				OK
	-15DL	18	3	22				OK 100/300
	-7	19	1	23				OK
	-20	20		24				OK
	-17	21		25				1552 OK
	-6	22		26				1556 OK
	-15	23		27				OOC
	-18DL	24	2	28				100/200

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52624
IS MIX	52633

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

DATE OF DFTPP INJECTION: 061615

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG164883-1	50ng DFTPP	ND953	1	1	DFTPPSVM	2.0	JLM	OK
-2	SSTD 1.00 ND616	N6625	1	2	NSPSVM44			OK
3510	SI4050-3DL	26	3	3				OK, SSI 100/300
	WG164814-1	27	1	4				OK
	-2	28		5				OK
	-3	29		6				OK
	SI3862-6	30		7				OK
	-7	31		8				OK
3550	WG164585-1	32		9				OK
	-2	33		10				OK
	SI3897-18DL2	34	100	11				OK (50/500)x2
	-8DL2	35	150	12				— DL 1:200 50/500 → 50/7500
	-22	36	1	13				OK
	-23	37		14				OK
	-27	38		15				OK
	-28	39		16				OK
	-29	40		17				OK
	-30	41		18				OK
	-5	42		19				OK
	SI4015-2	43		20				OK
	SI3897-24	44		21				1562 DL 1:3
	SI4015-1	45		22				OK DL 1:4
	SI3897-21	46		23				OK DL 1:25
	-15	47		24				OK
	-26	48		25				OK DL 1:8
	-18DL	49	2	26				OK 150/200
	MeOH	50-60	1	27				—

STANDARD	CODE
DFTPP	52611
CAL. STD.	52555 52624
IS MIX	52633

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES

GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 062315

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165324-1	50ng DFTPP	ND958	1	1	DFTPPSVM	2.0	JLL	OK
-4	SSTD1.00 ND623	N6778		2	NSP SVM45			✓
-2	0.2	79		3				✓
-3	0.5	80		4				✓
-5	3.0	81		5				✓
-6	7.0	82		6				✓
-7	12.	83		7				✓
-8	IND	84		8				OK
3510	WG165249-1	85		9				OK
	-4	86		10				OK SPLP PB1125CA
	-~~5~~2	87		11				OK
	-~~7~~3	88		12				OK
	-~~8~~5	89		13				OK SI3862 SPLP
	-6	90		14				OK SSY4
	SIY291-2	91		15				~~OK~~ not run; power loss SPLP
	-4	92		16				
	-6	93		17				
	-9	94		18				
	SIY332-1	95		19				
	-3	96		20				
	-5	97		21				
	-7	98		22				
	-9	99		23				
	-10	N6800		24				
	-11	01		25				
3550	SIY226-7DL	02	8	26				SI4400
	-8DL	03	7	27				SI350
	~~SI~~ WG165008-1	04	1	28				EPLT

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52637
IS MIX	52638

REVIEWED AND APPROVED BY: _____

DATE: _____

cont next page

SVOA-005 – Revision 1 – 03/01/2011

QAMS570

0000031

KATAHDIN ANALYTICAL SERVICES, INC. Non-Volatile TCLP/SPLP Extraction Log

I. EXTRACTION CONDITIONS

Extraction Method:	SW846 1311 (TCLP) ☐ / SW846 1312 (SPLP) ☑	Extractor ID: / Balance ID: BAL-08	Room Thermometer ID: DIG-23 (Room Temp Criteria: 23(±2)°C) / pH Meter ID: Orion 520A s/n 7422	pH Probe ID: 573356-003D
Solid pH Determination:	Date: 06·18·15		Analyst: GES / JS	
Rotary Extraction Started:	Date: 06·18·15	Time: 14:23	Analyst: GES	Room Temp. (degrees °C): 20.1
Rotary Extraction Completed:	Date: 06·19·15	Time: 06:23	Analyst: GES	Room Temp. (degrees °C): 20.1
Extraction Filtered:	Date: 06·19·15	Time: 07:00 - 11:00	Analyst: GES / DW	Filter Lot #: RSA44228 / RSAA49484
Elapsed Extraction Time (HH:MM): 16:00		5% HNO_3 ID (used to wash filters): MR1474		HNO_3 Lot # (used to preserve extracts): 104117
Fluid 1 pH (Day of use): 4.19		Fluid 1 Expiration Date: 06·18·15		
Fluid 2 pH (Day of use):		Fluid 2 Expiration Date:		

TCLP Fluid pH: #1 - 4.93 ± 0.05 #2 - 2.88 ± 0.05 SPLP Fluid pH: #1 - 4.20 ± 0.05 #2 - 5.00 ± 0.05

II. EXTRACTION SETUP

Katahdin Sample No. (include bottle ID)	Matrix	Check One: 100% Wet Solids-waste will yield no liquid upon filtration	Check One: < 100% Wet Solids (Perform Solids Determination below)	SPLP FLUID # (1 for east and 2 for west of Mississippi River)	TCLP pH Determination and Fluid Selection (date & init. above): Initial pH of solid phase: (if <5, use Fluid #1; if >5 add 3.5 mL of 1 N HCl)	TCLP pH Determination and Fluid Selection (date & init. above): pH after 1 N HCL addition (if <5, use Fluid #1; if >5, use Fluid #2	Extraction Setup: Volume of Extraction Fluid (mL)	Extraction Setup: Fluid # used	Extraction Setup: Associated Extraction Blank ID:	Extraction Setup: Weight of Waste (g)	pH of extract after extraction:	Extract to be analyzed for: Metals (M), SVOA (S), PEST (P), HERB (H), Cyanide (C)	Extraction Bottle ID (if applicable)
SI3862-60"17	SL			1	—	—	2,000	/	PBT1251A	100.02	5.64	S, M	32
SI3862-60"2	SL			1	—	—	↓	/	↓	100.07	5.51	↓	14

GES 06·19·15

ME-001 – Revision 4 – 07/05/2011

Katahdin Analytical Services 0000278

KATAHDIN ANALYTICAL SERVICES, INC. Non-Volatile TCLP/SPLP Extraction Log

I. EXTRACTION CONDITIONS

Extraction Method:	SW846 1311 (TCLP) ☐ / SW846 1312 (SPLP) ☑	Extractor ID: #2	Room Thermometer ID: DIG-23	(Room Temp Criteria. 23(±2)°C)
		Balance ID: BAL-0615	pH Meter ID: Orion 520A s/n 7422	pH Probe ID: 7
Solid pH Determination:	Date: 06-05-15	GES 06-05-15	Analyst: GES	
Rotary Extraction Started:	Date: 06-05-15	Time: 15:50	Analyst: GES	Room Temp. (degrees °C): 18.1
Rotary Extraction Completed:	Date: 06-06-15	Time: 08:06	Analyst: Eam	Room Temp. (degrees °C): 17.8
Extraction Filtered:	Date: 06/06/15	Time: 15:05	Analyst: [illegible]	Filter Lot #: R5AA49484
Elapsed Extraction Time (HH:MM):		5% HNO_3 ID (used to wash filters):		HNO_3 Lot # (used to preserve extracts):
Fluid 1 pH (Day of use): 4.24 (1225)		Fluid 1 Expiration Date: 01-14-16		
Fluid 2 pH (Day of use):		Fluid 2 Expiration Date:		

II. EXTRACTION SETUP

TCLP Fluid pH: #1 - 4.93 ± 0.05 #2 - 2.88 ± 0.05 SPLP Fluid pH: #1 - 4.20 ± 0.05 #2 - 5.00 ± 0.05

Katahdin Sample No. (include bottle ID)	Matrix	Check One: 100% Wet Solids- waste will yield no liquid upon filtration	Check One: < 100% Wet Solids (Perform Solids Determination below)	SPLP FLUID # (1 for east and 2 for west of Mississippi River)	TCLP pH Determination and Fluid Selection (date & init. above): Initial pH of solid phase: (if <5, use Fluid #1; if >5 add 3.5 mL of 1 N HCl)	TCLP pH Determination and Fluid Selection (date & init. above): pH after 1 N HCL addition (if <5, use Fluid #1; if >5, use Fluid #2	Extraction Setup: Volume of Extraction Fluid (mL)	Extraction Setup: Fluid # used	Extraction Setup: Associated Extraction Blank ID:	Extraction Setup: Weight of Waste (g)	pH of extract after extraction: 06-05-15 GES	Extract to be analyzed for: Metals (M), SVOA (S), PEST (P), HERB (H), Cyanide (C)	Extraction Bottle ID (if applicable)
SI3862-1	SL	✓		1	—	—	2000	—	PBT1255D	100.38	6.49	M, S	18
SI3862-2	SL	✓		1	—	—	↓	—	↓	100.59	6.59	M, S	3
PBT1225D	Aq	—		1	—	—	↓	—	↓	—	6.59	M, S	1

Katahdin Analytical Services 0000279

SPLP SEMIVOLATILE DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI3862

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
SITE4TS-FB	SI3862-6		76.6.		40.6		82.4		27.2		83.9		88.4	
SITE4TS-XX	SI3862-7		79.7		34.7		80.8		26.8		64.1		73.7	
Method Blank Sample	WG164594-1		72.0		39.6		68.4		27.9		70.8		92.1	
Laboratory Control S	WG164594-2		75.0		36.7		70.0		25.3		80.2		73.9	
SPLP Blank	WG164594-3		70.5		38.8		71.5		27		66.9		75.5	
Method Blank Sample	WG165248-1		82.1		38.0		80.2		27.2		54.9		78.8	
Laboratory Control S	WG165248-2		93.7		38.6		81.8		28.5		96.4		93.8	
Laboratory Control S	WG165248-3		83.1		36.4		76.7		23.8		95.3		82.7	
Matrix Spike	WG165248-6		82.9		35.6		85.0		24.1		85.3		90.4	
Matrix Spike Duplica	WG165248-7		76.3		34.2		76.6		24.0		77.9		79.2	

		QC Limits
2FBP	2-FLUOROBIPHENYL	50-110
2FP	2-FLUOROPHENOL	20-110
PHL	PHENOL-D6	10-115
TPH	TERPHENYL-D14	50-135
NBZ	NITROBENZENE-D5	40-110
TBP	2,4,6-TRIBROMOPHENOL	40-125

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0651.D
Instrument ID : GCMS-U
Matrix : AQ

SDG : SI3862
Lab Sample ID : WG164594-1
Date Extracted : 11-JUN-15
Date Analyzed : 11-JUN-15
Time Analyzed : 18:03

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
SPLP Blank	WG164594-3	U0652.D	06/11/15	18:31
Laboratory Control S	WG164594-2	U0653.D	06/11/15	18:59
SITE4TS-FB	SI3862-6	U0654.D	06/11/15	19:26
SITE4TS-XX	SI3862-7	U0655.D	06/11/15	19:54

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0790.D
Instrument ID : GCMS-U
Matrix : AQ

SDG : SI3862
Lab Sample ID : WG165248-1
Date Extracted : 22-JUN-15
Date Analyzed : 23-JUN-15
Time Analyzed : 12:08

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165248-2	U0793.D	06/23/15	13:31
Laboratory Control S	WG165248-3	U0794.D	06/23/15	13:59
Matrix Spike	WG165248-6	U0802.D	06/23/15	17:44
Matrix Spike Duplica	WG165248-7	U0803.D	06/23/15	18:13

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164594-1
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: U0651.D

Sample Date:
Received Date:
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164594

Analysis Date: 11-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	7.5	ug/L	1	10	10.	1.0	7.5
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
Acetophenone	U	7.5	ug/L	1	10	10.	3.9	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Caprolactam	U	7.5	ug/L	1	10	10.	0.40	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.8	7.5
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
2-Fluorophenol		39.6	%					
Phenol-d6		27.9	%					
Nitrobenzene-d5		68.4	%					
2-Fluorobiphenyl		72.0	%					
2,4,6-Tribromophenol		70.8	%					
Terphenyl-d14		92.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164594-3
Client ID: SPLP Blank
Project:
SDG: SI3862
Lab File ID: U0652.D

Sample Date:
Received Date:
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG164594

Analysis Date: 11-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	7.5	ug/L	1	10	10.	1.0	7.5
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
Acetophenone	U	7.5	ug/L	1	10	10.	3.9	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Caprolactam	U	7.5	ug/L	1	10	10.	0.40	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.8	7.5
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
2-Fluorophenol		38.8	%					
Phenol-d6		27	%					
Nitrobenzene-d5		71.5	%					
2-Fluorobiphenyl		70.5	%					
2,4,6-Tribromophenol		66.9	%					
Terphenyl-d14		75.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165248-1
Client ID: Method Blank Sample
Project:
SDG: SI3862
Lab File ID: U0790.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165248

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	7.5	ug/L	1	10	10.	1.0	7.5
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
Acetophenone	U	7.5	ug/L	1	10	10.	3.9	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Caprolactam	U	7.5	ug/L	1	10	10.	0.40	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.8	7.5
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
2-Fluorophenol		38.0	%					
Phenol-d6		27.2	%					
Nitrobenzene-d5		80.2	%					
2-Fluorobiphenyl		82.1	%					
2,4,6-Tribromophenol		54.9	%					
Terphenyl-d14		78.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG164594-2
Client ID: LCS
Project:
SDG: SI3862
LCS File ID: U0653.D

Sample Date:
Received Date:
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164594

Analysis Date: 11-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Benzaldehyde	* 398.	50.0	199.	ug/L	10-189
Phenol	24.6	100.	24.6	ug/L	0-115
2-Methylphenol	53.2	100.	53.2	ug/L	40-110
Acetophenone	74.4	50.0	37.2	ug/L	49-102
Isophorone	56.2	50.0	28.1	ug/L	50-110
2,4-Dimethylphenol	70.8	100.	70.8	ug/L	30-110
Caprolactam	11.9	50.0	5.94	ug/L	10-86
4-Chloro-3-Methylphenol	80.1	100.	80.1	ug/L	45-110
2-Chloronaphthalene	68.2	50.0	34.1	ug/L	50-105
Dimethyl Phthalate	79.8	50.0	39.9	ug/L	25-125
Acenaphthylene	76.6	50.0	38.3	ug/L	50-105
3-Nitroaniline	70.2	50.0	35.1	ug/L	20-125
Acenaphthene	76.4	50.0	38.2	ug/L	45-110
Diethylphthalate	84.4	50.0	42.2	ug/L	45-120
Fluorene	81.4	50.0	40.7	ug/L	50-110
4-Bromophenyl-Phenylether	90.8	50.0	45.4	ug/L	50-115
Carbazole	88.0	50.0	44.0	ug/L	50-115
2-Fluorophenol	36.7				20-110
Phenol-d6	25.3				10-115
Nitrobenzene-d5	70.0				40-110
2-Fluorobiphenyl	75.0				50-110
2,4,6-Tribromophenol	80.2				40-125
Terphenyl-d14	73.9				50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165248-2
LCSD ID: WG165248-3
Project:
SDG: SI3862
Report Date: 25-JUN-15
LCS File ID: U0793.D

Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165248
LCSD File ID: U0794.D

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Benzaldehyde	50.0	133.	266.*	141.	282.*	ug/L	6	30	10-189
Phenol	100.	27.5	27.5	24.3	24.3	ug/L	12	30	0-115
2-Methylphenol	100.	58.5	58.5	53.2	53.2	ug/L	9	30	40-110
Acetophenone	50.0	40.5	81.0	37.2	74.4	ug/L	8	30	49-102
Isophorone	50.0	32.4	64.8	30.2	60.4	ug/L	7	30	50-110
2,4-Dimethylphenol	100.	77.1	77.1	77.4	77.4	ug/L	0	30	30-110
Caprolactam	50.0	8.45	16.9	7.85	15.7	ug/L	7	30	10-86
4-Chloro-3-Methylphenol	100.	85.6	85.6	86.0	86.0	ug/L	0	30	45-110
2-Chloronaphthalene	50.0	37.9	75.8	33.9	67.8	ug/L	11	30	50-105
Dimethyl Phthalate	50.0	49.5	99.0	40.6	81.2	ug/L	20	30	25-125
Acenaphthylene	50.0	44.6	89.2	38.3	76.6	ug/L	15	30	50-105
3-Nitroaniline	50.0	38.6	77.2	33.6	67.2	ug/L	14	30	20-125
Acenaphthene	50.0	46.8	93.6	42.0	84.0	ug/L	11	30	45-110
Diethylphthalate	50.0	59.0	118.	47.9	95.8	ug/L	21	30	45-120
Fluorene	50.0	54.2	108.	49.2	98.4	ug/L	10	30	50-110
4-Bromophenyl-Phenylether	50.0	47.9	95.8	40.7	81.4	ug/L	16	30	50-115
Carbazole	50.0	51.2	102.	44.2	88.4	ug/L	15	30	50-115
2-Fluorophenol			38.6		36.4				20-110
Phenol-d6			28.5		23.8				10-115
Nitrobenzene-d5			81.8		76.7				40-110
2-Fluorobiphenyl			93.7		83.1				50-110
2,4,6-Tribromophenol			96.4		95.3				40-125
Terphenyl-d14			93.8		82.7				50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

MS/MSD Recovery Report

MS ID: WG165248-6
MSD ID: WG165248-7
Sample ID: SI3862-6
Client ID: SITE4TS-FB
Project:
SDG: SI3862
MS File ID: U0802.D

Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165248
Report Date: 25-JUN-15
MSD File ID: U0803.D

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Benzaldehyde	55.6	56.8	ug/L	ULMM7.	160	130	281.*	236.*	15	30	10-189
Phenol	111.	114.	ug/L	U7.1	27.	27.	24.2	23.7	0	30	0-115
2-Methylphenol	111.	114.	ug/L	U7.1	62.	61.	55.4	53.9	0	30	40-110
Acetophenone	55.6	56.8	ug/L	U7.1	48.	43.	86.4	75.0	12	30	49-102
Isophorone	55.6	56.8	ug/L	U7.1	36.	34.	65.7	59.7	7	30	50-110
2,4-Dimethylphenol	111.	114.	ug/L	U7.1	89.	87.	80.4	76.3	3	30	30-110
Caprolactam	55.6	56.8	ug/L	U7.1	8.9	8.8	16.0	15.5	1	30	10-86
4-Chloro-3-Methylphenol	111.	114.	ug/L	U7.1	100	100	90.0	88.0	0	30	45-110
2-Chloronaphthalene	55.6	56.8	ug/L	U7.1	39.	36.	70.2	63.9	7	30	50-105
Dimethyl Phthalate	55.6	56.8	ug/L	U7.1	49.	46.	88.6	80.4	7	30	25-125
Acenaphthylene	55.6	56.8	ug/L	U7.1	44.	41.	79.4	72.9	6	30	50-105
3-Nitroaniline	55.6	56.8	ug/L	U18	39.	36.	70.0	62.5	9	30	20-125
Acenaphthene	55.6	56.8	ug/L	U7.1	53.	46.	95.2	80.2	15	30	45-110
Diethylphthalate	55.6	56.8	ug/L	J2.6	53.	48.	91.1	79.7	10	30	45-120
Fluorene	55.6	56.8	ug/L	U7.1	58.	55.	104.	96.6	5	30	50-110
4-Bromophenyl-Phenylether	55.6	56.8	ug/L	U7.1	48.	46.	86.2	81.7	3	30	50-115
Carbazole	55.6	56.8	ug/L	U7.1	46.	47.	82.8	83.4	3	30	50-115
2-Fluorophenol							35.6	34.2			20-110
Phenol-d6							24.1	24.0			10-115
Nitrobenzene-d5							85.0	76.6			40-110
2-Fluorobiphenyl							82.9	76.3			50-110
2,4,6-Tribromophenol							85.3	77.9			40-125
Terphenyl-d14							90.4	79.2			50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD381.D
Instrument ID : GCMS-U

SDG : SI3862
Date Analyzed : 05-JUN-15
Time Analyzed : 14:09

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	34.8		
68	Less than 2.0% of mass 69	0.5	1.29	1
69	Less than 100.0% of mass 198	37.4		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	47.7		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	7.1		
275	10.0 - 30.0% of mass 198	22.1		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	14.8	82.58	2
442	40.0 - 100.0% of mass 198	91.9		
443	17.0 - 23.0% of mass 442	17.9	19.48	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG164192-4	U0591.D	06/05/15	14:27
Initial Calibration	WG164192-2	U0592.D	06/05/15	15:26
Initial Calibration	WG164192-3	U0593.D	06/05/15	15:52
Initial Calibration	WG164192-5	U0594.D	06/05/15	16:19
Initial Calibration	WG164192-6	U0595.D	06/05/15	16:46
Initial Calibration	WG164192-7	U0596.D	06/05/15	17:12
Independent Source	WG164192-8	U0597.D	06/05/15	17:39

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD384.D
Instrument ID : GCMS-U

SDG : SI3862
Date Analyzed : 11-JUN-15
Time Analyzed : 08:51

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	34.9		
68	Less than 2.0% of mass 69	0.5	1.18	1
69	Less than 100.0% of mass 198	39.7		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	50.0		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	19.9		
365	1.0 - 100.0% of mass 198	2.2		
441	0.0 - 100.0% of mass 443	11.2	83.59	2
442	40.0 - 100.0% of mass 198	69.9		
443	17.0 - 23.0% of mass 442	13.4	19.13	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG164504-2	U0632.D	06/11/15	09:09
Method Blank Sample	WG164594-1	U0651.D	06/11/15	18:03
SPLP Blank	WG164594-3	U0652.D	06/11/15	18:31
Laboratory Control S	WG164594-2	U0653.D	06/11/15	18:59
SITE4TS-FB	SI3862-6	U0654.D	06/11/15	19:26
SITE4TS-XX	SI3862-7	U0655.D	06/11/15	19:54

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD391.D
Instrument ID : GCMS-U

SDG : SI3862
Date Analyzed : 22-JUN-15
Time Analyzed : 13:30

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	34.9		
68	Less than 2.0% of mass 69	0.2	0.71	1
69	Less than 100.0% of mass 198	25.9		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	44.0		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.3		
275	10.0 - 30.0% of mass 198	17.2		
365	1.0 - 100.0% of mass 198	1.6		
441	0.0 - 100.0% of mass 443	13.2	82.85	2
442	40.0 - 100.0% of mass 198	83.4		
443	17.0 - 23.0% of mass 442	15.9	19.06	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165272-4	U0757.D	06/22/15	13:48
Initial Calibration	WG165272-2	U0758.D	06/22/15	14:16
Initial Calibration	WG165272-3	U0759.D	06/22/15	14:44
Initial Calibration	WG165272-5	U0760.D	06/22/15	15:12
Initial Calibration	WG165272-6	U0761.D	06/22/15	15:40
Initial Calibration	WG165272-7	U0762.D	06/22/15	16:08
Independent Source	WG165272-8	U0763.D	06/22/15	16:36

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD392.D
Instrument ID : GCMS-U

SDG : SI3862
Date Analyzed : 23-JUN-15
Time Analyzed : 10:54

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	33.1		
68	Less than 2.0% of mass 69	0.1	0.57	1
69	Less than 100.0% of mass 198	26.3		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	44.4		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	17.1		
365	1.0 - 100.0% of mass 198	1.7		
441	0.0 - 100.0% of mass 443	12.6	82.55	2
442	40.0 - 100.0% of mass 198	79.9		
443	17.0 - 23.0% of mass 442	15.2	19.05	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165301-2	U0788.D	06/23/15	11:12
Method Blank Sample	WG165248-1	U0790.D	06/23/15	12:08
Laboratory Control S	WG165248-2	U0793.D	06/23/15	13:31
Laboratory Control S	WG165248-3	U0794.D	06/23/15	13:59
Matrix Spike	WG165248-6	U0802.D	06/23/15	17:44
Matrix Spike Duplica	WG165248-7	U0803.D	06/23/15	18:13

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164192-4
Lab File ID : U0591.D

SDG: SI3862
Analytical Date: 06/05/15 14:27
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	298088		4.55		1167270		5.95		585203		8.03	
	Upper Limit	596176		5.05		2334540		6.45		1170406		8.53	
	Lower Limit	149044		4.05		583635		5.45		292601.5		7.53	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG164504-2	331666		4.55		1297827		5.94		668836		8.04	
Method Blank Sample	WG164594-1	384174		4.55		1605378		5.95		804711		8.04	
SPLP Blank	WG164594-3	379087		4.55		1546276		5.95		739908		8.03	
Laboratory Control S	WG164594-2	359152		4.55		1367115		5.94		678338		8.03	
SITE4TS-FB	SI3862-6	374269		4.55		1480627		5.95		735356		8.03	
SITE4TS-XX	SI3862-7	357608		4.55		1364513		5.95		668146		8.03	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164192-4
Lab File ID : U0591.D

SDG: SI3862
Analytical Date: 06/05/15 14:27
Instrument ID: GCMS-U

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	909618		9.84		432679		13.40		280169		16.37	
	Upper Limit	1819236		10.34		865358		13.90		560338		16.87	
	Lower Limit	454809		9.34		216339.5		12.90		140084.5		15.87	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG164504-2	1089022		9.85		632948		13.42		379199		16.39	
Method Blank Sample	WG164594-1	1277562		9.84		659070		13.41		338605		16.39	
SPLP Blank	WG164594-3	1117627		9.84		675413		13.41		286810		16.38	
Laboratory Control S	WG164594-2	1064632		9.84		741557		13.41		376484		16.38	
SITE4TS-FB	SI3862-6	1086286		9.84		639862		13.41		308523		16.38	
SITE4TS-XX	SI3862-7	996238		9.84		676538		13.41		368792		16.38	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165272-4
Lab File ID : U0757.D

SDG: SI3862
Analytical Date: 06/22/15 13:48
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	319771		4.53		1162914		5.92		598316		8.01	
	Upper Limit	639542		5.03		2325828		6.42		1196632		8.51	
	Lower Limit	159885.5		4.03		581457		5.42		299158		7.51	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165301-2	253482		4.52		1009168		5.92		510564		8.01	
Method Blank Sample	WG165248-1	358845		4.52		1367124		5.91		661718		8.01	
Laboratory Control S	WG165248-2	341080		4.52		1256846		5.91		614389		8.00	
Laboratory Control S	WG165248-3	341276		4.52		1282735		5.91		511500		8.00	
Matrix Spike	WG165248-6	374125		4.53		1340473		5.91		692202		8.00	
Matrix Spike Duplica	WG165248-7	371701		4.52		1310674		5.91		682198		8.00	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165272-4
Lab File ID : U0757.D

SDG: SI3862
Analytical Date: 06/22/15 13:48
Instrument ID: GCMS-U

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	926799		9.82		468408		13.38		194522		16.34	
	Upper Limit	1853598		10.32		936816		13.88		389044		16.84	
	Lower Limit	463399.5		9.32		234204		12.88		97261		15.84	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165301-2	581733		9.81		316215		13.37		165443		16.33	
Method Blank Sample	WG165248-1	660146		9.81		410775		13.36		230772		16.33	
Laboratory Control S	WG165248-2	968176		9.81		547047		13.36		260405		16.33	
Laboratory Control S	WG165248-3	799924		9.81		460939		13.36		217287		16.33	
Matrix Spike	WG165248-6	1017548		9.81		431057		13.35		213768		16.32	
Matrix Spike Duplica	WG165248-7	945689		9.81		440224		13.35		194419		16.32	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-6
Client ID: SITE4TS-FB
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: U0654.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164594

Analysis Date: 11-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	ULMM	7.1	ug/L	1	10	9.5	0.95	7.1
Phenol	U	7.1	ug/L	1	10	9.5	1.7	7.1
2-Methylphenol	U	7.1	ug/L	1	10	9.5	3.6	7.1
Acetophenone	U	7.1	ug/L	1	10	9.5	3.7	7.1
Isophorone	U	7.1	ug/L	1	10	9.5	1.6	7.1
2,4-Dimethylphenol	U	7.1	ug/L	1	10	9.5	4.2	7.1
Caprolactam	U	7.1	ug/L	1	10	9.5	0.38	7.1
4-Chloro-3-Methylphenol	U	7.1	ug/L	1	10	9.5	3.4	7.1
2-Chloronaphthalene	U	7.1	ug/L	1	10	9.5	2.7	7.1
Dimethyl Phthalate	U	7.1	ug/L	1	10	9.5	1.9	7.1
Acenaphthylene	U	7.1	ug/L	1	10	9.5	1.4	7.1
3-Nitroaniline	U	18	ug/L	1	25	24.	1.4	18.
Acenaphthene	U	7.1	ug/L	1	10	9.5	1.4	7.1
Diethylphthalate	J	2.6	ug/L	1	10	9.5	1.9	7.1
Fluorene	U	7.1	ug/L	1	10	9.5	2.0	7.1
4-Bromophenyl-Phenylether	U	7.1	ug/L	1	10	9.5	1.8	7.1
Carbazole	U	7.1	ug/L	1	10	9.5	2.0	7.1
2-Fluorophenol		40.6	%					
Phenol-d6		27.2	%					
Nitrobenzene-d5		82.4	%					
2-Fluorobiphenyl		76.6.	%					
2,4,6-Tribromophenol		83.9	%					
Terphenyl-d14		88.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI3862-7
Client ID: SITE4TS-XX
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI3862
Lab File ID: U0655.D

Sample Date: 04-JUN-15
Received Date: 05-JUN-15
Extract Date: 11-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG164594

Analysis Date: 11-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	UL	9.0	ug/L	1	10	12.	1.2	9.0
Phenol	U	9.0	ug/L	1	10	12.	2.2	9.0
2-Methylphenol	U	9.0	ug/L	1	10	12.	4.6	9.0
Acetophenone	U	9.0	ug/L	1	10	12.	4.7	9.0
Isophorone	U	9.0	ug/L	1	10	12.	2.0	9.0
2,4-Dimethylphenol	U	9.0	ug/L	1	10	12.	5.3	9.0
Caprolactam	U	9.0	ug/L	1	10	12.	0.48	9.0
4-Chloro-3-Methylphenol	U	9.0	ug/L	1	10	12.	4.3	9.0
2-Chloronaphthalene	U	9.0	ug/L	1	10	12.	3.4	9.0
Dimethyl Phthalate	U	9.0	ug/L	1	10	12.	2.4	9.0
Acenaphthylene	U	9.0	ug/L	1	10	12.	1.8	9.0
3-Nitroaniline	U	23	ug/L	1	25	30.	1.8	23.
Acenaphthene	U	9.0	ug/L	1	10	12.	1.8	9.0
Diethylphthalate	U	9.0	ug/L	1	10	12.	2.4	9.0
Fluorene	U	9.0	ug/L	1	10	12.	2.5	9.0
4-Bromophenyl-Phenylether	U	9.0	ug/L	1	10	12.	2.3	9.0
Carbazole	U	9.0	ug/L	1	10	12.	2.5	9.0
2-Fluorophenol		34.7	%					
Phenol-d6		26.8	%					
Nitrobenzene-d5		80.8	%					
2-Fluorobiphenyl		79.7	%					
2,4,6-Tribromophenol		64.1	%					
Terphenyl-d14		73.7	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0592.D U0593.D U0591.D U0594.D U0595.D U0596.D **Column ID:**
Calibration Date(s): 05-JUN-15 14:27 05-JUN-15 17:12

	Level 1 10.0000	Level 2 25.0000	Level 3 50.0000	Level 4 75.0000	Level 5 100.0000	Level 6 125.0000	Crv New	b	m1	m2	%RSD	Max %RSD	
Benzaldehyde	12395	26260	41544	62418	75819	99553	QUA	-0.08208	9.42226	3.13857	0.99219	0.99000	O
Phenol	1.65880	1.60566	1.64459	1.63752	1.56109	1.53520	AVG		1.60714		3.08520	30.00000	O
2-Methylphenol	1.16610	1.09909	1.13965	1.17786	1.15182	1.17088	AVG		1.15090		2.50872	15.00000	O
Acetophenone	0.42413	0.41774	0.39698	0.39132	0.38853	0.37305	AVG		0.39862		4.79619	15.00000	O
Isophorone	0.64897	0.64810	0.61577	0.58729	0.59348	0.56147	AVG		0.60918		5.75418	15.00000	O
2,4-Dimethylphenol	0.32705	0.32577	0.32275	0.29187	0.26713	0.26973	AVG		0.30072		9.37336	15.00000	O
Caprolactam	0.09146	0.09185	0.09171	0.09233	0.09133	0.09081	AVG		0.09158		0.56154	15.00000	O
4-Chloro-3-Methylphenol	0.27479	0.27785	0.26197	0.24059	0.23213	0.21759	AVG		0.25082		9.74592	30.00000	O
2-Chloronaphthalene	1.17158	1.29051	1.00580	1.08457	0.92364	1.13248	AVG		1.10143		11.6747(	15.00000	O
Dimethyl Phthalate	1.26942	1.21900	1.23541	1.17894	1.15053	1.09520	AVG		1.19142		5.29072	15.00000	O
Acenaphthylene	1.79561	1.76591	1.72673	1.51827	1.47830	1.34898	AVG		1.60563		11.35364	15.00000	O
3-Nitroaniline	0.27550	0.30303	0.29954	0.28214	0.27820	0.28144	AVG		0.28664		4.06242	15.00000	O
Acenaphthene	1.09159	1.07831	0.99508	0.91733	0.90474	0.87114	AVG		0.97636		9.57610	30.00000	O
Diethylphthalate	1.33761	1.29246	1.22954	1.13597	1.07578	0.96640	AVG		1.17296		11.93972	15.00000	O
Fluorene	183212	406976	730428	1063953	1226870	1462882	QUA	0.02366	0.58177	0.35525	0.99891	0.99000	O
4-Bromophenyl-phenylether	0.20930	0.20257	0.20609	0.18534	0.18294	0.17522	AVG		0.19358		7.31512	15.00000	O
Carbazole	0.79221	0.77417	0.73931	0.66321	0.67474	0.64695	AVG		0.71510		8.61746	15.00000	O
2-Fluorophenol	1.17562	1.20290	1.18445	1.20074	1.22588	1.17173	AVG		1.19355		1.70259	15.00000	
Phenol-D6	1.44572	1.46478	1.44018	1.40919	1.34474	1.32454	AVG		1.40486		4.10048	15.00000	
Nitrobenzene-D5	0.33550	0.33905	0.32730	0.31663	0.30283	0.30003	AVG		0.32022		5.15240	15.00000	
2-Fluorobiphenyl	1.20810	1.15199	1.16435	0.96842	1.00091	0.94320	AVG		1.07283		10.69457	15.00000	
2,4,6-Tribromophenol	0.16926	0.16936	0.17446	0.15930	0.15587	0.15011	AVG		0.16306		5.76270	15.00000	
Terphenyl-D14	1.03876	1.04627	0.97491	0.85512	0.83198	0.80479	AVG		0.92531		11.65229	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U060515.b\U0597.D
Report Date: 17-Jun-2015 13:15

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: WG164192-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: INDcheck8270.spk
Quant Type: ISTD
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U060515.b\U8270C77.m
Misc Info: WG164192,WG164192,WG164192-4,SI3942-1

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	50.6	101.31	80-120
3 Pyridine	50.0	58.4	116.79	80-120
2 N-Nitrosodimethyla	50.0	45.7	91.43	80-120
5 2-Picoline	50.0	61.5	123.09*	80-120
6 N-Nitrosomethyleth	50.0	55.0	109.96	80-120
7 Methyl Methanesulf	50.0	47.1	94.24	80-120
9 N-Nitrosodiethylam	50.0	54.5	108.99	80-120
10 Ethyl Methanesulfo	50.0	54.7	109.33	80-120
11 Benzaldehyde	50.0	21.9	43.73*	80-120
14 Aniline	50.0	55.5	111.10	80-120
13 Phenol	50.0	51.7	103.39	80-120
16 Bis(2-Chloroethyl)	50.0	59.8	119.64	80-120
17 2-Chlorophenol	50.0	54.6	109.27	80-120
18 1,3-Dichlorobenzen	50.0	54.5	109.03	80-120
20 1,4-Dichlorobenzen	50.0	55.5	111.09	80-120
22 Benzyl alcohol	50.0	51.5	103.09	80-120
21 1,2-Dichlorobenzen	50.0	55.4	110.73	80-120
25 2,2'-Oxybis(1-chlo	50.0	50.0	100.01	80-120
23 2-Methylphenol	50.0	56.6	113.21	80-120
26 Acetophenone	100	99.7	99.69	80-120
27 N-Nitrosopyrrolidi	50.0	54.9	109.79	80-120
30 N-Nitrosomorpholin	50.0	56.3	112.62	80-120
28 N-Nitroso-di-n-pro	50.0	50.2	100.50	80-120
29 3&4-Methylphenol	50.0	55.7	111.33	80-120
32 Hexachloroethane	50.0	53.9	107.88	80-120
31 o-Toluidine	50.0	54.4	108.86	80-120
34 Nitrobenzene	50.0	56.6	113.20	80-120
35 N-Nitrosopiperidin	50.0	54.0	108.01	80-120
36 Isophorone	50.0	53.1	106.20	80-120
37 2-Nitrophenol	50.0	53.4	106.77	80-120
38 2,4-Dimethylphenol	50.0	54.8	109.65	80-120
40 Bis(2-Chloroethoxy	50.0	49.8	99.62	80-120
39 O,O,O-Triethylphos	50.0	50.3	100.70	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	89.6	179.18*	80-120
42 2,4-Dichlorophenol	50.0	52.8	105.69	80-120
44 1,2,4-Trichloroben	50.0	53.0	106.05	80-120
46 Naphthalene	50.0	53.6	107.29	80-120
43 2,6-Dichlorophenol	50.0	54.2	108.44	80-120
47 4-Chloroaniline	50.0	51.6	103.17	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U060515.b\U0597.D
Report Date: 17-Jun-2015 13:15

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	53.4	106.87	80-120
49 Hexachlorobutadien	50.0	54.9	109.82	80-120
51 N-Nitroso-Di-N-But	50.0	51.5	102.97	80-120
53 Caprolactam	50.0	56.4	112.75	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	50.8	101.71	80-120
55 4-Chloro-3-Methylp	50.0	56.7	113.45	80-120
57 2-Methylnaphthalen	50.0	54.7	109.46	80-120
58 1-Methylnaphthalen	50.0	54.2	108.43	80-120
60 1,2,4,5-Tetrachlor	100	91.9	91.94	80-120
59 Hexachlorocyclopen	50.0	41.5	83.03	80-120
61 2,4,6-Trichlorophe	50.0	55.7	111.39	80-120
62 2,4,5-Trichlorophe	50.0	56.4	112.76	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	54.1	108.12	80-120
65 1,1'-Biphenyl	50.0	58.3	116.62	80-120
66 2-Chloronaphthalen	50.0	52.6	105.23	80-120
67 1-Chloronaphthalen	50.0	62.3	124.58*	80-120
69 2-Nitroaniline	50.0	56.6	113.24	80-120
70 1,4-Naphthoquinone	50.0	95.4	190.87*	80-120
72 Dimethyl Phthalate	50.0	54.7	109.48	80-120
73 1,3-Dinitrobenzene	50.0	53.6	107.18	80-120
75 Acenaphthylene	50.0	50.4	100.89	80-120
74 2,6-Dinitrotoluene	50.0	57.8	115.57	80-120
77 3-Nitroaniline	50.0	54.4	108.85	80-120
79 Acenaphthene	50.0	53.9	107.83	80-120
80 2,4-Dinitrophenol	50.0	54.9	109.81	80-120
83 Dibenzofuran	50.0	56.9	113.77	80-120
81 Pentachlorobenzene	50.0	55.0	109.93	80-120
82 4-Nitrophenol	50.0	55.7	111.46	80-120
84 2,4-Dinitrotoluene	50.0	53.3	106.63	80-120
85 1-Naphthylamine	50.0	48.9	97.87	80-120
88 2-Naphthylamine	50.0	55.4	110.80	80-120
87 2,3,4,6-Tetrachlor	50.0	53.6	107.13	80-120
89 Diethylphthalate	50.0	53.6	107.28	80-120
91 Fluorene	50.0	54.6	109.12	80-120
92 4-Chlorophenyl-phe	50.0	57.2	114.50	80-120
90 O,O-diethyl-o-2-py	50.0	56.2	112.50	80-120
93 5-Nitro-O-Toluidin	50.0	54.2	108.40	80-120
94 4-Nitroaniline	50.0	53.5	107.10	80-120
96 N-Nitrosodiphenyla	100	83.6	83.57	80-120
95 4,6-Dinitro-2-Meth	50.0	56.7	113.40	80-120
98 1,2-Diphenylhydraz	50.0	56.2	112.45	80-120
101 Sulfotepp	50.0	49.1	98.12	80-120
102 Diallate	50.0	56.1	112.17	80-120
103 Phorate	50.0	22.5	44.95*	80-120
105 4-Bromophenyl-phen	50.0	54.7	109.44	80-120
106 Phenacetin	50.0	47.4	94.73	80-120
104 1,3,5-Trinitrobenz	50.0	55.0	109.99	80-120
107 Hexachlorobenzene	50.0	55.1	110.21	80-120
108 Dimethoate	50.0	53.2	106.50	80-120
109 Atrazine	50.0	29.0	57.91*	80-120
110 4-Aminobiphenyl	50.0	45.1	90.13	80-120
111 Pentachlorophenol	50.0	54.4	108.86	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U060515.b\U0597.D
Report Date: 17-Jun-2015 13:15

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
113 Pronamide	50.0	54.3	108.55	80-120
112 Pentachloronitrobe	50.0	54.0	107.95	80-120
116 Phenanthrene	50.0	50.0	99.99	80-120
115 Disulfoton	50.0	47.8	95.50	80-120
118 Anthracene	50.0	52.2	104.39	80-120
117 Dinoseb	50.0	0.000	*	80-120
119 Carbazole	50.0	52.5	104.95	80-120
120 Methyl Parathion	50.0	51.0	101.98	80-120
121 Di-n-butylphthalat	50.0	54.8	109.70	80-120
122 Ethyl Parathion	50.0	45.8	91.70	80-120
123 4-Nitroquinoline-1	50.0	52.9	105.77	80-120
124 Methapyrilene	50.0	40.9	81.77	80-120
125 Isodrin	50.0	54.0	107.93	80-120
126 Fluoranthene	50.0	49.8	99.67	80-120
127 Benzidine	50.0	46.8	93.66	80-120
128 Pyrene	50.0	54.4	108.80	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	57.4	114.87	80-120
133 Chlorobenzilate	50.0	54.4	108.91	80-120
134 Famphur	50.0	30.8	61.54*	80-120
135 3,3'-Dimethylbenzi	50.0	97.0	194.05*	80-120
136 Butylbenzylphthala	50.0	53.5	107.09	80-120
137 Bis(2-ethylhexyl)a	50.0	51.9	103.89	80-120
138 2-Acetylaminofluor	50.0	57.1	114.25	80-120
140 Benzo(a)anthracene	50.0	51.9	103.74	80-120
139 3,3'-Dichlorobenzi	50.0	53.4	106.76	80-120
141 Chrysene	50.0	55.2	110.33	80-120
143 bis(2-Ethylhexyl)p	50.0	53.8	107.66	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	50.8	101.55	80-120
147 Benzo(b)fluoranthe	50.0	49.8	99.60	80-120
146 7,12-Dimethylbenz(	50.0	49.9	99.81	80-120
148 Benzo(k)fluoranthe	50.0	52.4	104.87	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	49.3	98.64	80-120
151 3-Methylcholanthre	50.0	53.3	106.54	80-120
152 Dibenz(a,j)acridin	50.0	51.0	101.98	80-120
153 Indeno(1,2,3-cd)py	50.0	53.8	107.55	80-120
155 Dibenzo(a,h)anthra	50.0	52.5	105.06	80-120
156 Benzo(g,h,i)peryle	50.0	52.5	104.96	80-120

SURROGATE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	35-105
$ 12 Phenol-D6	100	0.000	*	40-100
$ 33 Nitrobenzene-D5	50.0	0.000	*	35-100
$ 63 2-Fluorobiphenyl	50.0	0.000	*	45-105
$ 100 2,4,6-Tribromophe	100	0.000	*	35-125
$ 129 Terphenyl-D14	50.0	0.000	*	30-125

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI3862
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0758.D U0759.D U0757.D U0760.D U0761.D U0762.D **Column ID:**
Calibration Date(s): 22-JUN-15 13:48
22-JUN-15 16:08

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Crv					Max	
	10.0000	25.0000	50.0000	75.0000	100.0000	125.0000	New	b	m1	m2	%RSD	%RSD	
Benzaldehyde	0.13557	0.12330	0.11466	0.10355	0.09317	0.09947	AVG		0.11162		14.29268	15.00000	O
Phenol	1.55176	1.49106	1.54595	1.45120	1.36000	1.29535	AVG		1.44922		7.12175	30.00000	O
2-Methylphenol	1.23970	1.16464	1.22111	1.23711	1.23117	1.21538	AVG		1.21819		2.28474	15.00000	O
Acetophenone	0.43458	0.42534	0.41830	0.39794	0.37503	0.36724	AVG		0.40307		6.85507	15.00000	O
Isophorone	0.56285	0.54220	0.54812	0.52863	0.49633	0.46796	AVG		0.52435		6.79615	15.00000	O
2,4-Dimethylphenol	0.27722	0.28385	0.28869	0.27891	0.25667	0.22409	AVG		0.26824		9.03971	15.00000	O
Caprolactam	0.10576	0.10957	0.11382	0.11591	0.11315	0.10940	AVG		0.11127		3.32112	15.00000	O
4-Chloro-3-Methylphenol	0.22570	0.22899	0.24689	0.24024	0.23409	0.22204	AVG		0.23299		4.00869	30.00000	O
2-Chloronaphthalene	1.22423	1.21542	1.09093	1.04117	0.96641	1.13060	AVG		1.11146		9.02343	15.00000	O
Dimethyl Phthalate	1.19539	1.16366	1.19378	1.25572	1.08266	1.06409	AVG		1.15922		6.30927	15.00000	O
Acenaphthylene	1.80551	1.77679	1.84139	1.73275	1.45473	1.25319	AVG		1.64406		14.37095	15.00000	O
3-Nitroaniline	0.33271	0.32248	0.31877	0.33674	0.30862	0.30541	AVG		0.32079		3.91393	15.00000	O
Acenaphthene	1.05737	1.05564	1.00224	0.97808	0.75203	0.78740	AVG		0.93879		14.37685	30.00000	O
Diethylphthalate	1.20247	1.17334	1.14190	1.10982	0.96163	0.82800	AVG		1.06953		13.56814	15.00000	O
Fluorene	1.25253	1.20727	1.00409	0.82078	0.61377	0.59793	AVG		0.91606		31.16156	15.00000	W(
4-Bromophenyl-phenylether	0.18069	0.18132	0.19695	0.19113	0.18682	0.17117	AVG		0.18468		4.88257	15.00000	O
Carbazole	0.94970	0.94227	0.89938	0.79383	0.73662	0.79704	AVG		0.85314		10.43762	15.00000	O
2-Fluorophenol	1.23079	1.18588	1.30868	1.24658	1.30576	1.24411	AVG		1.25363		3.74148	15.00000	
Phenol-D6	1.49098	1.41535	1.41242	1.30591	1.19054	1.16838	AVG		1.33060		9.86440	15.00000	
Nitrobenzene-D5	0.25354	0.25124	0.25857	0.25791	0.23837	0.22803	AVG		0.24794		4.91553	15.00000	
2-Fluorobiphenyl	1.18754	1.13682	1.20507	1.13801	0.86528	0.87967	AVG		1.06873		14.45195	15.00000	
2,4,6-Tribromophenol	0.15766	0.16284	0.18248	0.18292	0.16880	0.14577	AVG		0.16674		8.69547	15.00000	
Terphenyl-D14	0.82974	0.93391	1.03382	0.97858	1.00736	0.94814	AVG		0.95526		7.50400	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U0763.D
Report Date: 24-Jun-2015 15:15

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: WG165272-8
Level: LOW
Data Type: MS DATA
SpikeList File: INDcheck8270.spk
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U8270C79.m
Misc Info: WG165272,WG165272,WG165272-4,SI4291-1

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	49.4	98.87	80-120
3 Pyridine	50.0	55.4	110.88	80-120
2 N-Nitrosodimethyla	50.0	44.2	88.49	80-120
5 2-Picoline	50.0	61.7	123.45*	80-120
6 N-Nitrosomethyleth	50.0	54.1	108.19	80-120
7 Methyl Methanesulf	50.0	43.3	86.57	80-120
9 N-Nitrosodiethylam	50.0	57.2	114.43	80-120
10 Ethyl Methanesulfo	50.0	49.9	99.80	80-120
11 Benzaldehyde	50.0	18.8	37.57*	80-120
14 Aniline	50.0	51.9	103.72	80-120
13 Phenol	50.0	54.9	109.87	80-120
16 Bis(2-Chloroethyl)	50.0	65.8	131.52*	80-120
17 2-Chlorophenol	50.0	53.8	107.56	80-120
18 1,3-Dichlorobenzen	50.0	54.7	109.33	80-120
20 1,4-Dichlorobenzen	50.0	53.9	107.77	80-120
22 Benzyl alcohol	50.0	48.8	97.50	80-120
21 1,2-Dichlorobenzen	50.0	54.5	109.01	80-120
25 2,2'-Oxybis(1-chlo	50.0	48.2	96.46	80-120
23 2-Methylphenol	50.0	52.1	104.24	80-120
26 Acetophenone	100	93.3	93.27	80-120
27 N-Nitrosopyrrolidi	50.0	54.8	109.62	80-120
30 N-Nitrosomorpholin	50.0	52.1	104.20	80-120
28 N-Nitroso-di-n-pro	50.0	45.8	91.72	80-120
29 3&4-Methylphenol	50.0	53.8	107.62	80-120
32 Hexachloroethane	50.0	53.6	107.25	80-120
31 o-Toluidine	50.0	56.6	113.20	80-120
34 Nitrobenzene	50.0	55.8	111.62	80-120
35 N-Nitrosopiperidin	50.0	57.0	114.09	80-120
36 Isophorone	50.0	54.4	108.86	80-120
37 2-Nitrophenol	50.0	51.8	103.50	80-120
38 2,4-Dimethylphenol	50.0	54.3	108.61	80-120
40 Bis(2-Chloroethoxy	50.0	52.3	104.56	80-120
39 O,O,O-Triethylphos	50.0	53.0	106.04	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	145	289.32*	80-120
42 2,4-Dichlorophenol	50.0	53.3	106.57	80-120
44 1,2,4-Trichloroben	50.0	55.2	110.37	80-120
46 Naphthalene	50.0	58.0	116.07	80-120
43 2,6-Dichlorophenol	50.0	57.2	114.39	80-120
47 4-Chloroaniline	50.0	49.6	99.17	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U0763.D
Report Date: 24-Jun-2015 15:15

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	57.3	114.61	80-120
49 Hexachlorobutadien	50.0	58.5	116.95	80-120
51 N-Nitroso-Di-N-But	50.0	59.6	119.21	80-120
53 Caprolactam	50.0	50.7	101.40	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	48.1	96.30	80-120
55 4-Chloro-3-Methylp	50.0	55.1	110.14	80-120
57 2-Methylnaphthalen	50.0	55.9	111.82	80-120
58 1-Methylnaphthalen	50.0	56.5	112.97	80-120
60 1,2,4,5-Tetrachlor	100	95.4	95.42	80-120
59 Hexachlorocyclopen	50.0	47.4	94.80	80-120
61 2,4,6-Trichlorophe	50.0	57.0	114.09	80-120
62 2,4,5-Trichlorophe	50.0	60.7	121.38*	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	56.9	113.82	80-120
65 1,1'-Biphenyl	50.0	54.9	109.83	80-120
66 2-Chloronaphthalen	50.0	57.4	114.73	80-120
67 1-Chloronaphthalen	50.0	49.4	98.90	80-120
69 2-Nitroaniline	50.0	57.1	114.21	80-120
70 1,4-Naphthoquinone	50.0	69.8	139.69*	80-120
72 Dimethyl Phthalate	50.0	56.4	112.79	80-120
73 1,3-Dinitrobenzene	50.0	53.7	107.44	80-120
75 Acenaphthylene	50.0	52.8	105.59	80-120
74 2,6-Dinitrotoluene	50.0	59.9	119.77	80-120
77 3-Nitroaniline	50.0	51.7	103.33	80-120
79 Acenaphthene	50.0	55.6	111.17	80-120
80 2,4-Dinitrophenol	50.0	56.0	111.95	80-120
83 Dibenzofuran	50.0	61.0	122.10*	80-120
81 Pentachlorobenzene	50.0	55.4	110.92	80-120
82 4-Nitrophenol	50.0	55.7	111.35	80-120
84 2,4-Dinitrotoluene	50.0	55.3	110.56	80-120
85 1-Naphthylamine	50.0	53.0	106.00	80-120
88 2-Naphthylamine	50.0	56.6	113.29	80-120
87 2,3,4,6-Tetrachlor	50.0	55.6	111.28	80-120
89 Diethylphthalate	50.0	55.5	111.04	80-120
91 Fluorene	50.0	55.3	110.65	80-120
92 4-Chlorophenyl-phe	50.0	54.2	108.36	80-120
90 O,O-diethyl-o-2-py	50.0	57.8	115.55	80-120
93 5-Nitro-O-Toluidin	50.0	56.0	112.05	80-120
94 4-Nitroaniline	50.0	53.4	106.78	80-120
96 N-Nitrosodiphenyla	100	82.8	82.81	80-120
95 4,6-Dinitro-2-Meth	50.0	54.3	108.58	80-120
98 1,2-Diphenylhydraz	50.0	54.4	108.86	80-120
101 Sulfotepp	50.0	52.5	104.95	80-120
102 Diallate	50.0	55.8	111.52	80-120
103 Phorate	50.0	24.4	48.82*	80-120
105 4-Bromophenyl-phen	50.0	56.2	112.35	80-120
106 Phenacetin	50.0	53.1	106.25	80-120
104 1,3,5-Trinitrobenz	50.0	49.1	98.14	80-120
107 Hexachlorobenzene	50.0	56.8	113.65	80-120
108 Dimethoate	50.0	45.9	91.90	80-120
109 Atrazine	50.0	20.8	41.59*	80-120
110 4-Aminobiphenyl	50.0	45.9	91.86	80-120
111 Pentachlorophenol	50.0	66.6	133.25*	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U0763.D
Report Date: 24-Jun-2015 15:15

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
113 Pronamide	50.0	50.5	101.09	80-120
112 Pentachloronitrobe	50.0	52.7	105.33	80-120
116 Phenanthrene	50.0	52.0	103.96	80-120
115 Disulfoton	50.0	47.1	94.22	80-120
118 Anthracene	50.0	52.9	105.87	80-120
117 Dinoseb	50.0	51.4	102.75	80-120
119 Carbazole	50.0	52.0	104.03	80-120
120 Methyl Parathion	50.0	55.0	110.01	80-120
121 Di-n-butylphthalat	50.0	54.9	109.82	80-120
122 Ethyl Parathion	50.0	48.2	96.38	80-120
123 4-Nitroquinoline-1	50.0	49.4	98.71	80-120
124 Methapyrilene	50.0	42.3	84.66	80-120
125 Isodrin	50.0	51.8	103.63	80-120
126 Fluoranthene	50.0	50.5	101.01	80-120
127 Benzidine	50.0	51.0	101.96	80-120
128 Pyrene	50.0	48.6	97.30	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	55.1	110.15	80-120
133 Chlorobenzilate	50.0	47.7	95.38	80-120
134 Famphur	50.0	28.1	56.27*	80-120
135 3,3'-Dimethylbenzi	50.0	97.2	194.51*	80-120
136 Butylbenzylphthala	50.0	52.5	105.00	80-120
137 Bis(2-ethylhexyl)a	50.0	47.4	94.85	80-120
138 2-Acetylaminofluor	50.0	55.0	110.10	80-120
140 Benzo(a)anthracene	50.0	52.1	104.28	80-120
139 3,3'-Dichlorobenzi	50.0	54.6	109.15	80-120
141 Chrysene	50.0	53.0	106.00	80-120
143 bis(2-Ethylhexyl)p	50.0	51.2	102.47	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	55.8	111.65	80-120
147 Benzo(b)fluoranthe	50.0	52.8	105.59	80-120
146 7,12-Dimethylbenz(	50.0	50.2	100.50	80-120
148 Benzo(k)fluoranthe	50.0	52.8	105.52	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	48.0	96.05	80-120
151 3-Methylcholanthre	50.0	56.7	113.32	80-120
152 Dibenz(a,j)acridin	50.0	50.0	99.93	80-120
153 Indeno(1,2,3-cd)py	50.0	55.1	110.17	80-120
155 Dibenzo(a,h)anthra	50.0	54.2	108.36	80-120
156 Benzo(g,h,i)peryle	50.0	51.9	103.76	80-120

SURROGATE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	35-105
$ 12 Phenol-D6	100	0.000	*	40-100
$ 33 Nitrobenzene-D5	50.0	0.000	*	35-100
$ 63 2-Fluorobiphenyl	50.0	0.000	*	45-105
$ 100 2,4,6-Tribromophe	100	0.000	*	35-125
$ 129 Terphenyl-D14	50.0	0.000	*	30-125

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG164504-2
Analytical Date: 06/11/15 09:09
Lab File ID : U0632.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 06/05/15 14:27 06/05/15 17:12
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
11 Benzaldehyde	50.00000	45.43640	0.09931	0.010	-9.12719	20.00000	Quadratic
13 Phenol	1.60714	1.56311	1.56311	0.010	-2.73985	20.01000	Averaged
23 2-Methylphenol	1.15090	1.12409	1.12409	0.010	-2.32953	20.00000	Averaged
26 Acetophenone	0.39862	0.37555	0.37555	0.010	-5.78889	20.00000	Averaged
36 Isophorone	0.60918	0.56728	0.56728	0.010	-6.87872	20.00000	Averaged
38 2,4-Dimethylphenol	0.30072	0.30280	0.30280	0.010	0.69213	20.00000	Averaged
53 Caprolactam	0.09158	0.08633	0.08633	0.010	-5.73207	20.00000	Averaged
55 4-Chloro-3-Methylphenol	0.25082	0.24570	0.24570	0.010	-2.04155	20.01000	Averaged
66 2-Chloronaphthalene	1.10143	0.92191	0.92191	0.010	-16.29897	20.00000	Averaged
72 Dimethyl Phthalate	1.19142	1.13176	1.13176	0.010	-5.00745	20.00000	Averaged
75 Acenaphthylene	1.60563	1.51370	1.51370	0.010	-5.72586	20.00000	Averaged
77 3-Nitroaniline	0.28664	0.28209	0.28209	0.010	-1.58622	20.00000	Averaged
79 Acenaphthene	0.97636	0.94976	0.94976	0.010	-2.72502	20.01000	Averaged
89 Diethylphthalate	1.17296	1.16622	1.16622	0.010	-0.57451	20.00000	Averaged
91 Fluorene	50.00000	49.96848	0.96883	0.010	-0.06304	20.00000	Quadratic
105 4-Bromophenyl-phenylether	0.19358	0.19130	0.19130	0.010	-1.17389	20.00000	Averaged
119 Carbazole	0.71510	0.77437	0.77437	0.010	8.28851	20.00000	Averaged
8 2-Fluorophenol	1.19355	1.12806	1.12806	0.010	-5.48693	20.00000	Averaged
12 Phenol-D6	1.40486	1.32712	1.32712	0.010	-5.53365	20.00000	Averaged
33 Nitrobenzene-D5	0.32022	0.29736	0.29736	0.010	-7.13976	20.00000	Averaged
63 2-Fluorobiphenyl	1.07283	1.05753	1.05753	0.010	-1.42615	20.00000	Averaged
100 2,4,6-Tribromophenol	0.16306	0.17333	0.17333	0.010	6.29866	20.00000	Averaged
129 Terphenyl-D14	0.92531	0.90389	0.90389	0.010	-2.31418	20.00000	Averaged

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI3862
Lab ID : WG165301-2
Analytical Date: 06/23/15 11:12
Lab File ID : U0788.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 06/22/15 13:48 06/22/15 16:08
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
11 Benzaldehyde	0.11162	0.11962	0.11962	0.010	7.16912	20.00000	Averaged	
13 Phenol	1.44922	1.66004	1.66004	0.010	14.54696	20.01000	Averaged	
23 2-Methylphenol	1.21819	1.24381	1.24381	0.010	2.10339	20.00000	Averaged	
26 Acetophenone	0.40307	0.40845	0.40845	0.010	1.33436	20.00000	Averaged	
36 Isophorone	0.52435	0.53506	0.53506	0.010	2.04375	20.00000	Averaged	
38 2,4-Dimethylphenol	0.26824	0.27428	0.27428	0.010	2.25116	20.00000	Averaged	
53 Caprolactam	0.11127	0.10633	0.10633	0.010	-4.43436	20.00000	Averaged	
55 4-Chloro-3-Methylphenol	0.23299	0.22948	0.22948	0.010	-1.50794	20.01000	Averaged	
66 2-Chloronaphthalene	1.11146	0.96744	0.96744	0.010	-12.95731	20.00000	Averaged	
72 Dimethyl Phthalate	1.15922	1.00835	1.00835	0.010	-13.01427	20.00000	Averaged	
75 Acenaphthylene	1.64406	1.62848	1.62848	0.010	-0.94758	20.00000	Averaged	
77 3-Nitroaniline	0.32079	0.29557	0.29557	0.010	-7.86011	20.00000	Averaged	
79 Acenaphthene	0.93879	0.97184	0.97184	0.010	3.51983	20.01000	Averaged	
89 Diethylphthalate	1.06953	1.00832	1.00832	0.010	-5.72240	20.00000	Averaged	
91 Fluorene	0.91606	0.91720	0.91720	0.010	0.12453	20.00000	Averaged	
105 4-Bromophenyl-phenylether	0.18468	0.22527	0.22527	0.010	21.98053	20.00000	Averaged	*
119 Carbazole	0.85314	0.83980	0.83980	0.010	-1.56363	20.00000	Averaged	
8 2-Fluorophenol	1.25363	1.29736	1.29736	0.010	3.48801	20.00000	Averaged	
12 Phenol-D6	1.33060	1.53655	1.53655	0.010	15.47811	20.00000	Averaged	
33 Nitrobenzene-D5	0.24794	0.25788	0.25788	0.010	4.00914	20.00000	Averaged	
63 2-Fluorobiphenyl	1.06873	1.05646	1.05646	0.010	-1.14878	20.00000	Averaged	
100 2,4,6-Tribromophenol	0.16674	0.14064	0.14064	0.010	-15.65530	20.00000	Averaged	
129 Terphenyl-D14	0.95526	0.91006	0.91006	0.010	-4.73091	20.00000	Averaged	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 050515

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG164192-1	50ng DFTPP	UD381	1	1	DFTPP 390	2.0	JCG	ok
-4	SSTD050 U0605	U0591		2	U8270C77	1.0		✓
-2	010	92		3				✓
-3	025	93		4				✓
-4	075	94		5				✓
-6	100	95		6				✓
-7	125	96		7				✓
-8	150	97		8				ok
3550	WG164216-1	98		9				ok
	WG164249-1	99		10				—
3550	WG164216-2	U0600		11				ok
	WG164249-2	01		12				— not needed
	SI3799-1	02		13				—
	-2	03		14				—
	-3	04		15				—
	-4	05		16				—
	SI3837-1	06		17				—
	SI3862-3	07		18				—
	WG164249-3	08		19				—
	-4	09		20				—
	SI3787-5	10		21				—
	-1DL	11	3	22				☆ not surr. int. fault
	-1	12	1	23				
	SI3862-1DL	13	10	24				
	-2DL	14		25				
	WG164216-3DL	15		26				
	-4DL	16		27				
	meOH	17-21	1	28				

STANDARD	CODE
DFTPP	52611
CAL. STD.	52615 STK4917
IS MIX	STK4944

REVIEWED AND APPROVED BY: _____
DATE: _____

DATE OF DFTPP INJECTION: 061115

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG164504-1	50 ng DFTPP	UD384	1	1	DFTPP 390	2.0	JM	OK
-2	SSTD050 UD611	UD632		2	U8270C77	1.0		OK
3510	SI3920-1	33		3				OK
	-2	34		4				OK
	-3	35		5				156↑
	-4	36		6				155↑
	-5	37		7				OK
	-6	38		8				OK
	-7	39		9				OK
	-8	40		10				OK
	WG164515-1	41		11				OK
	-3	42		12				OK PST1247A
	-2	43		13				OK
	SI3907-1	44		14				OK
	-4	45		15				OK
	-6	46		16				554.5↓
3510	SI3821-3DL	47	2	17				OK 100/200
	-6RA	48	1	18				1556↓ 552.4↑
3510	SI3950-1DL	49	10	19				OK 50/500
~	MeOH	50	1	20				—
3510	WG164594-1	51		21				OK
	-3	52		22				~~553-54~~ ok PST1225D
	-2	53		23				OK
	SI3862-6	54		24				OK
	-7	55		25				~~553-1~~ ↑ ok
	SI3907-2	56		26				OK
	SI4024-1	57		27				— not needed

STANDARD	CODE
DFTPP	S2611
CAL. STD.	S2615 STK4917
IS MIX	STK4944

REVIEWED AND APPROVED BY: _____
DATE: _____

DATE OF DFTPP INJECTION: 062215

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165272-1	50ng DFTPP	UD391	1	1	DFTPP 3560	2.0	JCG	OK
-4	SSTD050 UU622	U0757		2	U8270C79	1.0		✓
-2	010	58		3				✓
-3	025	59		4				✓
-5	075	60		5				✓
-6	100	61		6				✓
-7	125	62		7				✓
-8	1MD	63		8				OK
3550	WG164995-1	64		9				1564
	-2	65		10				OK
	-3	66		11				OK
	SI4190-1	67		12				OK
	SI4270-1R1	68		13				OK
	SI4226-8	69		14				OK
	-1	70		15				1556↓
	-2	71		16				1556↓
	-9	72		17				1556↓
	-10	73		18				1556↓ SS1-5↓ DL:2✓
3560	SI4291-1DL	74	3	19				1556↓ SS6↑ 100/300
	-3DL	75		20				1556↓ SS6↑
	-8DL	76		21				1556↓ SS 4,6↑
	-5DL	77		22				1556↓ SS 3,4,6↑
	SI4226-5	78	1	23				1556↓
	-7	79		24				1556↓ SS6↑
	MeCl2	80-87		25				

STANDARD	CODE
DFTPP	S2601
CAL. STD.	S2636 STK4917
IS MIX	STK5001

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 062315

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165391-1	50ng DFTPP	U0392	1	1	DFTPP5UM	2.0	JLM	OK
-2	SSTD050U0623	U0788		2	U8270C79	1.0		OK
3550	WG164995-1RA	89		3				OK
3510	WG165248-1	90		4				OK
	-4	91		5				OK PBT1251A
	-5	92		6				OK PBT1250A
	-2	93		7				OK
	-3	94		8				OK
	SE4291-2	95		9				~~SS23~~ SPLP
	-4	96		10				~~SS01~~ JLM
	-6	97		11				SS1(2)
	-9	98		12				~~SS23~~
	SE4240-1	99		13				OK
	SE4306-7	U0800		14				OK
	SE4332-11	01		15				SS1
	WG165248-6	02		16				OK
	-7	03		17				OK
3550	SE4226-10DL	04	2	18				1561 SS45 100/200
	meCl2	05-07	1	19				
								JLM 062415

STANDARD	CODE
DFTPP	52611
CAL. STD.	526310 SPK4917
IS MIX	SPK8001

REVIEWED AND APPROVED BY: _____
DATE: _____

625/SV/SIM
SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625 ✓	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV8717		Spike ID (1): SV8715		
	Surrogate ID (2):		Spike ID (2): SIM: SV8718		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM804		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 2796500		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) ≥11		pH (2nd Extraction) ≤2
Prep Start Time: 1000	Prep End Time: 14:40		CLLE Start Time: —		CLLE End Time: —

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV036	Initials	Comments
6-1-15	KF	WG164593-1 625										625-R
		WG164594-1 SV	1000	1mL	NR	✓	✓	1mL	6-1-15	C8	JMS	SV-R
		WG164595-1 SIM										SIM-R
		WG164593-2			1mL	✓				E9		
		WG164594-2										
		WG164595-2					✓			C10		
		-3	1060				✓			D1		MS S14024-5D
		-4	1060				✓			D2		MSD " -5E
		WG164594-3	~~1000~~ 1060	2mL	NR	✓				D3		~~Spike Blank PBT12250~~
		WG164595-3	1060	1mL	1mL	✗	✓			D4		MS S1 4050-2S
		-4	1060			✗	✓			D5		MSD -2F

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000080

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-1-15	KF	S1 3987-2A	1060	1mL	NR	✓		1mL	6-11-15	D6	JMS	625 em-ss. -cont
		S1 3988-2A	1060							D7		
		S1 4018-3A	1060							D8		cont
		S1 4022-2A	1060							D9		em-ss
		S1 4023-2A	1060							D10		
		S1 4028-1D	1060							E1		
		S1 4029-1F	1020							E2		cont
		S1 3862-6A	1050	2mL		✓				E3		SPLP
		S1 3862-7F	830	2mL		✓				E4		SPLP
		S1 3907-2F	1060	1mL		✓				E5		em-S.S.
		S1 4024-1B	1060				✓			E6		
		-2B	1060							E7		
		-3B	1020							E8		
		-4B	1030							E9		
		-5G	1050							E10		MS/D
		S1 4050-2E	1060							SV037 A1		
		-3E								A2		em-SS
		-4G								A3		
		-5F	1030							A4		

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000081

S|S|625
sep

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625 ✓	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV2721		Spike ID (1): SV2715(SV)		
	Surrogate ID (2):		Spike ID (2): SV2716(SIM)		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM824		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 27965002		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) ≤2		pH (2nd Extraction) ≥11
Prep Start Time: 1130	Prep End Time: 1330		CLLE Start Time:		CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV039	Initials	Comments Rsv 322505
6-22-15	WAS	WG-165248-1 246-1 251-1	1000	1mL	NR	✓	✓	1µ	6-22-15	A1	KF	Rsim 322506
		WG-165248-2 251-2			1mL					A2		R625 322507
		248-3 251-3								3		
		WG-165248-4	1010		NR					4		SPLP Blank 1251A
		-5	200							5		TCLP Blank 1250A → 2000mL w/DI
		-6	900		1mL					6		MS SP3862-6
		-7	880							7		MSD -6
		WG-165249-2	~~750~~ 1000				✓			8		
		-3	~~703~~							9		
		-4	1010		NR					A10		SPLP Blank 1251A
		-5	750		1mL					B1		MS SP3862-6
		-6	1030							B2		MSD -6

EX-007 – Revision 2 – 12/05/2013 QAEX284 0000088

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-22-15	WAS	SD4240-1	200	1mL	NR	✓		1µ	6-22-15	B3	KF	TCLP → 2000mL w/DI
		SD4291-2	1020				✓			4		SPLP
		-4	4							5		
		-6	960							6		
		-9	880							7		
		SD4306-7 H	1050			✓				8		
		SD4319-1 F	1060			✓				9		625
		SD4332-1 H	980				✓			B10		
		-3 H	1010							C1		emulsion → SS
		-5 H	1050							2		
		-7 H	1600							3		
		-9 G	1060							4		Centrifuge
		-10 F	1010							5		
		-11 H	1050			✓	✓			C6		
									KF	6-22-15		

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284 Katahdin Analytical Services 0000321

0000089

KATAHDIN ANALYTICAL SERVICES, INC. Non-Volatile TCLP/SPLP Extraction Log

I. EXTRACTION CONDITIONS

Extraction Method:	SW846 1311 (TCLP) ☐ / SW846 1312 (SPLP) ☑	Extractor ID: #2	Room Thermometer ID: DIG-23	(Room Temp Criteria. 23(±2)°C)
		Balance ID: BAL-0615	pH Meter ID: Orion 520A s/n 7422	pH Probe ID: 7
Solid pH Determination:	Date: 06·05·15	GEJ 06.05.15	Analyst: GEJ	
Rotary Extraction Started:	Date: 06·05·15	Time: 15:50	Analyst: GEJ	Room Temp. (degrees °C): 18.1
Rotary Extraction Completed:	Date: 06-06-15	Time: 08:06	Analyst: Gam	Room Temp. (degrees °C): 17.8
Extraction Filtered:	Date: 06/06/15	Time: 15:05	Analyst: [illegible]	Filter Lot #: R5AA49484
Elapsed Extraction Time (HH:MM):		5% HNO_3 ID (used to wash filters):		HNO_3 Lot # (used to preserve extracts):
Fluid 1 pH (Day of use): 4.24 (1225)		Fluid 1 Expiration Date: 01·14·16		
Fluid 2 pH (Day of use):		Fluid 2 Expiration Date:		

II. EXTRACTION SETUP

TCLP Fluid pH: #1 - 4.93 ± 0.05 #2 - 2.88 ± 0.05 SPLP Fluid pH: #1 - 4.20 ± 0.05 #2 - 5.00 ± 0.05

Katahdin Sample No. (include bottle ID)	Matrix	Check One: 100% Wet Solids- waste will yield no liquid upon filtration	Check One: < 100% Wet Solids (Perform Solids Determination below)	SPLP FLUID # (1 for east and 2 for west of Mississippi River)	TCLP pH Determination and Fluid Selection (date & init. above): Initial pH of solid phase: (if <5, use Fluid #1; if >5 add 3.5 mL of 1 N HCl)	TCLP pH Determination and Fluid Selection (date & init. above): pH after 1 N HCL addition (if <5, use Fluid #1; if >5, use Fluid #2	Extraction Setup: Volume of Extraction Fluid (mL)	Extraction Setup: Fluid # used	Extraction Setup: Associated Extraction Blank ID:	Extraction Setup: Weight of Waste (g)	pH of extract after extraction: 06-05-15 GEJ	Extract to be analyzed for: Metals (M), SVOA (S), PEST (P), HERB (H), Cyanide (C)	Extraction Bottle ID (if applicable)
SI3862-1	SL	✓		1	—	—	2000	—	PBT1255D	100.38	6.48	M, S	18
SI3862-2	SL	✓		1	—	—	↓	—	↓	100.59	6.53	M, S	3
PBT1225D	Ag	—		1	—	—	↓	—	↓	—	6.59	M, S	1

ME-001 – Revision 4 – 07/05/2011

METALS DATA

Sample Data Section

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SI3862 **SOW No.** SW846

Client Field ID	Lab Sample ID
SITE4TS-EB	SI3862-003
SITE4TS-FB	SI3862-001
SITE4TS-FB	SI3862-001D
SITE4TS-FB	SI3862-001P
SITE4TS-FB	SI3862-001S
SITE4TS-FB	SI3862-006
SITE4TS-FB	SI3862-006P
SITE4TS-FB	SI3862-006S
SITE4TS-XX	SI3862-002
SITE4TS-XX	SI3862-007

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Edward A. Morgan Name: Edward A. Morgan

Date: June 29, 2015 Title: Senior Analyst

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FB

Matrix: SOIL **SDG Name:** SI3862

Percent Solids: 92.6 **Lab Sample ID:** SI3862-001

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	1470		N*	MS	5	26	0.44	3.5
7440-36-0	ANTIMONY, TOTAL	0.018	J	N	MS	5	0.087	0.017	0.044
7440-38-2	ARSENIC, TOTAL	2.34		*	MS	5	0.44	0.13	0.35
7440-39-3	BARIUM, TOTAL	6.07		*	MS	5	0.17	0.032	0.087
7440-41-7	BERYLLIUM, TOTAL	0.0483	J		MS	5	0.087	0.0035	0.017
7440-43-9	CADMIUM, TOTAL	0.0066	J		MS	5	0.087	0.0065	0.017
7440-70-2	CALCIUM, TOTAL	66.3		N*B	MS	5	8.7	3.4	7.0
7440-47-3	CHROMIUM, TOTAL	2.41			MS	5	0.44	0.043	0.35
7440-48-4	COBALT, TOTAL	0.642		*	MS	5	0.087	0.0048	0.026
7440-50-8	COPPER, TOTAL	2.77		*	MS	5	0.26	0.061	0.17
7439-89-6	IRON, TOTAL	3090		N*A	MS	5	8.7	2.1	5.2
7439-92-1	LEAD, TOTAL	2.65		*	MS	5	0.087	0.0061	0.044
7439-95-4	MAGNESIUM, TOTAL	32.7		*	MS	5	8.7	1.2	7.0
7439-96-5	MANGANESE, TOTAL	11.4		B	MS	5	0.17	0.037	0.087
7439-97-6	MERCURY, TOTAL	0.015	U	A	CV	1	0.029	0.0045	0.015
7440-02-0	NICKEL, TOTAL	2.15			MS	5	0.17	0.023	0.10
7440-09-7	POTASSIUM, TOTAL	169		*	MS	5	87	4.0	35
7782-49-2	SELENIUM, TOTAL	0.20	J		MS	5	0.44	0.034	0.26
7440-22-4	SILVER, TOTAL	0.035	U		MS	5	0.087	0.0057	0.035
7440-23-5	SODIUM, TOTAL	16	J		MS	5	87	2.2	35
7440-28-0	THALLIUM, TOTAL	0.023	J		MS	5	0.087	0.0083	0.035
7440-62-2	VANADIUM, TOTAL	19.1			MS	5	0.44	0.096	0.35
7440-66-6	ZINC, TOTAL	2.16		*	MS	5	0.87	0.11	0.70

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-XX

Matrix: SOIL **SDG Name:** SI3862

Percent Solids: 91.7 **Lab Sample ID:** SI3862-002

Concentration Units : mg/Kg drywt

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	1090			MS	5	18	0.31	2.5
7440-36-0	ANTIMONY, TOTAL	0.013	J		MS	5	0.062	0.012	0.031
7440-38-2	ARSENIC, TOTAL	2.38			MS	5	0.31	0.092	0.25
7440-39-3	BARIUM, TOTAL	4.14			MS	5	0.12	0.022	0.062
7440-41-7	BERYLLIUM, TOTAL	0.0384	J		MS	5	0.062	0.0025	0.012
7440-43-9	CADMIUM, TOTAL	0.0064	J		MS	5	0.062	0.0046	0.012
7440-70-2	CALCIUM, TOTAL	50.0		B	MS	5	6.2	2.4	4.9
7440-47-3	CHROMIUM, TOTAL	2.05			MS	5	0.31	0.030	0.25
7440-48-4	COBALT, TOTAL	0.495			MS	5	0.062	0.0034	0.018
7440-50-8	COPPER, TOTAL	2.19			MS	5	0.18	0.043	0.12
7439-89-6	IRON, TOTAL	3060			MS	5	6.2	1.5	3.7
7439-92-1	LEAD, TOTAL	2.01			MS	5	0.062	0.0043	0.031
7439-95-4	MAGNESIUM, TOTAL	21.3			MS	5	6.2	0.83	4.9
7439-96-5	MANGANESE, TOTAL	14.6		B	MS	5	0.12	0.026	0.062
7439-97-6	MERCURY, TOTAL	0.016	U		CV	1	0.031	0.0048	0.016
7440-02-0	NICKEL, TOTAL	2.56			MS	5	0.12	0.016	0.074
7440-09-7	POTASSIUM, TOTAL	99.8			MS	5	62	2.8	25
7782-49-2	SELENIUM, TOTAL	0.12	J		MS	5	0.31	0.024	0.18
7440-22-4	SILVER, TOTAL	0.0041	J		MS	5	0.062	0.0040	0.025
7440-23-5	SODIUM, TOTAL	12	J		MS	5	62	1.6	25
7440-28-0	THALLIUM, TOTAL	0.015	J		MS	5	0.062	0.0059	0.025
7440-62-2	VANADIUM, TOTAL	23.0			MS	5	0.31	0.068	0.25
7440-66-6	ZINC, TOTAL	1.45			MS	5	0.62	0.080	0.49

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-EB

Matrix: WATER **SDG Name:** SI3862

Percent Solids: 0.00 **Lab Sample ID:** SI3862-003

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, TOTAL	9.5	J		MS	5	300	4.4	40
7440-36-0	ANTIMONY, TOTAL	0.12	J		MS	5	1.0	0.055	0.50
7440-38-2	ARSENIC, TOTAL	4.0	U		MS	5	5.0	2.3	4.0
7440-39-3	BARIUM, TOTAL	0.85	J		MS	5	2.0	0.27	1.0
7440-41-7	BERYLLIUM, TOTAL	0.20	U		MS	5	1.0	0.034	0.20
7440-43-9	CADMIUM, TOTAL	0.041	J		MS	5	1.0	0.030	0.20
7440-70-2	CALCIUM, TOTAL	80	J		MS	5	100	21.	80
7440-47-3	CHROMIUM, TOTAL	0.92	J		MS	5	5.0	0.22	4.0
7440-48-4	COBALT, TOTAL	0.30	U		MS	5	1.0	0.060	0.30
7440-50-8	COPPER, TOTAL	1.4	J		MS	5	3.0	0.19	2.0
7439-89-6	IRON, TOTAL	28	J		MS	5	100	13.	60
7439-92-1	LEAD, TOTAL	0.50	U		MS	5	1.0	0.075	0.50
7439-95-4	MAGNESIUM, TOTAL	24	J		MS	5	100	8.0	80
7439-96-5	MANGANESE, TOTAL	1.1	J		MS	5	2.0	0.35	1.0
7439-97-6	MERCURY, TOTAL	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, TOTAL	0.22	J		MS	5	2.0	0.15	1.2
7440-09-7	POTASSIUM, TOTAL	400	U		MS	5	1000	31.	400
7782-49-2	SELENIUM, TOTAL	2.09	J		MS	5	5.0	0.19	3.0
7440-22-4	SILVER, TOTAL	0.40	U		MS	5	1.0	0.050	0.40
7440-23-5	SODIUM, TOTAL	210	J		MS	5	1000	19.	400
7440-28-0	THALLIUM, TOTAL	0.40	U		MS	5	1.0	0.060	0.40
7440-62-2	VANADIUM, TOTAL	4.0	U		MS	5	5.0	0.50	4.0
7440-66-6	ZINC, TOTAL	8.0	U		MS	5	10	3.9	8.0

Comments:

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FB

Matrix: WATER **SDG Name:** SI3862

Percent Solids: 0.00 **Lab Sample ID:** SI3862-006

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, SPLP	180	J		P	1	1500	75.	500
7440-36-0	ANTIMONY, SPLP	25	U		P	1	40	6.5	25
7440-38-2	ARSENIC, SPLP	25	U	A	P	1	40	7.0	25
7440-39-3	BARIUM, SPLP	126		B	P	1	25	1.2	15
7440-41-7	BERYLLIUM, SPLP	2.5	U		P	1	25	0.50	2.5
7440-43-9	CADMIUM, SPLP	15	U		P	1	25	0.25	15
7440-70-2	CALCIUM, SPLP	320	J		P	1	500	55.	400
7440-47-3	CHROMIUM, SPLP	20	U		P	1	50	1.8	20
7440-48-4	COBALT, SPLP	1.8	J		P	1	50	1.2	20
7440-50-8	COPPER, SPLP	50	U		P	1	120	3.2	50
7439-89-6	IRON, SPLP	170	J	N	P	1	500	27.	400
7439-92-1	LEAD, SPLP	20	U		P	1	25	5.5	20
7439-95-4	MAGNESIUM, SPLP	100	J		P	1	500	39.	400
7439-96-5	MANGANESE, SPLP	14	J		P	1	25	5.5	20
7439-97-6	MERCURY, SPLP	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, SPLP	20	U		P	1	50	1.4	20
7440-09-7	POTASSIUM, SPLP	2500	U		P	1	5000	205.	2500
7782-49-2	SELENIUM, SPLP	35	U		P	1	50	12.	35
7440-22-4	SILVER, SPLP	20	U		P	1	50	1.4	20
7440-23-5	SODIUM, SPLP	2500	U		P	1	5000	120.	2500
7440-28-0	THALLIUM, SPLP	25	U		P	1	75	5.5	25
7440-62-2	VANADIUM, SPLP	20	U		P	1	50	1.2	20
7440-66-6	ZINC, SPLP	41.6	J		P	1	100	3.6	50

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-XX

Matrix: WATER **SDG Name:** SI3862

Percent Solids: 0.00 **Lab Sample ID:** SI3862-007

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, SPLP	7970			P	1	1500	75.	500
7440-36-0	ANTIMONY, SPLP	25	U		P	1	40	6.5	25
7440-38-2	ARSENIC, SPLP	11	J		P	1	40	7.0	25
7440-39-3	BARIUM, SPLP	274		B	P	1	25	1.2	15
7440-41-7	BERYLLIUM, SPLP	2.5	U		P	1	25	0.50	2.5
7440-43-9	CADMIUM, SPLP	1.4	J		P	1	25	0.25	15
7440-70-2	CALCIUM, SPLP	1660			P	1	500	55.	400
7440-47-3	CHROMIUM, SPLP	6.1	J		P	1	50	1.8	20
7440-48-4	COBALT, SPLP	1.8	J		P	1	50	1.2	20
7440-50-8	COPPER, SPLP	3.3	J		P	1	120	3.2	50
7439-89-6	IRON, SPLP	2720			P	1	500	27.	400
7439-92-1	LEAD, SPLP	20	U		P	1	25	5.5	20
7439-95-4	MAGNESIUM, SPLP	300	J		P	1	500	39.	400
7439-96-5	MANGANESE, SPLP	20	J		P	1	25	5.5	20
7439-97-6	MERCURY, SPLP	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, SPLP	3.7	J		P	1	50	1.4	20
7440-09-7	POTASSIUM, SPLP	440	J		P	1	5000	205.	2500
7782-49-2	SELENIUM, SPLP	35	U		P	1	50	12.	35
7440-22-4	SILVER, SPLP	20	U		P	1	50	1.4	20
7440-23-5	SODIUM, SPLP	3220	J		P	1	5000	120.	2500
7440-28-0	THALLIUM, SPLP	25	U		P	1	75	5.5	25
7440-62-2	VANADIUM, SPLP	8.8	J		P	1	50	1.2	20
7440-66-6	ZINC, SPLP	75.6	J		P	1	100	3.6	50

Comments:

FORM I - IN

QC Summary Section

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICV

File: HIF09A Jun 09, 2015 15:19

Analyte	True	Found	%R (1)
MERCURY	6.0	5.98	99.7

SAMPLE: CCV

File: HIF09A Jun 09, 2015 15:25

Analyte	True	Found	%R (1)
MERCURY	5.0	5.21	104.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: HIF09A Jun 09, 2015 15:49

Analyte	True	Found	%R (1)
MERCURY	5.0	4.93	98.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICV

File: HIF10A Jun 10, 2015 16:56

Analyte	True	Found	%R (1)
MERCURY	6.0	5.96	99.3

SAMPLE: CCV

File: HIF10A Jun 10, 2015 17:02

Analyte	True	Found	%R (1)
MERCURY	5.0	5.07	101.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: HIF10A Jun 10, 2015 17:57

Analyte	True	Found	%R (1)
MERCURY	5.0	4.90	98.0

SAMPLE: CCV

File: HIF10A Jun 10, 2015 18:23

Analyte	True	Found	%R (1)
MERCURY	5.0	4.99	99.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: HIF10A Jun 10, 2015 18:48

Analyte	True	Found	%R (1)
MERCURY	5.0	5.00	100.0

SAMPLE: CCV

File: HIF10A Jun 10, 2015 19:14

Analyte	True	Found	%R (1)
MERCURY	5.0	5.09	101.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: HIF10A Jun 10, 2015 19:40

Analyte	True	Found	%R (1)
MERCURY	5.0	5.02	100.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICV

File: IIF09B Jun 09, 2015 19:07

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10030.00	100.3
ANTIMONY	400.0	418.30	104.6
ARSENIC	400.0	406.80	101.7
BARIUM	400.0	424.20	106.1
BERYLLIUM	400.0	430.00	107.5
CADMIUM	400.0	419.60	104.9
CALCIUM	10000.0	10100.00	101.0
CHROMIUM	400.0	418.50	104.6
COBALT	400.0	427.30	106.8
COPPER	400.0	419.10	104.8
IRON	10000.0	10160.00	101.6
LEAD	400.0	426.50	106.6
MAGNESIUM	10000.0	10200.00	102.0
MANGANESE	400.0	423.10	105.8
NICKEL	400.0	425.50	106.4
POTASSIUM	13600.0	13740.00	101.0
SELENIUM	400.0	415.70	103.9
SILVER	400.0	415.90	104.0
SODIUM	10000.0	10170.00	101.7
THALLIUM	400.0	436.50	109.1
VANADIUM	400.0	420.00	105.0
ZINC	400.0	423.70	105.9

SAMPLE: CCV

File: IIF09B Jun 09, 2015 19:52

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12920.00	103.4
ANTIMONY	500.0	493.20	98.6
ARSENIC	500.0	495.80	99.2
BARIUM	500.0	505.60	101.1
BERYLLIUM	500.0	521.40	104.3
CADMIUM	500.0	510.30	102.1
CALCIUM	12500.0	12950.00	103.6
CHROMIUM	500.0	513.50	102.7
COBALT	500.0	517.20	103.4
COPPER	500.0	516.40	103.3
IRON	12500.0	13120.00	105.0
LEAD	500.0	515.10	103.0
MAGNESIUM	12500.0	13070.00	104.6
MANGANESE	500.0	516.40	103.3
NICKEL	500.0	510.00	102.0
POTASSIUM	12500.0	13030.00	104.2
SELENIUM	500.0	507.60	101.5
SILVER	500.0	509.50	101.9
SODIUM	12500.0	12920.00	103.4
THALLIUM	500.0	521.30	104.3
VANADIUM	500.0	504.30	100.9
ZINC	500.0	517.00	103.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF09B Jun 09, 2015 20:52

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12720.00	101.8
ANTIMONY	500.0	491.20	98.2
ARSENIC	500.0	496.50	99.3
BARIUM	500.0	498.30	99.7
BERYLLIUM	500.0	510.90	102.2
CADMIUM	500.0	511.40	102.3
CALCIUM	12500.0	12740.00	101.9
CHROMIUM	500.0	516.30	103.3
COBALT	500.0	517.00	103.4
COPPER	500.0	521.80	104.4
IRON	12500.0	12840.00	102.7
LEAD	500.0	516.10	103.2
MAGNESIUM	12500.0	13060.00	104.5
MANGANESE	500.0	508.00	101.6
NICKEL	500.0	510.50	102.1
POTASSIUM	12500.0	12810.00	102.5
SELENIUM	500.0	507.40	101.5
SILVER	500.0	515.90	103.2
SODIUM	12500.0	12810.00	102.5
THALLIUM	500.0	521.40	104.3
VANADIUM	500.0	509.20	101.8
ZINC	500.0	517.50	103.5

SAMPLE: CCV

File: IIF09B Jun 09, 2015 21:52

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12850.00	102.8
ANTIMONY	500.0	494.70	98.9
ARSENIC	500.0	497.30	99.5
BARIUM	500.0	502.40	100.5
BERYLLIUM	500.0	508.50	101.7
CADMIUM	500.0	510.40	102.1
CALCIUM	12500.0	12710.00	101.7
CHROMIUM	500.0	515.60	103.1
COBALT	500.0	513.90	102.8
COPPER	500.0	518.30	103.7
IRON	12500.0	12810.00	102.5
LEAD	500.0	514.10	102.8
MAGNESIUM	12500.0	13130.00	105.0
MANGANESE	500.0	507.90	101.6
NICKEL	500.0	511.30	102.3
POTASSIUM	12500.0	12850.00	102.8
SELENIUM	500.0	502.20	100.4
SILVER	500.0	518.00	103.6
SODIUM	12500.0	12930.00	103.4
THALLIUM	500.0	520.10	104.0
VANADIUM	500.0	510.90	102.2
ZINC	500.0	515.10	103.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF09B Jun 09, 2015 22:53

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12520.00	100.2
ANTIMONY	500.0	495.40	99.1
ARSENIC	500.0	498.60	99.7
BARIUM	500.0	492.70	98.5
BERYLLIUM	500.0	501.40	100.3
CADMIUM	500.0	512.60	102.5
CALCIUM	12500.0	12560.00	100.5
CHROMIUM	500.0	513.30	102.7
COBALT	500.0	516.80	103.4
COPPER	500.0	510.10	102.0
IRON	12500.0	12670.00	101.4
LEAD	500.0	516.80	103.4
MAGNESIUM	12500.0	13020.00	104.2
MANGANESE	500.0	499.00	99.8
NICKEL	500.0	512.20	102.4
POTASSIUM	12500.0	12630.00	101.0
SELENIUM	500.0	506.40	101.3
SILVER	500.0	507.50	101.5
SODIUM	12500.0	12750.00	102.0
THALLIUM	500.0	518.10	103.6
VANADIUM	500.0	505.60	101.1
ZINC	500.0	518.80	103.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICV

File: IIF23A Jun 23, 2015 12:49

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10150.00	101.5
ANTIMONY	400.0	406.60	101.6
ARSENIC	400.0	401.40	100.3
BARIUM	400.0	412.00	103.0
BERYLLIUM	400.0	414.20	103.5
CADMIUM	400.0	413.20	103.3
CALCIUM	10000.0	9952.00	99.5
CHROMIUM	400.0	416.30	104.1
COBALT	400.0	419.50	104.9
COPPER	400.0	410.70	102.7
IRON	10000.0	9992.00	99.9
LEAD	400.0	413.70	103.4
MAGNESIUM	10000.0	9971.00	99.7
MANGANESE	400.0	415.40	103.8
NICKEL	400.0	416.90	104.2
POTASSIUM	13600.0	13630.00	100.2
SELENIUM	400.0	405.70	101.4
SILVER	400.0	409.60	102.4
SODIUM	10000.0	10050.00	100.5
THALLIUM	400.0	418.80	104.7
VANADIUM	400.0	414.10	103.5
ZINC	400.0	413.60	103.4

SAMPLE: CCV

File: IIF23A Jun 23, 2015 13:33

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12410.00	99.3
ANTIMONY	500.0	497.80	99.6
ARSENIC	500.0	492.30	98.5
BARIUM	500.0	496.50	99.3
BERYLLIUM	500.0	496.70	99.3
CADMIUM	500.0	496.20	99.2
CALCIUM	12500.0	12380.00	99.0
CHROMIUM	500.0	493.40	98.7
COBALT	500.0	507.80	101.6
COPPER	500.0	491.20	98.2
IRON	12500.0	12230.00	97.8
LEAD	500.0	498.10	99.6
MAGNESIUM	12500.0	12440.00	99.5
MANGANESE	500.0	494.80	99.0
NICKEL	500.0	501.40	100.3
POTASSIUM	12500.0	12240.00	97.9
SELENIUM	500.0	493.50	98.7
SILVER	500.0	493.10	98.6
SODIUM	12500.0	12450.00	99.6
THALLIUM	500.0	490.60	98.1
VANADIUM	500.0	495.90	99.2
ZINC	500.0	502.90	100.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF23A Jun 23, 2015 14:31

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12570.00	100.6
ANTIMONY	500.0	496.40	99.3
ARSENIC	500.0	488.10	97.6
BARIUM	500.0	500.60	100.1
BERYLLIUM	500.0	491.70	98.3
CADMIUM	500.0	501.60	100.3
CALCIUM	12500.0	12490.00	99.9
CHROMIUM	500.0	502.10	100.4
COBALT	500.0	502.30	100.5
COPPER	500.0	500.60	100.1
IRON	12500.0	12540.00	100.3
LEAD	500.0	501.90	100.4
MAGNESIUM	12500.0	12550.00	100.4
MANGANESE	500.0	497.50	99.5
NICKEL	500.0	503.10	100.6
POTASSIUM	12500.0	12720.00	101.8
SELENIUM	500.0	493.80	98.8
SILVER	500.0	497.20	99.4
SODIUM	12500.0	12520.00	100.2
THALLIUM	500.0	500.00	100.0
VANADIUM	500.0	494.70	98.9
ZINC	500.0	495.90	99.2

SAMPLE: CCV

File: IIF23A Jun 23, 2015 15:30

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12560.00	100.5
ANTIMONY	500.0	487.00	97.4
ARSENIC	500.0	479.70	95.9
BARIUM	500.0	496.90	99.4
BERYLLIUM	500.0	492.70	98.5
CADMIUM	500.0	503.90	100.8
CALCIUM	12500.0	12710.00	101.7
CHROMIUM	500.0	519.10	103.8
COBALT	500.0	491.10	98.2
COPPER	500.0	517.10	103.4
IRON	12500.0	13030.00	104.2
LEAD	500.0	507.80	101.6
MAGNESIUM	12500.0	12640.00	101.1
MANGANESE	500.0	511.80	102.4
NICKEL	500.0	500.30	100.1
POTASSIUM	12500.0	13120.00	105.0
SELENIUM	500.0	502.20	100.4
SILVER	500.0	498.70	99.7
SODIUM	12500.0	12760.00	102.1
THALLIUM	500.0	509.60	101.9
VANADIUM	500.0	494.40	98.9
ZINC	500.0	483.60	96.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF23A Jun 23, 2015 16:09

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12450.00	99.6
ANTIMONY	500.0	488.00	97.6
ARSENIC	500.0	479.80	96.0
BARIUM	500.0	496.70	99.3
BERYLLIUM	500.0	492.40	98.5
CADMIUM	500.0	508.00	101.6
CALCIUM	12500.0	12710.00	101.7
CHROMIUM	500.0	541.30	108.3
COBALT	500.0	488.20	97.6
COPPER	500.0	543.90	108.8
IRON	12500.0	13140.00	105.1
LEAD	500.0	507.80	101.6
MAGNESIUM	12500.0	12650.00	101.2
MANGANESE	500.0	514.20	102.8
NICKEL	500.0	501.20	100.2
POTASSIUM	12500.0	13310.00	106.5
SELENIUM	500.0	508.40	101.7
SILVER	500.0	520.80	104.2
SODIUM	12500.0	12720.00	101.8
THALLIUM	500.0	517.60	103.5
VANADIUM	500.0	515.20	103.0
ZINC	500.0	479.30	95.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICV

File: IIF24A Jun 24, 2015 10:28

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10090.00	100.9
ARSENIC	400.0	403.00	100.8
BERYLLIUM	400.0	407.80	102.0
CALCIUM	10000.0	9824.00	98.2
IRON	10000.0	9840.00	98.4
MAGNESIUM	10000.0	10300.00	103.0
MANGANESE	400.0	409.00	102.3
POTASSIUM	13600.0	13570.00	99.8

SAMPLE: CCV

File: IIF24A Jun 24, 2015 11:13

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12460.00	99.7
ARSENIC	500.0	501.00	100.2
BERYLLIUM	500.0	513.40	102.7
CALCIUM	12500.0	12650.00	101.2
IRON	12500.0	12850.00	102.8
MAGNESIUM	12500.0	12880.00	103.0
MANGANESE	500.0	509.30	101.9
POTASSIUM	12500.0	12820.00	102.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF24A Jun 24, 2015 12:12

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13380.00	107.0
ARSENIC	500.0	497.80	99.6
BERYLLIUM	500.0	555.40	111.1•
CALCIUM	12500.0	13680.00	109.4
IRON	12500.0	13860.00	110.9•
MAGNESIUM	12500.0	12850.00	102.8
MANGANESE	500.0	547.30	109.5
POTASSIUM	12500.0	13810.00	110.5

SAMPLE: CCV

File: IIF24A Jun 24, 2015 13:12

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12150.00	97.2
ARSENIC	500.0	504.00	100.8
BERYLLIUM	500.0	507.80	101.6
CALCIUM	12500.0	12270.00	98.2
IRON	12500.0	12320.00	98.6
MAGNESIUM	12500.0	12550.00	100.4
MANGANESE	500.0	505.00	101.0
POTASSIUM	12500.0	12600.00	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF24A Jun 24, 2015 14:11

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12270.00	98.2
ARSENIC	500.0	497.50	99.5
BERYLLIUM	500.0	514.40	102.9
CALCIUM	12500.0	12340.00	98.7
IRON	12500.0	12440.00	99.5
MAGNESIUM	12500.0	12590.00	100.7
MANGANESE	500.0	507.60	101.5
POTASSIUM	12500.0	12830.00	102.6

SAMPLE: CCV

File: IIF24A Jun 24, 2015 15:10

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12320.00	98.6
ARSENIC	500.0	500.00	100.0
BERYLLIUM	500.0	525.20	105.0
CALCIUM	12500.0	12410.00	99.3
IRON	12500.0	12690.00	101.5
MAGNESIUM	12500.0	12550.00	100.4
MANGANESE	500.0	515.90	103.2
POTASSIUM	12500.0	12850.00	102.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF24A Jun 24, 2015 16:10

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12160.00	97.3
ARSENIC	500.0	502.10	100.4
BERYLLIUM	500.0	518.70	103.7
CALCIUM	12500.0	12340.00	98.7
IRON	12500.0	12520.00	100.2
MAGNESIUM	12500.0	12470.00	99.8
MANGANESE	500.0	511.10	102.2
POTASSIUM	12500.0	12760.00	102.1

SAMPLE: CCV

File: IIF24A Jun 24, 2015 17:09

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12670.00	101.4
ARSENIC	500.0	484.10	96.8
BERYLLIUM	500.0	544.00	108.8
CALCIUM	12500.0	12900.00	103.2
IRON	12500.0	13150.00	105.2
MAGNESIUM	12500.0	12100.00	96.8
MANGANESE	500.0	533.80	106.8
POTASSIUM	12500.0	13230.00	105.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF24A Jun 24, 2015 18:08

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11770.00	94.2
ARSENIC	500.0	482.70	96.5
BERYLLIUM	500.0	500.70	100.1
CALCIUM	12500.0	11940.00	95.5
IRON	12500.0	12100.00	96.8
MAGNESIUM	12500.0	12180.00	97.4
MANGANESE	500.0	495.30	99.1
POTASSIUM	12500.0	12280.00	98.2

SAMPLE: CCV

File: IIF24A Jun 24, 2015 19:07

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11350.00	90.8
ARSENIC	500.0	466.10	93.2
BERYLLIUM	500.0	508.30	101.7
CALCIUM	12500.0	11950.00	95.6
IRON	12500.0	12230.00	97.8
MAGNESIUM	12500.0	12380.00	99.0
MANGANESE	500.0	492.70	98.5
POTASSIUM	12500.0	12470.00	99.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF24A Jun 24, 2015 19:47

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12010.00	96.1
ARSENIC	500.0	463.60	92.7
BERYLLIUM	500.0	549.10	109.8
CALCIUM	12500.0	12730.00	101.8
IRON	12500.0	13270.00	106.2
MAGNESIUM	12500.0	12540.00	100.3
MANGANESE	500.0	529.80	106.0
POTASSIUM	12500.0	13290.00	106.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICV

File: IIF25A Jun 25, 2015 10:04

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10260.00	102.6
BERYLLIUM	400.0	419.60	104.9
CALCIUM	10000.0	9978.00	99.8
IRON	10000.0	9999.00	100.0
MAGNESIUM	10000.0	10310.00	103.1

SAMPLE: CCV

File: IIF25A Jun 25, 2015 10:48

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13300.00	106.4
BERYLLIUM	500.0	549.40	109.9
CALCIUM	12500.0	13060.00	104.5
IRON	12500.0	13060.00	104.5
MAGNESIUM	12500.0	12550.00	100.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF25A Jun 25, 2015 10:58

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12410.00	99.3
BERYLLIUM	500.0	517.20	103.4
CALCIUM	12500.0	12310.00	98.5
IRON	12500.0	12250.00	98.0
MAGNESIUM	12500.0	12570.00	100.6

SAMPLE: CCV

File: IIF25A Jun 25, 2015 11:45

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12260.00	98.1
BERYLLIUM	500.0	508.30	101.7
CALCIUM	12500.0	12140.00	97.1
IRON	12500.0	12160.00	97.3
MAGNESIUM	12500.0	12640.00	101.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF25A Jun 25, 2015 12:45

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12350.00	98.8
BERYLLIUM	500.0	510.00	102.0
CALCIUM	12500.0	12320.00	98.6
IRON	12500.0	12380.00	99.0
MAGNESIUM	12500.0	12650.00	101.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICV

File: IIF25B Jun 25, 2015 14:13

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	9929.00	99.3
BERYLLIUM	400.0	405.20	101.3
CADMIUM	400.0	408.50	102.1
CALCIUM	10000.0	9654.00	96.5
IRON	10000.0	9697.00	97.0
MAGNESIUM	10000.0	10170.00	101.7
MANGANESE	400.0	403.10	100.8
POTASSIUM	13600.0	13390.00	98.5
SELENIUM	400.0	402.00	100.5

SAMPLE: CCV

File: IIF25B Jun 25, 2015 14:56

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12200.00	97.6
BERYLLIUM	500.0	499.80	100.0
CADMIUM	500.0	502.60	100.5
CALCIUM	12500.0	12280.00	98.2
IRON	12500.0	12380.00	99.0
MAGNESIUM	12500.0	12550.00	100.4
MANGANESE	500.0	504.00	100.8
POTASSIUM	12500.0	12440.00	99.5
SELENIUM	500.0	503.60	100.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF25B Jun 25, 2015 15:55

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11940.00	95.5
BERYLLIUM	500.0	488.60	97.7
CADMIUM	500.0	504.30	100.9
CALCIUM	12500.0	12100.00	96.8
IRON	12500.0	12240.00	97.9
MAGNESIUM	12500.0	12520.00	100.2
MANGANESE	500.0	497.40	99.5
POTASSIUM	12500.0	12350.00	98.8
SELENIUM	500.0	499.10	99.8

SAMPLE: CCV

File: IIF25B Jun 25, 2015 16:54

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11920.00	95.4
BERYLLIUM	500.0	487.60	97.5
CADMIUM	500.0	503.50	100.7
CALCIUM	12500.0	11950.00	95.6
IRON	12500.0	11990.00	95.9
MAGNESIUM	12500.0	12490.00	99.9
MANGANESE	500.0	489.60	97.9
POTASSIUM	12500.0	12140.00	97.1
SELENIUM	500.0	505.80	101.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: IIF25B Jun 25, 2015 17:53

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12110.00	96.9
BERYLLIUM	500.0	492.00	98.4
CADMIUM	500.0	503.00	100.6
CALCIUM	12500.0	12060.00	96.5
IRON	12500.0	12310.00	98.5
MAGNESIUM	12500.0	12510.00	100.1
MANGANESE	500.0	498.20	99.6
POTASSIUM	12500.0	12620.00	101.0
SELENIUM	500.0	501.30	100.3

SAMPLE: CCV

File: IIF25B Jun 25, 2015 18:51

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	11910.00	95.3
BERYLLIUM	500.0	488.20	97.6
CADMIUM	500.0	507.30	101.5
CALCIUM	12500.0	12100.00	96.8
IRON	12500.0	12800.00	102.4
MAGNESIUM	12500.0	12780.00	102.2
MANGANESE	500.0	510.80	102.2
POTASSIUM	12500.0	12880.00	103.0
SELENIUM	500.0	505.80	101.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICV

File: JIF06A Jun 06, 2015 11:15

Analyte	True	Found	%R (1)
ALUMINUM	400.0	404.00	101.0
ANTIMONY	20.0	20.42	102.1
ARSENIC	20.0	19.50	97.5
BARIUM	20.0	20.67	103.4
CADMIUM	20.0	20.32	101.6
CALCIUM	4000.0	4043.00	101.1
COBALT	20.0	20.66	103.3
COPPER	20.0	20.79	103.9
IRON	4000.0	4070.00	101.8
LEAD	20.0	20.10	100.5
MAGNESIUM	4000.0	3905.00	97.6
MOLYBDENUM	40.0	39.91	99.8
NICKEL	20.0	20.81	104.1
POTASSIUM	4000.0	4039.00	101.0
SELENIUM	20.0	19.99	99.9
SILVER	20.0	19.02	95.1
SODIUM	4000.0	3950.00	98.8
THALLIUM	20.0	20.85	104.3
VANADIUM	20.0	20.14	100.7

SAMPLE: CCV

File: JIF06A Jun 06, 2015 11:45

Analyte	True	Found	%R (1)
ALUMINUM	500.0	518.30	103.7
ANTIMONY	25.0	24.06	96.2
ARSENIC	25.0	24.84	99.4
BARIUM	25.0	24.64	98.6
CADMIUM	25.0	25.23	100.9
CALCIUM	5000.0	5102.00	102.0
COBALT	25.0	25.32	101.3
COPPER	25.0	25.37	101.5
IRON	5000.0	5237.00	104.7
LEAD	25.0	24.71	98.8
MAGNESIUM	5000.0	5018.00	100.4
MOLYBDENUM	25.0	25.18	100.7
NICKEL	25.0	24.98	99.9
POTASSIUM	5000.0	5115.00	102.3
SELENIUM	25.0	25.54	102.2
SILVER	25.0	25.09	100.4
SODIUM	5000.0	5166.00	103.3
THALLIUM	25.0	24.82	99.3
VANADIUM	25.0	25.07	100.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: JIF06A Jun 06, 2015 12:25

Analyte	True	Found	%R (1)
ALUMINUM	500.0	449.10	89.8
ANTIMONY	25.0	26.17	104.7
ARSENIC	25.0	26.07	104.3
BARIUM	25.0	23.92	95.7
CADMIUM	25.0	25.57	102.3
CALCIUM	5000.0	5039.00	100.8
COBALT	25.0	22.94	91.8
COPPER	25.0	23.77	95.1
IRON	5000.0	4818.00	96.4
LEAD	25.0	24.42	97.7
MAGNESIUM	5000.0	4294.00	85.9•
MOLYBDENUM	25.0	26.36	105.4
NICKEL	25.0	22.91	91.6
POTASSIUM	5000.0	4590.00	91.8
SELENIUM	25.0	22.96	91.8
SILVER	25.0	25.51	102.0
SODIUM	5000.0	3821.00	76.4•
THALLIUM	25.0	24.82	99.3
VANADIUM	25.0	22.51	90.0

SAMPLE: CCV

File: JIF06A Jun 06, 2015 13:06

Analyte	True	Found	%R (1)
ALUMINUM	500.0	506.30	101.3
ANTIMONY	25.0	24.92	99.7
ARSENIC	25.0	25.24	101.0
BARIUM	25.0	25.04	100.2
CADMIUM	25.0	25.27	101.1
CALCIUM	5000.0	5101.00	102.0
COBALT	25.0	25.43	101.7
COPPER	25.0	25.32	101.3
IRON	5000.0	5208.00	104.2
LEAD	25.0	24.91	99.6
MAGNESIUM	5000.0	4982.00	99.6
MOLYBDENUM	25.0	25.05	100.2
NICKEL	25.0	25.19	100.8
POTASSIUM	5000.0	5045.00	100.9
SELENIUM	25.0	25.35	101.4
SILVER	25.0	25.38	101.5
SODIUM	5000.0	5036.00	100.7
THALLIUM	25.0	24.73	98.9
VANADIUM	25.0	24.86	99.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: JIF06A Jun 06, 2015 13:47

Analyte	True	Found	%R (1)
ALUMINUM	500.0	513.30	102.7
ANTIMONY	25.0	24.77	99.1
ARSENIC	25.0	24.85	99.4
BARIUM	25.0	24.94	99.8
CADMIUM	25.0	25.16	100.6
CALCIUM	5000.0	5094.00	101.9
COBALT	25.0	25.27	101.1
COPPER	25.0	25.07	100.3
IRON	5000.0	5204.00	104.1
LEAD	25.0	24.75	99.0
MAGNESIUM	5000.0	5128.00	102.6
MOLYBDENUM	25.0	24.69	98.8
NICKEL	25.0	25.36	101.4
POTASSIUM	5000.0	5160.00	103.2
SELENIUM	25.0	25.11	100.4
SILVER	25.0	25.02	100.1
SODIUM	5000.0	5230.00	104.6
THALLIUM	25.0	24.70	98.8
VANADIUM	25.0	25.26	101.0

SAMPLE: CCV

File: JIF06A Jun 06, 2015 14:29

Analyte	True	Found	%R (1)
ALUMINUM	500.0	502.90	100.6
ANTIMONY	25.0	25.67	102.7
ARSENIC	25.0	25.31	101.2
BARIUM	25.0	25.68	102.7
CADMIUM	25.0	24.79	99.2
CALCIUM	5000.0	5190.00	103.8
COBALT	25.0	25.20	100.8
COPPER	25.0	25.27	101.1
IRON	5000.0	5304.00	106.1
LEAD	25.0	24.72	98.9
MAGNESIUM	5000.0	5120.00	102.4
MOLYBDENUM	25.0	24.65	98.6
NICKEL	25.0	25.27	101.1
POTASSIUM	5000.0	5204.00	104.1
SELENIUM	25.0	25.18	100.7
SILVER	25.0	24.75	99.0
SODIUM	5000.0	5418.00	108.4
THALLIUM	25.0	24.86	99.4
VANADIUM	25.0	25.76	103.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: JIF06A Jun 06, 2015 15:10

Analyte	True	Found	%R (1)
ALUMINUM	500.0	521.90	104.4
ANTIMONY	25.0	25.09	100.4
ARSENIC	25.0	25.02	100.1
BARIUM	25.0	25.75	103.0
CADMIUM	25.0	24.76	99.0
CALCIUM	5000.0	5109.00	102.2
COBALT	25.0	26.28	105.1
COPPER	25.0	25.46	101.8
IRON	5000.0	5444.00	108.9
LEAD	25.0	24.62	98.5
MAGNESIUM	5000.0	5316.00	106.3
MOLYBDENUM	25.0	24.42	97.7
NICKEL	25.0	26.16	104.6
POTASSIUM	5000.0	5187.00	103.7
SELENIUM	25.0	25.54	102.2
SILVER	25.0	24.81	99.2
SODIUM	5000.0	5530.00	110.6•
THALLIUM	25.0	24.71	98.8
VANADIUM	25.0	26.41	105.6

SAMPLE: CCV

File: JIF06A Jun 06, 2015 15:52

Analyte	True	Found	%R (1)
ALUMINUM	500.0	516.50	103.3
ANTIMONY	25.0	25.04	100.2
ARSENIC	25.0	25.25	101.0
BARIUM	25.0	25.18	100.7
CADMIUM	25.0	24.76	99.0
CALCIUM	5000.0	5139.00	102.8
COBALT	25.0	25.69	102.8
COPPER	25.0	25.38	101.5
IRON	5000.0	5394.00	107.9
LEAD	25.0	24.59	98.4
MAGNESIUM	5000.0	5227.00	104.5
MOLYBDENUM	25.0	24.26	97.0
NICKEL	25.0	26.05	104.2
POTASSIUM	5000.0	5248.00	105.0
SELENIUM	25.0	25.67	102.7
SILVER	25.0	24.60	98.4
SODIUM	5000.0	5510.00	110.2
THALLIUM	25.0	24.70	98.8
VANADIUM	25.0	26.89	107.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: JIF06A Jun 06, 2015 16:33

Analyte	True	Found	%R (1)
ALUMINUM	500.0	518.30	103.7
ANTIMONY	25.0	25.54	102.2
ARSENIC	25.0	25.36	101.4
BARIUM	25.0	25.49	102.0
CADMIUM	25.0	24.83	99.3
CALCIUM	5000.0	5145.00	102.9
COBALT	25.0	26.10	104.4
COPPER	25.0	25.57	102.3
IRON	5000.0	5419.00	108.4
LEAD	25.0	24.36	97.4
MAGNESIUM	5000.0	5300.00	106.0
MOLYBDENUM	25.0	24.22	96.9
NICKEL	25.0	25.97	103.9
POTASSIUM	5000.0	5209.00	104.2
SELENIUM	25.0	25.38	101.5
SILVER	25.0	24.56	98.2
SODIUM	5000.0	5554.00	111.1•
THALLIUM	25.0	24.47	97.9
VANADIUM	25.0	26.54	106.2

SAMPLE: CCV

File: JIF06A Jun 06, 2015 16:50

Analyte	True	Found	%R (1)
ALUMINUM	500.0	524.10	104.8
ANTIMONY	25.0	25.42	101.7
ARSENIC	25.0	25.09	100.4
BARIUM	25.0	25.70	102.8
CADMIUM	25.0	24.46	97.8
CALCIUM	5000.0	5089.00	101.8
COBALT	25.0	25.69	102.8
COPPER	25.0	25.17	100.7
IRON	5000.0	5396.00	107.9
LEAD	25.0	24.23	96.9
MAGNESIUM	5000.0	5222.00	104.4
MOLYBDENUM	25.0	24.12	96.5
NICKEL	25.0	25.79	103.2
POTASSIUM	5000.0	5268.00	105.4
SELENIUM	25.0	25.64	102.6
SILVER	25.0	24.45	97.8
SODIUM	5000.0	5455.00	109.1
THALLIUM	25.0	24.33	97.3
VANADIUM	25.0	26.30	105.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICV

File: JIF08A Jun 08, 2015 16:15

Analyte	True	Found	%R (1)
ALUMINUM	400.0	407.50	101.9
ANTIMONY	20.0	20.36	101.8
ARSENIC	20.0	19.38	96.9
BARIUM	20.0	20.47	102.3
BERYLLIUM	20.0	19.90	99.5
CADMIUM	20.0	20.17	100.9
CALCIUM	4000.0	4031.00	100.8
CHROMIUM	20.0	20.71	103.6
COBALT	20.0	20.35	101.8
COPPER	20.0	20.90	104.5
IRON	4000.0	4084.00	102.1
LEAD	20.0	20.01	100.1
MAGNESIUM	4000.0	4070.00	101.8
MANGANESE	20.0	20.23	101.2
MOLYBDENUM	40.0	39.55	98.9
NICKEL	20.0	20.49	102.5
POTASSIUM	4000.0	4081.00	102.0
SELENIUM	20.0	20.03	100.2
SILVER	20.0	19.05	95.3
SODIUM	4000.0	4088.00	102.2
THALLIUM	20.0	20.65	103.3
VANADIUM	20.0	20.22	101.1
ZINC	20.0	20.39	102.0

SAMPLE: CCV

File: JIF08A Jun 08, 2015 16:45

Analyte	True	Found	%R (1)
ALUMINUM	500.0	504.40	100.9
ANTIMONY	25.0	24.73	98.9
ARSENIC	25.0	24.88	99.5
BARIUM	25.0	24.34	97.4
BERYLLIUM	25.0	24.88	99.5
CADMIUM	25.0	24.94	99.8
CALCIUM	5000.0	5044.00	100.9
CHROMIUM	25.0	24.87	99.5
COBALT	25.0	24.57	98.3
COPPER	25.0	25.26	101.0
IRON	5000.0	4999.00	100.0
LEAD	25.0	24.56	98.2
MAGNESIUM	5000.0	4977.00	99.5
MANGANESE	25.0	24.56	98.2
MOLYBDENUM	25.0	24.92	99.7
NICKEL	25.0	24.70	98.8
POTASSIUM	5000.0	5112.00	102.2
SELENIUM	25.0	25.22	100.9
SILVER	25.0	24.93	99.7
SODIUM	5000.0	4919.00	98.4
THALLIUM	25.0	24.37	97.5
VANADIUM	25.0	24.66	98.6
ZINC	25.0	24.77	99.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: JIF08A Jun 08, 2015 16:54

Analyte	True	Found	%R (1)
ALUMINUM	500.0	498.80	99.8
ANTIMONY	25.0	25.03	100.1
ARSENIC	25.0	24.80	99.2
BARIUM	25.0	25.20	100.8
BERYLLIUM	25.0	24.83	99.3
CADMIUM	25.0	24.96	99.8
CALCIUM	5000.0	5026.00	100.5
CHROMIUM	25.0	24.79	99.2
COBALT	25.0	24.69	98.8
COPPER	25.0	24.84	99.4
IRON	5000.0	5037.00	100.7
LEAD	25.0	24.79	99.2
MAGNESIUM	5000.0	5010.00	100.2
MANGANESE	25.0	24.38	97.5
MOLYBDENUM	25.0	24.79	99.2
NICKEL	25.0	24.60	98.4
POTASSIUM	5000.0	4995.00	99.9
SELENIUM	25.0	24.58	98.3
SILVER	25.0	24.87	99.5
SODIUM	5000.0	4918.00	98.4
THALLIUM	25.0	24.68	98.7
VANADIUM	25.0	24.60	98.4
ZINC	25.0	25.07	100.3

SAMPLE: CCV

File: JIF08A Jun 08, 2015 17:34

Analyte	True	Found	%R (1)
ALUMINUM	500.0	514.80	103.0
ANTIMONY	25.0	24.64	98.6
ARSENIC	25.0	24.87	99.5
BARIUM	25.0	24.72	98.9
BERYLLIUM	25.0	24.60	98.4
CADMIUM	25.0	24.99	100.0
CALCIUM	5000.0	5053.00	101.1
CHROMIUM	25.0	24.86	99.4
COBALT	25.0	24.67	98.7
COPPER	25.0	24.93	99.7
IRON	5000.0	5125.00	102.5
LEAD	25.0	25.00	100.0
MAGNESIUM	5000.0	5113.00	102.3
MANGANESE	25.0	24.92	99.7
MOLYBDENUM	25.0	24.76	99.0
NICKEL	25.0	24.92	99.7
POTASSIUM	5000.0	5064.00	101.3
SELENIUM	25.0	24.75	99.0
SILVER	25.0	24.98	99.9
SODIUM	5000.0	5036.00	100.7
THALLIUM	25.0	24.92	99.7
VANADIUM	25.0	24.97	99.9
ZINC	25.0	24.91	99.6

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: JIF08A Jun 08, 2015 18:13

Analyte	True	Found	%R (1)
ALUMINUM	500.0	505.90	101.2
ANTIMONY	25.0	24.58	98.3
ARSENIC	25.0	24.73	98.9
BARIUM	25.0	24.40	97.6
BERYLLIUM	25.0	24.30	97.2
CADMIUM	25.0	24.84	99.4
CALCIUM	5000.0	5026.00	100.5
CHROMIUM	25.0	24.78	99.1
COBALT	25.0	24.64	98.6
COPPER	25.0	25.00	100.0
IRON	5000.0	5057.00	101.1
LEAD	25.0	24.73	98.9
MAGNESIUM	5000.0	5027.00	100.5
MANGANESE	25.0	24.75	99.0
MOLYBDENUM	25.0	24.43	97.7
NICKEL	25.0	24.70	98.8
POTASSIUM	5000.0	5088.00	101.8
SELENIUM	25.0	24.76	99.0
SILVER	25.0	24.79	99.2
SODIUM	5000.0	4980.00	99.6
THALLIUM	25.0	24.52	98.1
VANADIUM	25.0	24.88	99.5
ZINC	25.0	25.20	100.8

SAMPLE: CCV

File: JIF08A Jun 08, 2015 18:53

Analyte	True	Found	%R (1)
ALUMINUM	500.0	505.00	101.0
ANTIMONY	25.0	24.86	99.4
ARSENIC	25.0	24.68	98.7
BARIUM	25.0	25.09	100.4
BERYLLIUM	25.0	24.55	98.2
CADMIUM	25.0	24.75	99.0
CALCIUM	5000.0	5065.00	101.3
CHROMIUM	25.0	24.78	99.1
COBALT	25.0	24.42	97.7
COPPER	25.0	24.72	98.9
IRON	5000.0	5017.00	100.3
LEAD	25.0	24.60	98.4
MAGNESIUM	5000.0	5122.00	102.4
MANGANESE	25.0	24.75	99.0
MOLYBDENUM	25.0	24.48	97.9
NICKEL	25.0	25.02	100.1
POTASSIUM	5000.0	5099.00	102.0
SELENIUM	25.0	24.91	99.6
SILVER	25.0	24.79	99.2
SODIUM	5000.0	5049.00	101.0
THALLIUM	25.0	24.35	97.4
VANADIUM	25.0	24.86	99.4
ZINC	25.0	25.12	100.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: JIF08A Jun 08, 2015 19:34

Analyte	True	Found	%R (1)
ALUMINUM	500.0	515.80	103.2
ANTIMONY	25.0	24.97	99.9
ARSENIC	25.0	24.55	98.2
BARIUM	25.0	25.49	102.0
BERYLLIUM	25.0	24.32	97.3
CADMIUM	25.0	24.79	99.2
CALCIUM	5000.0	5084.00	101.7
CHROMIUM	25.0	24.94	99.8
COBALT	25.0	24.67	98.7
COPPER	25.0	25.16	100.6
IRON	5000.0	5112.00	102.2
LEAD	25.0	24.92	99.7
MAGNESIUM	5000.0	5098.00	102.0
MANGANESE	25.0	24.93	99.7
MOLYBDENUM	25.0	24.62	98.5
NICKEL	25.0	24.64	98.6
POTASSIUM	5000.0	5226.00	104.5
SELENIUM	25.0	24.98	99.9
SILVER	25.0	24.55	98.2
SODIUM	5000.0	5107.00	102.1
THALLIUM	25.0	24.95	99.8
VANADIUM	25.0	25.09	100.4
ZINC	25.0	24.50	98.0

SAMPLE: CCV

File: JIF08A Jun 08, 2015 20:15

Analyte	True	Found	%R (1)
ALUMINUM	500.0	517.40	103.5
ANTIMONY	25.0	25.07	100.3
ARSENIC	25.0	24.87	99.5
BARIUM	25.0	25.17	100.7
BERYLLIUM	25.0	23.94	95.8
CADMIUM	25.0	24.84	99.4
CALCIUM	5000.0	5052.00	101.0
CHROMIUM	25.0	25.01	100.0
COBALT	25.0	24.83	99.3
COPPER	25.0	25.06	100.2
IRON	5000.0	5075.00	101.5
LEAD	25.0	24.70	98.8
MAGNESIUM	5000.0	5168.00	103.4
MANGANESE	25.0	24.83	99.3
MOLYBDENUM	25.0	24.60	98.4
NICKEL	25.0	24.78	99.1
POTASSIUM	5000.0	5140.00	102.8
SELENIUM	25.0	25.06	100.2
SILVER	25.0	24.74	99.0
SODIUM	5000.0	5111.00	102.2
THALLIUM	25.0	24.56	98.2
VANADIUM	25.0	25.29	101.2
ZINC	25.0	25.11	100.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: JIF08A Jun 08, 2015 20:56

Analyte	True	Found	%R (1)
ALUMINUM	500.0	512.00	102.4
ANTIMONY	25.0	24.84	99.4
ARSENIC	25.0	24.62	98.5
BARIUM	25.0	24.68	98.7
BERYLLIUM	25.0	24.24	97.0
CADMIUM	25.0	24.39	97.6
CALCIUM	5000.0	5057.00	101.1
CHROMIUM	25.0	25.02	100.1
COBALT	25.0	24.42	97.7
COPPER	25.0	24.62	98.5
IRON	5000.0	5071.00	101.4
LEAD	25.0	24.45	97.8
MAGNESIUM	5000.0	5126.00	102.5
MANGANESE	25.0	24.57	98.3
MOLYBDENUM	25.0	24.41	97.6
NICKEL	25.0	24.65	98.6
POTASSIUM	5000.0	5131.00	102.6
SELENIUM	25.0	24.96	99.8
SILVER	25.0	24.53	98.1
SODIUM	5000.0	5057.00	101.1
THALLIUM	25.0	24.33	97.3
VANADIUM	25.0	24.86	99.4
ZINC	25.0	24.59	98.4

SAMPLE: CCV

File: JIF08A Jun 08, 2015 21:38

Analyte	True	Found	%R (1)
ALUMINUM	500.0	517.30	103.5
ANTIMONY	25.0	24.86	99.4
ARSENIC	25.0	24.62	98.5
BARIUM	25.0	25.05	100.2
BERYLLIUM	25.0	24.58	98.3
CADMIUM	25.0	24.60	98.4
CALCIUM	5000.0	5039.00	100.8
CHROMIUM	25.0	24.86	99.4
COBALT	25.0	24.35	97.4
COPPER	25.0	24.75	99.0
IRON	5000.0	5059.00	101.2
LEAD	25.0	24.88	99.5
MAGNESIUM	5000.0	5166.00	103.3
MANGANESE	25.0	24.79	99.2
MOLYBDENUM	25.0	24.55	98.2
NICKEL	25.0	24.53	98.1
POTASSIUM	5000.0	5118.00	102.4
SELENIUM	25.0	24.93	99.7
SILVER	25.0	24.81	99.2
SODIUM	5000.0	5006.00	100.1
THALLIUM	25.0	24.52	98.1
VANADIUM	25.0	24.92	99.7
ZINC	25.0	25.00	100.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCV

File: JIF08A Jun 08, 2015 22:12

Analyte	True	Found	%R (1)
ALUMINUM	500.0	524.00	104.8
ANTIMONY	25.0	25.29	101.2
ARSENIC	25.0	25.34	101.4
BARIUM	25.0	25.57	102.3
BERYLLIUM	25.0	24.06	96.2
CADMIUM	25.0	25.22	100.9
CALCIUM	5000.0	5145.00	102.9
CHROMIUM	25.0	25.39	101.6
COBALT	25.0	25.12	100.5
COPPER	25.0	25.73	102.9
IRON	5000.0	5171.00	103.4
LEAD	25.0	25.33	101.3
MAGNESIUM	5000.0	5269.00	105.4
MANGANESE	25.0	25.45	101.8
MOLYBDENUM	25.0	25.30	101.2
NICKEL	25.0	25.17	100.7
POTASSIUM	5000.0	5119.00	102.4
SELENIUM	25.0	25.61	102.4
SILVER	25.0	25.07	100.3
SODIUM	5000.0	5131.00	102.6
THALLIUM	25.0	25.18	100.7
VANADIUM	25.0	25.60	102.4
ZINC	25.0	25.50	102.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: PQL

File: HIF09A Jun 09, 2015 15:23

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.20	100.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: PQL

File: HIF10A Jun 10, 2015 17:00

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.19	95.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: PQL

File: IIF09B Jun 09, 2015 19:19

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	307.10	102.4
ANTIMONY	8.0	8.97	112.1
ARSENIC	8.0	9.51	118.9
BARIUM	5.0	5.43	108.6
BERYLLIUM	5.0	5.46	109.2
CADMIUM	5.0	5.16	103.2
CALCIUM	100.0	103.10	103.1
CHROMIUM	10.0	10.62	106.2
COBALT	10.0	10.78	107.8
COPPER	25.0	26.33	105.3
IRON	100.0	103.40	103.4
LEAD	5.0	4.65	93.0
MAGNESIUM	100.0	106.90	106.9
MANGANESE	5.0	5.35	107.0
NICKEL	10.0	10.63	106.3
POTASSIUM	1000.0	1020.00	102.0
SELENIUM	10.0	9.29	92.9
SILVER	10.0	10.90	109.0
SODIUM	1000.0	942.20	94.2
THALLIUM	15.0	16.50	110.0
VANADIUM	10.0	10.23	102.3
ZINC	20.0	21.91	109.6

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: PQL

File: IIF23A Jun 23, 2015 13:01

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	292.60	97.5
ANTIMONY	8.0	8.71	108.9
ARSENIC	8.0	7.50	93.8
BARIUM	5.0	5.86	117.2
BERYLLIUM	5.0	6.07	121.4•
CADMIUM	5.0	6.10	122.0•
CALCIUM	100.0	93.88	93.9
CHROMIUM	10.0	11.80	118.0
COBALT	10.0	11.38	113.8
COPPER	25.0	27.68	110.7
IRON	100.0	104.50	104.5
LEAD	5.0	5.69	113.8
MAGNESIUM	100.0	109.20	109.2
MANGANESE	5.0	6.75	135.0•
NICKEL	10.0	11.95	119.5
POTASSIUM	1000.0	1092.00	109.2
SELENIUM	10.0	7.96	79.6
SILVER	10.0	10.73	107.3
SODIUM	1000.0	1027.00	102.7
THALLIUM	15.0	16.72	111.5
VANADIUM	10.0	11.19	111.9
ZINC	20.0	22.53	112.7

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: PQL

File: IIF24A Jun 24, 2015 10:40

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	291.30	97.1
ARSENIC	8.0	8.29	103.6
BERYLLIUM	5.0	5.16	103.2
CALCIUM	100.0	111.70	111.7
IRON	100.0	97.54	97.5
MAGNESIUM	100.0	107.40	107.4
MANGANESE	5.0	5.18	103.6
POTASSIUM	1000.0	1110.00	111.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: PQL

File: IIF25A Jun 25, 2015 10:16

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	312.60	104.2
BERYLLIUM	5.0	5.26	105.2
CALCIUM	100.0	99.93	99.9
IRON	100.0	91.48	91.5
MAGNESIUM	100.0	108.10	108.1

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: PQL

File: IIF25B Jun 25, 2015 14:25

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	311.80	103.9
BERYLLIUM	5.0	5.01	100.2
CADMIUM	5.0	5.00	100.0
CALCIUM	100.0	105.30	105.3
IRON	100.0	100.20	100.2
MAGNESIUM	100.0	110.90	110.9
MANGANESE	5.0	5.71	114.2
POTASSIUM	1000.0	946.00	94.6
SELENIUM	10.0	12.02	120.2

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: PQL

File: JIF06A Jun 06, 2015 11:22

Analyte	TRUE	FOUND	% R
ALUMINUM	60.0	61.29	102.2
ANTIMONY	0.2	0.21	105.0
ARSENIC	1.0	0.82	82.0
BARIUM	0.4	0.43	107.5
CADMIUM	0.2	0.19	95.0
CALCIUM	20.0	20.03	100.2
COBALT	0.2	0.20	100.0
COPPER	0.6	0.70	116.7
IRON	20.0	19.11	95.5
LEAD	0.2	0.20	100.0
MAGNESIUM	20.0	20.36	101.8
MOLYBDENUM	1.0	1.04	104.0
NICKEL	0.4	0.41	102.5
POTASSIUM	200.0	204.40	102.2
SELENIUM	1.0	1.13	113.0
SILVER	0.2	0.21	105.0
SODIUM	200.0	214.90	107.5
THALLIUM	0.2	0.19	95.0
VANADIUM	1.0	1.14	114.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: PQL

File: JIF08A Jun 08, 2015 16:22

Analyte	TRUE	FOUND	% R
ALUMINUM	60.0	59.69	99.5
ANTIMONY	0.2	0.21	105.0
ARSENIC	1.0	0.88	88.0
BARIUM	0.4	0.44	110.0
BERYLLIUM	0.2	0.19	95.0
CADMIUM	0.2	0.20	100.0
CALCIUM	20.0	18.40	92.0
CHROMIUM	1.0	1.16	116.0
COBALT	0.2	0.21	105.0
COPPER	0.6	0.62	103.3
IRON	20.0	19.58	97.9
LEAD	0.2	0.20	100.0
MAGNESIUM	20.0	21.07	105.4
MANGANESE	0.4	0.56	140.0•
MOLYBDENUM	1.0	1.03	103.0
NICKEL	0.4	0.42	105.0
POTASSIUM	200.0	197.60	98.8
SELENIUM	1.0	1.17	117.0
SILVER	0.2	0.20	100.0
SODIUM	200.0	208.20	104.1
THALLIUM	0.2	0.20	100.0
VANADIUM	1.0	1.14	114.0
ZINC	2.0	2.50	125.0•

SAMPLE: PQL

File: JIF08A Jun 08, 2015 16:51

Analyte	TRUE	FOUND	% R
ALUMINUM	60.0	58.56	97.6
ANTIMONY	0.2	0.22	110.0
ARSENIC	1.0	0.92	92.0
BARIUM	0.4	0.41	102.5
BERYLLIUM	0.2	0.20	100.0
CADMIUM	0.2	0.19	95.0
CALCIUM	20.0	21.08	105.4
CHROMIUM	1.0	1.02	102.0
COBALT	0.2	0.20	100.0
COPPER	0.6	0.67	111.7
IRON	20.0	16.78	83.9
LEAD	0.2	0.20	100.0
MAGNESIUM	20.0	20.22	101.1
MANGANESE	0.4	0.41	102.5
MOLYBDENUM	1.0	1.10	110.0
NICKEL	0.4	0.45	112.5
POTASSIUM	200.0	204.20	102.1
SELENIUM	1.0	1.36	136.0•
SILVER	0.2	0.20	100.0
SODIUM	200.0	207.90	104.0
THALLIUM	0.2	0.21	105.0
VANADIUM	1.0	1.08	108.0
ZINC	2.0	2.14	107.0

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICB

File: HIF09A Jun 09, 2015 15:21

Analyte	Result	C
MERCURY	-0.035	U

SAMPLE: CCB

File: HIF09A Jun 09, 2015 15:27

Analyte	Result	C
MERCURY	-0.044	U

SAMPLE: CCB

File: HIF09A Jun 09, 2015 15:51

Analyte	Result	C
MERCURY	-0.041	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICB

File: HIF10A Jun 10, 2015 16:58

Analyte	Result	C
MERCURY	0.023	U

SAMPLE: CCB

File: HIF10A Jun 10, 2015 17:04

Analyte	Result	C
MERCURY	-0.046	U

SAMPLE: CCB

File: HIF10A Jun 10, 2015 17:59

Analyte	Result	C
MERCURY	-0.033	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: HIF10A Jun 10, 2015 18:25

Analyte	Result	C
MERCURY	-0.040	U

SAMPLE: CCB

File: HIF10A Jun 10, 2015 18:50

Analyte	Result	C
MERCURY	-0.028	U

SAMPLE: CCB

File: HIF10A Jun 10, 2015 19:16

Analyte	Result	C
MERCURY	0.023	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: HIF10A Jun 10, 2015 19:42

Analyte	Result	C
MERCURY	-0.034	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICB

File: IIF09B Jun 09, 2015 19:14

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	1.800	U
ARSENIC	2.400	U
BARIUM	0.500	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
CHROMIUM	0.310	U
COBALT	0.250	U
COPPER	0.470	U
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	45.000	U
SELENIUM	2.800	U
SILVER	0.410	U
SODIUM	-48.950	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

SAMPLE: CCB

File: IIF09B Jun 09, 2015 19:57

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	4.231	J
ARSENIC	2.574	J
BARIUM	0.500	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
CHROMIUM	0.310	U
COBALT	0.250	U
COPPER	-0.499	U
IRON	9.529	J
LEAD	1.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	45.000	U
SELENIUM	3.679	J
SILVER	0.410	U
SODIUM	-124.500	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

SAMPLE: CCB

File: IIF09B Jun 09, 2015 20:57

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	3.627	J
ARSENIC	2.400	U
BARIUM	0.500	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
CHROMIUM	0.310	U
COBALT	0.292	J
COPPER	0.470	U
IRON	5.527	J
LEAD	1.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	45.000	U
SELENIUM	2.800	U
SILVER	0.410	U
SODIUM	-156.100	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: IIF09B Jun 09, 2015 21:57

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	5.795	B
ARSENIC	2.400	U
BARIUM	0.500	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
CHROMIUM	0.310	U
COBALT	0.250	U
COPPER	0.470	U
IRON	8.863	J
LEAD	1.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	45.000	U
SELENIUM	2.800	U
SILVER	0.410	U
SODIUM	-184.700	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	1.207	J

SAMPLE: CCB

File: IIF09B Jun 09, 2015 22:58

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	5.695	B
ARSENIC	2.672	J
BARIUM	0.500	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
CHROMIUM	0.325	J
COBALT	0.250	U
COPPER	0.470	U
IRON	6.419	J
LEAD	1.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	-57.160	U
SELENIUM	2.800	U
SILVER	0.410	U
SODIUM	-214.600	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICB

File: IIF23A Jun 23, 2015 12:56

Analyte	Result	C
ALUMINUM	42.120	J
ANTIMONY	1.800	U
ARSENIC	2.400	U
BARIUM	1.355	J
BERYLLIUM	0.130	U
CADMIUM	-0.080	U
CALCIUM	51.380	J
CHROMIUM	1.004	J
COBALT	0.250	U
COPPER	1.687	J
IRON	18.080	J
LEAD	1.200	U
MAGNESIUM	40.510	J
MANGANESE	1.345	J
NICKEL	0.420	U
POTASSIUM	189.700	J
SELENIUM	2.800	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	-1.728	U
VANADIUM	0.250	U
ZINC	0.510	U

SAMPLE: CCB

File: IIF23A Jun 23, 2015 13:37

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	-4.295	U
ARSENIC	2.400	U
BARIUM	0.729	J
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
CHROMIUM	0.521	J
COBALT	0.250	U
COPPER	1.292	J
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	146.000	J
SELENIUM	-6.263	U
SILVER	0.410	U
SODIUM	63.970	J
THALLIUM	-2.032	U
VANADIUM	-0.812	U
ZINC	0.510	U

SAMPLE: CCB

File: IIF23A Jun 23, 2015 14:36

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	1.800	U
ARSENIC	2.400	U
BARIUM	0.873	J
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
CHROMIUM	0.310	U
COBALT	-0.462	U
COPPER	2.154	J
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	8.570	J
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	279.300	J
SELENIUM	-7.974	B
SILVER	0.410	U
SODIUM	307.200	J
THALLIUM	1.500	U
VANADIUM	-0.448	U
ZINC	0.510	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: IIF23A Jun 23, 2015 15:35

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	1.800	U
ARSENIC	2.400	U
BARIUM	0.500	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
CHROMIUM	0.575	J
COBALT	0.250	U
COPPER	1.058	J
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	11.440	J
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	124.000	J
SELENIUM	2.800	U
SILVER	0.410	U
SODIUM	199.400	J
THALLIUM	-1.995	U
VANADIUM	0.250	U
ZINC	0.510	U

SAMPLE: CCB

File: IIF23A Jun 23, 2015 16:14

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	1.800	U
ARSENIC	2.400	U
BARIUM	1.153	J
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	-11.460	U
CHROMIUM	0.321	J
COBALT	0.271	J
COPPER	1.324	J
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	14.190	J
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	133.500	J
SELENIUM	2.800	U
SILVER	0.410	U
SODIUM	187.200	J
THALLIUM	-2.048	U
VANADIUM	0.250	U
ZINC	0.510	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICB

File: IIF24A Jun 24, 2015 10:35

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BERYLLIUM	0.130	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U
MANGANESE	-1.780	U
POTASSIUM	45.000	U

SAMPLE: CCB

File: IIF24A Jun 24, 2015 11:18

Analyte	Result	C
ALUMINUM	33.050	J
ARSENIC	2.400	U
BERYLLIUM	0.130	U
CALCIUM	12.520	J
IRON	5.321	J
MAGNESIUM	7.055	J
MANGANESE	1.100	U
POTASSIUM	218.500	J

SAMPLE: CCB

File: IIF24A Jun 24, 2015 12:17

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BERYLLIUM	0.130	U
CALCIUM	11.890	J
IRON	9.252	J
MAGNESIUM	10.620	J
MANGANESE	-1.335	U
POTASSIUM	117.800	J

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: IIF24A Jun 24, 2015 13:17

Analyte	Result	C
ALUMINUM	24.810	J
ARSENIC	2.400	U
BERYLLIUM	0.130	U
CALCIUM	18.490	J
IRON	11.640	J
MAGNESIUM	6.439	J
MANGANESE	1.100	U
POTASSIUM	163.400	J

SAMPLE: CCB

File: IIF24A Jun 24, 2015 14:16

Analyte	Result	C
ALUMINUM	50.150	J
ARSENIC	2.400	U
BERYLLIUM	0.130	U
CALCIUM	14.590	J
IRON	8.566	J
MAGNESIUM	12.600	J
MANGANESE	1.100	U
POTASSIUM	214.000	J

SAMPLE: CCB

File: IIF24A Jun 24, 2015 15:15

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BERYLLIUM	0.229	J
CALCIUM	23.480	J
IRON	10.650	J
MAGNESIUM	12.750	J
MANGANESE	1.100	U
POTASSIUM	109.200	J

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: IIF24A Jun 24, 2015 16:15

Analyte	Result	C
ALUMINUM	40.980	J
ARSENIC	2.400	U
BERYLLIUM	0.190	J
CALCIUM	21.520	J
IRON	10.570	J
MAGNESIUM	9.610	J
MANGANESE	1.100	U
POTASSIUM	125.200	J

SAMPLE: CCB

File: IIF24A Jun 24, 2015 17:14

Analyte	Result	C
ALUMINUM	25.040	J
ARSENIC	3.848	J
BERYLLIUM	0.211	J
CALCIUM	16.510	J
IRON	18.290	J
MAGNESIUM	14.320	J
MANGANESE	1.100	U
POTASSIUM	114.700	J

SAMPLE: CCB

File: IIF24A Jun 24, 2015 18:13

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BERYLLIUM	0.215	J
CALCIUM	25.730	J
IRON	16.920	J
MAGNESIUM	15.350	J
MANGANESE	1.100	U
POTASSIUM	119.200	J

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: IIF24A Jun 24, 2015 19:12

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BERYLLIUM	0.130	U
CALCIUM	20.030	J
IRON	21.670	J
MAGNESIUM	11.260	J
MANGANESE	1.100	U
POTASSIUM	45.000	U

SAMPLE: CCB

File: IIF24A Jun 24, 2015 19:51

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BERYLLIUM	0.600	B
CALCIUM	24.360	J
IRON	30.560	J
MAGNESIUM	18.560	J
MANGANESE	1.100	U
POTASSIUM	45.000	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICB

File: IIF25A Jun 25, 2015 10:11

Analyte	Result	C
ALUMINUM	24.000	U
BERYLLIUM	0.130	U
CALCIUM	-15.450	U
IRON	-11.560	U
MAGNESIUM	-6.872	U

SAMPLE: CCB

File: IIF25A Jun 25, 2015 10:53

Analyte	Result	C
ALUMINUM	24.000	U
BERYLLIUM	0.130	U
CALCIUM	9.700	U
IRON	-6.477	U
MAGNESIUM	5.200	U

SAMPLE: CCB

File: IIF25A Jun 25, 2015 11:03

Analyte	Result	C
ALUMINUM	-34.960	U
BERYLLIUM	0.240	J
CALCIUM	12.380	J
IRON	-8.255	U
MAGNESIUM	5.200	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: IIF25A Jun 25, 2015 11:50

Analyte	Result	C
ALUMINUM	24.000	U
BERYLLIUM	0.130	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U

SAMPLE: CCB

File: IIF25A Jun 25, 2015 12:50

Analyte	Result	C
ALUMINUM	24.000	U
BERYLLIUM	0.130	U
CALCIUM	9.700	U
IRON	-5.694	U
MAGNESIUM	8.574	J

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICB

File: IIF25B Jun 25, 2015 14:20

Analyte	Result	C
ALUMINUM	30.610	J
BERYLLIUM	0.130	U
CADMIUM	0.109	J
CALCIUM	9.700	U
IRON	6.523	J
MAGNESIUM	5.200	U
MANGANESE	1.100	U
POTASSIUM	45.000	U
SELENIUM	3.013	J

SAMPLE: CCB

File: IIF25B Jun 25, 2015 15:01

Analyte	Result	C
ALUMINUM	24.000	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	9.826	J
MANGANESE	1.100	U
POTASSIUM	45.000	U
SELENIUM	2.800	U

SAMPLE: CCB

File: IIF25B Jun 25, 2015 16:00

Analyte	Result	C
ALUMINUM	31.820	J
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
POTASSIUM	45.000	U
SELENIUM	2.800	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: IIF25B Jun 25, 2015 16:59

Analyte	Result	C
ALUMINUM	24.000	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
IRON	7.015	J
MAGNESIUM	5.200	U
MANGANESE	1.100	U
POTASSIUM	-54.480	U
SELENIUM	2.800	U

SAMPLE: CCB

File: IIF25B Jun 25, 2015 17:58

Analyte	Result	C
ALUMINUM	34.720	J
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	13.220	J
IRON	5.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
POTASSIUM	96.140	J
SELENIUM	3.722	J

SAMPLE: CCB

File: IIF25B Jun 25, 2015 18:56

Analyte	Result	C
ALUMINUM	24.000	U
BERYLLIUM	0.130	U
CADMIUM	0.110	J
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
POTASSIUM	-183.400	U
SELENIUM	2.800	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICB

File: JIF06A Jun 06, 2015 11:18

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.013	J
ARSENIC	0.220	U
BARIUM	0.037	U
CADMIUM	0.006	J
CALCIUM	4.800	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MOLYBDENUM	0.059	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.005	J
SODIUM	7.100	U
THALLIUM	0.011	J
VANADIUM	0.110	U

SAMPLE: CCB

File: JIF06A Jun 06, 2015 11:49

Analyte	Result	C
ALUMINUM	0.731	J
ANTIMONY	0.014	J
ARSENIC	0.220	U
BARIUM	0.037	U
CADMIUM	0.003	U
CALCIUM	4.800	U
COBALT	0.009	U
COPPER	0.059	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MOLYBDENUM	0.120	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.008	J
VANADIUM	0.110	U

SAMPLE: CCB

File: JIF06A Jun 06, 2015 12:29

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.022	J
ARSENIC	0.220	U
BARIUM	0.037	U
CADMIUM	0.006	J
CALCIUM	27.360	B
COBALT	0.013	J
COPPER	0.038	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MOLYBDENUM	0.047	J
NICKEL	0.014	U
POTASSIUM	43.120	J
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	11.340	J
THALLIUM	0.012	J
VANADIUM	0.110	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: JIF06A Jun 06, 2015 13:10

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.014	J
ARSENIC	0.220	U
BARIUM	0.037	U
CADMIUM	0.006	J
CALCIUM	4.800	U
COBALT	0.009	U
COPPER	0.042	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.285	J
MOLYBDENUM	0.035	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.009	J
VANADIUM	0.110	U

SAMPLE: CCB

File: JIF06A Jun 06, 2015 13:50

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.012	J
ARSENIC	0.220	U
BARIUM	0.037	U
CADMIUM	0.003	U
CALCIUM	4.800	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MOLYBDENUM	0.029	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.006	J
SODIUM	7.100	U
THALLIUM	0.010	J
VANADIUM	0.110	U

SAMPLE: CCB

File: JIF06A Jun 06, 2015 14:32

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.014	J
ARSENIC	0.220	U
BARIUM	0.037	U
CADMIUM	0.003	J
CALCIUM	4.800	U
COBALT	0.009	U
COPPER	0.037	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MOLYBDENUM	0.027	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	14.000	J
THALLIUM	0.007	J
VANADIUM	0.110	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: JIF06A Jun 06, 2015 15:13

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.014	J
ARSENIC	0.220	U
BARIUM	0.037	U
CADMIUM	0.003	U
CALCIUM	4.800	U
COBALT	0.009	U
COPPER	0.031	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MOLYBDENUM	0.022	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.006	U
VANADIUM	0.110	U

SAMPLE: CCB

File: JIF06A Jun 06, 2015 15:55

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.014	J
ARSENIC	0.220	U
BARIUM	0.037	U
CADMIUM	0.005	J
CALCIUM	4.800	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MOLYBDENUM	0.030	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.008	J
VANADIUM	0.110	U

SAMPLE: CCB

File: JIF06A Jun 06, 2015 16:36

Analyte	Result	C
ALUMINUM	0.563	J
ANTIMONY	0.016	J
ARSENIC	0.220	U
BARIUM	0.037	U
CADMIUM	0.008	J
CALCIUM	4.800	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.738	J
MOLYBDENUM	0.034	J
NICKEL	0.015	J
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.006	J
SODIUM	16.260	J
THALLIUM	0.010	J
VANADIUM	0.110	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: JIF06A Jun 06, 2015 16:54

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.010	J
ARSENIC	0.220	U
BARIUM	0.037	U
CADMIUM	0.003	U
CALCIUM	4.800	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MOLYBDENUM	0.029	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	J
SODIUM	7.100	U
THALLIUM	0.009	J
VANADIUM	0.110	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICB

File: JIF08A Jun 08, 2015 16:19

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.018	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.006	J
CADMIUM	0.003	U
CALCIUM	4.800	U
CHROMIUM	-0.051	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.075	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.006	U
VANADIUM	0.110	U
ZINC	0.120	U

SAMPLE: CCB

File: JIF08A Jun 08, 2015 16:48

Analyte	Result	C
ALUMINUM	3.121	J
ANTIMONY	0.025	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.008	J
CADMIUM	0.006	J
CALCIUM	5.601	J
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.045	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	3.751	J
MANGANESE	0.031	U
MOLYBDENUM	0.177	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.799	J
THALLIUM	0.007	J
VANADIUM	0.110	U
ZINC	0.120	U

SAMPLE: CCB

File: JIF08A Jun 08, 2015 16:57

Analyte	Result	C
ALUMINUM	2.118	J
ANTIMONY	0.016	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.005	J
CADMIUM	0.003	U
CALCIUM	4.800	U
CHROMIUM	-0.054	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	2.766	J
MANGANESE	0.031	U
MOLYBDENUM	0.110	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.006	U
VANADIUM	0.110	U
ZINC	0.120	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB
File: JIF08A Jun 08, 2015 17:37

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.016	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.008	J
CADMIUM	0.007	J
CALCIUM	5.597	J
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.032	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.045	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.421	J
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.014	J
VANADIUM	0.110	U
ZINC	0.120	U

SAMPLE: CCB
File: JIF08A Jun 08, 2015 18:16

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.013	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.003	U
CADMIUM	0.003	U
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.040	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.323	J
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.007	J
VANADIUM	0.110	U
ZINC	0.120	U

SAMPLE: CCB
File: JIF08A Jun 08, 2015 18:56

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.012	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.004	J
CADMIUM	0.003	U
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.040	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.447	J
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.006	U
VANADIUM	0.110	U
ZINC	0.120	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB
File: JIF08A Jun 08, 2015 19:37

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.011	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.004	J
CADMIUM	0.003	U
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.039	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.379	J
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.008	J
VANADIUM	0.110	U
ZINC	0.120	U

SAMPLE: CCB
File: JIF08A Jun 08, 2015 20:19

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.007	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.006	J
CADMIUM	0.003	U
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.033	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.464	J
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.006	U
VANADIUM	0.110	U
ZINC	0.120	U

SAMPLE: CCB
File: JIF08A Jun 08, 2015 20:59

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.017	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.005	J
CADMIUM	0.006	J
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.012	J
COPPER	0.030	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.036	J
NICKEL	0.022	J
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.008	J
VANADIUM	0.110	U
ZINC	0.120	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: CCB

File: JIF08A Jun 08, 2015 21:41

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.015	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.006	J
CADMIUM	0.004	J
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.029	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.033	J
NICKEL	0.019	J
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.008	J
VANADIUM	0.110	U
ZINC	0.120	U

SAMPLE: CCB

File: JIF08A Jun 08, 2015 22:15

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.018	J
ARSENIC	0.220	U
BARIUM	0.044	J
BERYLLIUM	0.005	J
CADMIUM	0.007	J
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.030	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.044	J
NICKEL	0.015	J
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.006	U
VANADIUM	0.110	U
ZINC	0.120	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSIF05IMS2

Matrix: SOIL **SDG Name:** SI3862

QC Batch ID: IF05IMS2

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ALUMINUM	2.4	J
ANTIMONY	0.050	U
ARSENIC	0.40	U
BARIUM	0.081	J
BERYLLIUM	0.020	U
CADMIUM	0.020	U
CALCIUM	18	B
CHROMIUM	0.20	J
COBALT	0.0056	J
COPPER	0.12	J
IRON	8.6	J
LEAD	0.018	J
MAGNESIUM	5.5	J
MANGANESE	0.28	B
NICKEL	0.040	J
POTASSIUM	14	J
SELENIUM	0.30	U
SILVER	0.040	U
SODIUM	7.9	J
THALLIUM	0.040	U
VANADIUM	0.40	U
ZINC	0.28	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSIF08HGS1

Matrix: SOIL **SDG Name:** SI3862

QC Batch ID: IF08HGS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
MERCURY	0.017	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBT1225D

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF08ICW3

Concentration Units : ug/L

Analyte	RESULT	C
ALUMINUM	500	U
ANTIMONY	25	U
ARSENIC	11	J
BARIUM	53.2	B
BERYLLIUM	2.5	U
CADMIUM	15	U
CALCIUM	160	J
CHROMIUM	20	U
COBALT	1.4	J
COPPER	9.0	J
IRON	80	J
LEAD	20	U
MAGNESIUM	60	J
MANGANESE	20	U
MERCURY	0.10	U
NICKEL	20	U
POTASSIUM	2500	U
SELENIUM	35	U
SILVER	20	U
SODIUM	2500	U
THALLIUM	25	U
VANADIUM	2.3	J
ZINC	20	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWIF08ICW3

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF08ICW3

Concentration Units : ug/L

Analyte	RESULT	C
ALUMINUM	100	U
ANTIMONY	5.0	U
ARSENIC	5.0	U
BARIUM	0.36	J
BERYLLIUM	0.50	U
CADMIUM	3.0	U
CALCIUM	80	U
CHROMIUM	4.0	U
COBALT	4.0	U
COPPER	10	U
IRON	80	U
LEAD	4.0	U
MAGNESIUM	13	J
MANGANESE	4.0	U
NICKEL	4.0	U
POTASSIUM	500	U
SELENIUM	7.0	U
SILVER	4.0	U
SODIUM	500	U
THALLIUM	5.0	U
VANADIUM	4.0	U
ZINC	10	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWIF08IMW2

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF08IMW2

Concentration Units : ug/L

Analyte	RESULT	C
ALUMINUM	40	U
ANTIMONY	0.50	U
ARSENIC	4.0	U
BARIUM	1.0	U
BERYLLIUM	0.20	U
CADMIUM	0.20	U
CALCIUM	80	U
CHROMIUM	0.72	J
COBALT	0.30	U
COPPER	0.45	J
IRON	25	J
LEAD	0.50	U
MAGNESIUM	10	J
MANGANESE	0.45	J
NICKEL	1.2	U
POTASSIUM	400	U
SELENIUM	1.4	J
SILVER	0.40	U
SODIUM	45	J
THALLIUM	0.40	U
VANADIUM	4.0	U
ZINC	8.0	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWIF10HGW2

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF10HGW2

Concentration Units : ug/L

Analyte	RESULT	C
MERCURY	0.10	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWIF10HGW3

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF10HGW3

Concentration Units : ug/L

Analyte	RESULT	C
MERCURY	0.10	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWIF19ICW1

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF19ICW1

Concentration Units : ug/L

Analyte	RESULT	C
ALUMINUM	100	U
ANTIMONY	1.7	J
ARSENIC	5.0	U
BARIUM	3.0	U
BERYLLIUM	0.50	U
CADMIUM	3.0	U
CALCIUM	80	U
CHROMIUM	1.1	J
COBALT	4.0	U
COPPER	1.9	J
IRON	77.2	J
LEAD	4.0	U
MAGNESIUM	17	J
MANGANESE	4.0	U
NICKEL	4.0	U
POTASSIUM	50	J
SELENIUM	4.4	J
SILVER	4.0	U
SODIUM	240	J
THALLIUM	5.0	U
VANADIUM	0.25	J
ZINC	10	U

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICSA

File: IIF09B Jun 09, 2015 19:40

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	490000	98.0
ANTIMONY	0	0	
ARSENIC	0	1	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	0	
CALCIUM	500000	463900	92.8
CHROMIUM	0	0	
COBALT	0	1	
COPPER	0	1	
IRON	200000	190300	95.2
LEAD	0	0	
MAGNESIUM	500000	434300	86.9
MANGANESE	0	2	
NICKEL	0	-3	
POTASSIUM	0	149	
SELENIUM	0	1	
SILVER	0	0	
SODIUM	0	173	
THALLIUM	0	2	
VANADIUM	0	0	
ZINC	0	1	

SAMPLE: ICSAB

File: IIF09B Jun 09, 2015 19:45

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	482500	96.5
ANTIMONY	600	589	98.2
ARSENIC	100	92	92.0
BARIUM	500	508	101.6
BERYLLIUM	500	513	102.6
CADMIUM	1000	940	94.0
CALCIUM	500000	436700	87.3
CHROMIUM	500	491	98.2
COBALT	500	469	93.8
COPPER	500	517	103.4
IRON	200000	181100	90.5
LEAD	50	47	94.0
MAGNESIUM	500000	422000	84.4
MANGANESE	500	506	101.2
NICKEL	1000	910	91.0
POTASSIUM	20000	22280	111.4
SELENIUM	50	60	120.0
SILVER	200	214	107.0
SODIUM	20000	21380	106.9
THALLIUM	100	92	92.0
VANADIUM	500	501	100.2
ZINC	1000	944	94.4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICSA

File: IIF23A Jun 23, 2015 13:22

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	500800	100.2
ANTIMONY	0	1	
ARSENIC	0	-5	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	1	
CALCIUM	500000	472100	94.4
CHROMIUM	0	1	
COBALT	0	1	
COPPER	0	3	
IRON	200000	186600	93.3
LEAD	0	-3	
MAGNESIUM	500000	469200	93.8
MANGANESE	0	-1	
NICKEL	0	-2	
POTASSIUM	0	542	
SELENIUM	0	-1	
SILVER	0	2	
SODIUM	0	144	
THALLIUM	0	0	
VANADIUM	0	-1	
ZINC	0	1	

SAMPLE: ICSAB

File: IIF23A Jun 23, 2015 13:26

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	504300	100.9
ANTIMONY	600	617	102.8
ARSENIC	100	98	98.0
BARIUM	500	517	103.4
BERYLLIUM	500	516	103.2
CADMIUM	1000	973	97.3
CALCIUM	500000	466900	93.4
CHROMIUM	500	493	98.6
COBALT	500	493	98.6
COPPER	500	506	101.2
IRON	200000	185500	92.8
LEAD	50	47	94.0
MAGNESIUM	500000	471300	94.3
MANGANESE	500	485	97.0
NICKEL	1000	953	95.3
POTASSIUM	20000	21030	105.2
SELENIUM	50	57	114.0
SILVER	200	214	107.0
SODIUM	20000	20700	103.5
THALLIUM	100	97	97.0
VANADIUM	500	512	102.4
ZINC	1000	968	96.8

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICSA

File: IIF24A Jun 24, 2015 11:02

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	490400	98.1
ARSENIC	0	3	
BERYLLIUM	0	0	
CALCIUM	500000	463000	92.6
IRON	200000	189700	94.8
MAGNESIUM	500000	470900	94.2
MANGANESE	0	-2	
POTASSIUM	0	403	

SAMPLE: ICSAB

File: IIF24A Jun 24, 2015 11:07

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	501300	100.3
ARSENIC	100	100	100.0
BERYLLIUM	500	532	106.4
CALCIUM	500000	485500	97.1
IRON	200000	195500	97.8
MAGNESIUM	500000	469800	94.0
MANGANESE	500	500	100.0
POTASSIUM	20000	21990	109.9

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICSA

File: IIF25A Jun 25, 2015 10:37

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	502600	100.5
BERYLLIUM	0	0	
CALCIUM	500000	464700	92.9
IRON	200000	188100	94.0
MAGNESIUM	500000	469000	93.8

SAMPLE: ICSAB

File: IIF25A Jun 25, 2015 10:42

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	508400	101.7
BERYLLIUM	500	528	105.6
CALCIUM	500000	471400	94.3
IRON	200000	188700	94.3
MAGNESIUM	500000	469300	93.9

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICSA

File: IIF25B Jun 25, 2015 14:45

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	488200	97.6
BERYLLIUM	0	0	
CADMIUM	0	1	
CALCIUM	500000	450400	90.1
IRON	200000	185300	92.7
MAGNESIUM	500000	468600	93.7
MANGANESE	0	-1	
POTASSIUM	0	81	
SELENIUM	0	3	

SAMPLE: ICSAB

File: IIF25B Jun 25, 2015 14:50

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	479600	95.9
BERYLLIUM	500	491	98.2
CADMIUM	1000	956	95.6
CALCIUM	500000	443200	88.6
IRON	200000	180000	90.0
MAGNESIUM	500000	460800	92.2
MANGANESE	500	467	93.4
POTASSIUM	20000	20420	102.1
SELENIUM	50	49	98.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICSA

File: JIF06A Jun 06, 2015 11:35

Analyte	TRUE	FOUND	% R
ALUMINUM	100000	91490	91.5
ANTIMONY	0	0	
ARSENIC	0	0	
BARIUM	0	0	
CADMIUM	0	0	
CALCIUM	100000	90110	90.1
COBALT	0	0	
COPPER	0	1	
IRON	100000	90240	90.2
LEAD	0	0	
MAGNESIUM	100000	90030	90.0
MOLYBDENUM	2000	1922	96.1
NICKEL	0	0	
POTASSIUM	100000	91520	91.5
SELENIUM	0	0	
SILVER	0	0	
SODIUM	100000	92680	92.7
THALLIUM	0	0	
VANADIUM	0	0	

SAMPLE: ICSAB

File: JIF06A Jun 06, 2015 11:38

Analyte	TRUE	FOUND	% R
ALUMINUM	100000	90970	91.0
ANTIMONY	20	19	95.0
ARSENIC	20	20	100.0
BARIUM	21	20	95.2
CADMIUM	20	18	90.0
CALCIUM	100000	90870	90.9
COBALT	20	19	95.0
COPPER	20	19	95.0
IRON	100000	90440	90.4
LEAD	20	20	100.0
MAGNESIUM	100000	89650	89.6
MOLYBDENUM	2000	1966	98.3
NICKEL	20	18	90.0
POTASSIUM	100000	93950	94.0
SELENIUM	20	19	95.0
SILVER	20	18	90.0
SODIUM	100000	94570	94.6
THALLIUM	20	20	100.0
VANADIUM	20	20	100.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Concentration Units: ug/L

SAMPLE: ICSA

File: JIF08A Jun 08, 2015 16:34

Analyte	TRUE	FOUND	% R
ALUMINUM	100000	91380	91.4
ANTIMONY	0	0	
ARSENIC	0	0	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	0	
CALCIUM	100000	89410	89.4
CHROMIUM	0	2	
COBALT	0	0	
COPPER	0	1	
IRON	100000	89200	89.2
LEAD	0	0	
MAGNESIUM	100000	89980	90.0
MANGANESE	0	0	
MOLYBDENUM	2000	1921	96.0
NICKEL	0	0	
POTASSIUM	100000	94030	94.0
SELENIUM	0	0	
SILVER	0	0	
SODIUM	100000	92110	92.1
THALLIUM	0	0	
VANADIUM	0	0	
ZINC	0	3	

SAMPLE: ICSAB

File: JIF08A Jun 08, 2015 16:38

Analyte	TRUE	FOUND	% R
ALUMINUM	100000	91040	91.0
ANTIMONY	20	19	95.0
ARSENIC	20	20	100.0
BARIUM	21	20	95.2
BERYLLIUM	20	20	100.0
CADMIUM	20	18	90.0
CALCIUM	100000	89920	89.9
CHROMIUM	20	21	105.0
COBALT	20	19	95.0
COPPER	20	20	100.0
IRON	100000	90680	90.7
LEAD	20	20	100.0
MAGNESIUM	100000	90770	90.8
MANGANESE	20	19	95.0
MOLYBDENUM	2000	1962	98.1
NICKEL	20	18	90.0
POTASSIUM	100000	94500	94.5
SELENIUM	20	19	95.0
SILVER	20	18	90.0
SODIUM	100000	92730	92.7
THALLIUM	20	20	100.0
VANADIUM	20	20	100.0
ZINC	20	21	105.0

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FBS

Matrix: SOIL **SDG Name:** SI3862

Percent Solids: 92.6 **Lab Sample ID:** SI3862-001P

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
MERCURY, TOTAL	0.156		0.015	U	0.14	111.1		80	120	CV

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FBS

Matrix: SOIL **SDG Name:** SI3862

Percent Solids: 92.6 **Lab Sample ID:** SI3862-001S

Concentration Units : mg/Kg drywt

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, TOTAL	2410		1470		172.68	545.7	N	80	120	MS
ANTIMONY, TOTAL	3.83		0.018	J	8.63	44.2	N	80	120	MS
ARSENIC, TOTAL	9.47		2.34		8.63	82.6		80	120	MS
BARIUM, TOTAL	170		6.07		172.68	95.2		80	120	MS
BERYLLIUM, TOTAL	4.04		0.0483	J	4.32	92.5		80	120	MS
CADMIUM, TOTAL	19.7		0.0066	J	21.58	91.1		80	120	MS
CALCIUM, TOTAL	234		66.3		215.85	77.8	N	80	120	MS
CHROMIUM, TOTAL	20.0		2.41		17.27	101.7		80	120	MS
COBALT, TOTAL	46.5		0.642		43.17	106.2		80	120	MS
COPPER, TOTAL	23.3		2.77		21.58	95.1		80	120	MS
IRON, TOTAL	2580		3090		86.34	-589.9	N	80	120	MS
LEAD, TOTAL	10.1		2.65		8.63	86.7		80	120	MS
MAGNESIUM, TOTAL	453		32.7		431.7	97.4		80	120	MS
MANGANESE, TOTAL	55.9		11.4		43.17	103.0		80	120	MS
MERCURY, TOTAL	0.156		0.015	U	0.14	111.2		80	120	CV
NICKEL, TOTAL	45.7		2.15		43.17	100.8		80	120	MS
POTASSIUM, TOTAL	936		169		863.39	88.9		80	120	MS
SELENIUM, TOTAL	7.73		0.20	J	8.63	87.2		80	120	MS
SILVER, TOTAL	3.77		0.035	U	4.32	87.2		80	120	MS
SODIUM, TOTAL	617		16	J	647.54	92.9		80	120	MS
THALLIUM, TOTAL	7.95		0.023	J	8.63	91.8		80	120	MS
VANADIUM, TOTAL	66.6		19.1		43.17	110.2		80	120	MS
ZINC, TOTAL	42.6		2.16		43.17	93.7		80	120	MS

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FBS

Matrix: WATER **SDG Name:** SI3862

Percent Solids: 0.00 **Lab Sample ID:** SI3862-006P

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, SPLP	10900		180	J	10000	107.1		80	120	P
ANTIMONY, SPLP	512		25	U	500	102.3		80	120	P
ARSENIC, SPLP	502		25	U	500	100.4		80	120	P
BARIUM, SPLP	10500		126		10000	104.1		80	120	P
BERYLLIUM, SPLP	250		2.5	U	250	100.1		80	120	P
CADMIUM, SPLP	1280		15	U	1250	102.4		80	120	P
CALCIUM, SPLP	14400		320	J	12500	112.5		80	120	P
CHROMIUM, SPLP	1100		20	U	1000	110.0		80	120	P
COBALT, SPLP	2640		1.8	J	2500	105.5		80	120	P
COPPER, SPLP	1380		50	U	1250	110.8		80	120	P
IRON, SPLP	6900		170	J	5000	134.7	N	80	120	P
LEAD, SPLP	539		20	U	500	107.8		80	120	P
MAGNESIUM, SPLP	26200		100	J	25000	104.4		80	120	P
MANGANESE, SPLP	2620		14	J	2500	104.2		80	120	P
MERCURY, SPLP	0.992		0.10	U	1	99.2		80	120	CV
NICKEL, SPLP	2680		20	U	2500	107.2		80	120	P
POTASSIUM, SPLP	51400		2500	U	50000	102.9		80	120	P
SELENIUM, SPLP	518		35	U	500	103.7		80	120	P
SILVER, SPLP	255		20	U	250	102.0		80	120	P
SODIUM, SPLP	40400		2500	U	37500	107.8		80	120	P
THALLIUM, SPLP	532		25	U	500	106.3		80	120	P
VANADIUM, SPLP	2650		20	U	2500	105.8		80	120	P
ZINC, SPLP	2630		41.6	J	2500	103.7		80	120	P

Comments:

5A

SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FBS

Matrix: WATER **SDG Name:** SI3862

Percent Solids: 0.00 **Lab Sample ID:** SI3862-006S

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, SPLP	10900		180	J	10000	107.0		80	120	P
ANTIMONY, SPLP	489		25	U	500	97.7		80	120	P
ARSENIC, SPLP	493		25	U	500	98.7		80	120	P
BARIUM, SPLP	10400		126		10000	102.9		80	120	P
BERYLLIUM, SPLP	248		2.5	U	250	99.1		80	120	P
CADMIUM, SPLP	1250		15	U	1250	100.2		80	120	P
CALCIUM, SPLP	14100		320	J	12500	110.3		80	120	P
CHROMIUM, SPLP	1080		20	U	1000	108.2		80	120	P
COBALT, SPLP	2600		1.8	J	2500	104.1		80	120	P
COPPER, SPLP	1360		50	U	1250	108.7		80	120	P
IRON, SPLP	6870		170	J	5000	134.0	N	80	120	P
LEAD, SPLP	528		20	U	500	105.6		80	120	P
MAGNESIUM, SPLP	26000		100	J	25000	103.5		80	120	P
MANGANESE, SPLP	2590		14	J	2500	103.0		80	120	P
MERCURY, SPLP	0.936		0.10	U	1	93.6		80	120	CV
NICKEL, SPLP	2640		20	U	2500	105.6		80	120	P
POTASSIUM, SPLP	51600		2500	U	50000	103.1		80	120	P
SELENIUM, SPLP	495		35	U	500	98.9		80	120	P
SILVER, SPLP	253		20	U	250	101.1		80	120	P
SODIUM, SPLP	40200		2500	U	37500	107.2		80	120	P
THALLIUM, SPLP	524		25	U	500	104.9		80	120	P
VANADIUM, SPLP	2600		20	U	2500	104.0		80	120	P
ZINC, SPLP	2590		41.6	J	2500	102.0		80	120	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FBS

Matrix: SOIL **SDG Name:** SI3862

Percent Solids: 92.6 **Lab Sample ID:** SI3862-001A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, TOTAL	3900		3380		600	86.5		75	125	MS
ANTIMONY, TOTAL	1.98		0.041	J	2	97.0		75	125	MS
ARSENIC, TOTAL	14.8		5.37		10	94.5		75	125	MS
BARIUM, TOTAL	17.8		13.9		4	98.0		75	125	MS
BERYLLIUM, TOTAL	2.07		0.111	J	2	98.1		75	125	MS
CADMIUM, TOTAL	1.94		0.015	J	2	96.3		75	125	MS
CALCIUM, TOTAL	401		152		200	124.4		75	125	MS
CHROMIUM, TOTAL	15.6		5.54		10	100.3		75	125	MS
COBALT, TOTAL	3.54		1.48		2	103.1		75	125	MS
COPPER, TOTAL	12.4		6.37		6	99.7		75	125	MS
IRON, TOTAL	7230		7100		200	64.5	A	75	125	MS
LEAD, TOTAL	7.98		6.08		2	95.1		75	125	MS
MAGNESIUM, TOTAL	292		75.2		200	108.7		75	125	MS
MANGANESE, TOTAL	29.9		26.1		4	94.5		75	125	MS
MERCURY, TOTAL	0.703		0.031	U	1	70.3	A	75	125	CV
NICKEL, TOTAL	9.05		4.93		4	102.9		75	125	MS
POTASSIUM, TOTAL	2410		388		2000	101.3		75	125	MS
SELENIUM, TOTAL	10.3		0.46	J	10	98.6		75	125	MS
SILVER, TOTAL	1.92		0.013	U	2	95.8		75	125	MS
SODIUM, TOTAL	2030		36	J	2000	99.8		75	125	MS
THALLIUM, TOTAL	2.01		0.054	J	2	97.8		75	125	MS
VANADIUM, TOTAL	53.8		44.0		10	97.5		75	125	MS
ZINC, TOTAL	28.7		4.97		20	118.6		75	125	MS

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FBS

Matrix: WATER **SDG Name:** SI3862

Percent Solids: 0.00 **Lab Sample ID:** SI3862-006A

Concentration Units : ug/L

Analyte	Spiked Sample Result	C	Sample Result	C	Spike Added	%R	Q	Control Limits (%R) Low	High	M
ALUMINUM, SPLP	23100		36	J	20500	112.5		75	125	P
ANTIMONY, SPLP	382		1.3	U	500	76.4		75	125	P
ARSENIC, SPLP	371		1.4	U	500	74.3	A	75	125	P
BARIUM, SPLP	410		25.2		500	77.0		75	125	P
BERYLLIUM, SPLP	391		0.10	U	500	78.2		75	125	P
CADMIUM, SPLP	397		0.049	U	500	79.5		75	125	P
CALCIUM, SPLP	5080		64	J	5500	91.2		75	125	P
CHROMIUM, SPLP	418		0.36	U	500	83.5		75	125	P
COBALT, SPLP	393		0.36	J	500	78.5		75	125	P
COPPER, SPLP	410		0.63	U	500	81.9		75	125	P
IRON, SPLP	5320		34	J	5500	96.1		75	125	P
LEAD, SPLP	405		1.1	U	500	81.0		75	125	P
MAGNESIUM, SPLP	4470		21	J	5500	80.9		75	125	P
MANGANESE, SPLP	405		2.9	J	500	80.3		75	125	P
MERCURY, SPLP	1.02		0.013	U	1	102.3		75	125	CV
NICKEL, SPLP	399		0.28	U	500	79.8		75	125	P
POTASSIUM, SPLP	8970		41.	U	10000	89.7		75	125	P
SELENIUM, SPLP	388		2.4	U	500	77.7		75	125	P
SILVER, SPLP	392		0.27	U	500	78.4		75	125	P
SODIUM, SPLP	5270		24.	U	5500	95.9		75	125	P
THALLIUM, SPLP	410		1.1	U	500	82.0		75	125	P
VANADIUM, SPLP	398		0.23	U	500	79.5		75	125	P
ZINC, SPLP	392		8.31	J	500	76.7		75	125	P

Comments:

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FB

Matrix: SOIL **SDG Name:** SI3862

Percent Solids: 92.6 **Lab Sample ID:** SI3862-001

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
MERCURY, TOTAL		0.156		0.156		0.1		CV

Comments:

FORM VD - IN

5D

SPIKE DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FB

Matrix: WATER **SDG Name:** SI3862

Percent Solids: 0.00 **Lab Sample ID:** SI3862-006

Concentration Units : ug/L

Analyte	Control Limits	Spike Result	C	Spike Dup. Result	C	RPD	Q	M
ALUMINUM, SPLP		10900		10900		0.1		P
ANTIMONY, SPLP		489		512		4.6		P
ARSENIC, SPLP		493		502		1.7		P
BARIUM, SPLP		10400		10500		1.1		P
BERYLLIUM, SPLP		248		250		1.0		P
CADMIUM, SPLP		1250		1280		2.1		P
CALCIUM, SPLP		14100		14400		1.9		P
CHROMIUM, SPLP		1080		1100		1.6		P
COBALT, SPLP		2600		2640		1.4		P
COPPER, SPLP		1360		1380		1.9		P
IRON, SPLP		6870		6900		0.5		P
LEAD, SPLP		528		539		2.1		P
MAGNESIUM, SPLP		26000		26200		0.9		P
MANGANESE, SPLP		2590		2620		1.1		P
MERCURY, SPLP		0.936		0.992		5.8		CV
NICKEL, SPLP		2640		2680		1.5		P
POTASSIUM, SPLP		51600		51400		0.2		P
SELENIUM, SPLP		495		518		4.7		P
SILVER, SPLP		253		255		0.9		P
SODIUM, SPLP		40200		40400		0.6		P
THALLIUM, SPLP		524		532		1.3		P
VANADIUM, SPLP		2600		2650		1.7		P
ZINC, SPLP		2590		2630		1.6		P

Comments:

DUPLICATES

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FBD

Matrix: SOIL **SDG Name:** SI3862

Percent Solids: 92.6 **Lab Sample ID:** SI3862-001D

Concentration Units : mg/Kg drywt

Analyte	Control Limits	Sample Result	C	Duplicate Result	C	RPD	Q	M
ALUMINUM, TOTAL		1472.2020		848.5941		53.7	*	MS
ANTIMONY, TOTAL		0.0181	J	0.0123	U	200.0		MS
ARSENIC, TOTAL		2.3382		1.6776		32.9	*	MS
BARIUM, TOTAL		6.0707		3.7691		46.8	*	MS
BERYLLIUM, TOTAL		0.0483	J	0.0333	J	36.8		MS
CADMIUM, TOTAL		0.0066	J	0.0022	U	200.0		MS
CALCIUM, TOTAL		66.3209		42.1294		44.6	*	MS
CHROMIUM, TOTAL		2.4091		2.2834		5.4		MS
COBALT, TOTAL		0.6419		0.3833		50.4	*	MS
COPPER, TOTAL		2.7734		2.0379		30.6	*	MS
IRON, TOTAL		3089.7530		2437.4235		23.6	*	MS
LEAD, TOTAL		2.6467		1.7364		41.5	*	MS
MAGNESIUM, TOTAL		32.7253		17.6072		60.1	*	MS
MANGANESE, TOTAL		11.3755		10.3790		9.2		MS
NICKEL, TOTAL		2.1463		2.1215		1.2		MS
POTASSIUM, TOTAL		168.8920		82.3354	J	68.9	*	MS
SELENIUM, TOTAL		0.2015	J	0.0983	J	68.8		MS
SILVER, TOTAL		0.0056	U	0.0036	U			MS
SODIUM, TOTAL		15.8013	J	11.0970	J	35.0		MS
THALLIUM, TOTAL		0.0234	J	0.0119	J	65.2		MS
VANADIUM, TOTAL		19.1304		17.9293		6.5		MS
ZINC, TOTAL		2.1628		1.4874		37.0	*	MS

Comments:

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSOIF05IMS2

Matrix: SOIL **SDG Name:** SI3862

QC Batch ID: IF05IMS2

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	200	209	104.4	80	120
ANTIMONY	10.0	9.83	98.3	80	120
ARSENIC	10.0	10.0	100.3	80	120
BARIUM	200	201	100.7	80	120
BERYLLIUM	5.00	4.78	95.6	80	120
CADMIUM	25.0	24.0	96.0	80	120
CALCIUM	250	232	92.9	80	120
CHROMIUM	20.0	20.3	101.6	80	120
COBALT	50.0	56.6	113.2	80	120
COPPER	25.0	25.8	103.2	80	120
IRON	100	106	105.7	80	120
LEAD	10.0	9.82	98.2	80	120
MAGNESIUM	500	529	105.8	80	120
MANGANESE	50.0	52.4	104.9	80	120
NICKEL	50.0	53.2	106.3	80	120
POTASSIUM	1000	1020	101.6	80	120
SELENIUM	10.0	9.53	95.3	80	120
SILVER	5.00	4.62	92.4	80	120
SODIUM	750	760	101.4	80	120
THALLIUM	10.0	9.91	99.1	80	120
VANADIUM	50.0	56.6	113.2	80	120
ZINC	50.0	48.7	97.4	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSOIF08HGS1

Matrix: SOIL **SDG Name:** SI3862

QC Batch ID: IF08HGS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	0.833	0.922	110.8	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWIF08ICW3

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF08ICW3

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	2000	2050	102.6	80	120
ANTIMONY	100	106	105.5	80	120
ARSENIC	100	104	104.5	80	120
BARIUM	2000	2080	104.3	80	120
BERYLLIUM	50.0	53.4	106.9	80	120
CADMIUM	250	266	106.6	80	120
CALCIUM	2500	2510	100.5	80	120
CHROMIUM	200	217	108.6	80	120
COBALT	500	545	108.9	80	120
COPPER	250	270	108.1	80	120
IRON	1000	1140	114.2	80	120
LEAD	100	107	106.8	80	120
MAGNESIUM	5000	5230	104.7	80	120
MANGANESE	500	530	106.1	80	120
NICKEL	500	541	108.3	80	120
POTASSIUM	10000	10200	102.1	80	120
SELENIUM	100	102	101.8	80	120
SILVER	50.0	51.8	103.7	80	120
SODIUM	7500	7570	101.0	80	120
THALLIUM	100	109	109.4	80	120
VANADIUM	500	532	106.4	80	120
ZINC	500	539	107.8	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWIF08IMW2

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF08IMW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	2000	2140	106.9	80	120
ANTIMONY	100	100	100.4	80	120
ARSENIC	100	98.8	98.8	80	120
BARIUM	2000	2080	104.0	80	120
BERYLLIUM	50.0	47.4	94.9	80	120
CADMIUM	250	250	100.2	80	120
CALCIUM	2500	2390	95.5	80	120
CHROMIUM	200	211	105.4	80	120
COBALT	500	549	109.8	80	120
COPPER	250	264	105.8	80	120
IRON	1000	1100	109.9	80	120
LEAD	100	104	104.3	80	120
MAGNESIUM	5000	5320	106.5	80	120
MANGANESE	500	546	109.2	80	120
NICKEL	500	520	104.0	80	120
POTASSIUM	10000	10400	103.6	80	120
SELENIUM	100	100	100.0	80	120
SILVER	50.0	48.5	97.0	80	120
SODIUM	7500	7600	101.4	80	120
THALLIUM	100	103	102.8	80	120
VANADIUM	500	544	108.8	80	120
ZINC	500	510	101.9	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWIF10HGW2

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF10HGW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.00	5.10	102.0	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWIF10HGW3

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF10HGW3

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.00	4.20	84.0	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWIF19ICW1

Matrix: WATER **SDG Name:** SI3862

QC Batch ID: IF19ICW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	2000	2190	109.5	80	120
ANTIMONY	100	105	105.3	80	120
ARSENIC	100	95.4	95.4	80	120
BARIUM	2000	2120	106.2	80	120
BERYLLIUM	50.0	52.5	105.0	80	120
CADMIUM	250	255	102.0	80	120
CALCIUM	2500	2630	105.1	80	120
CHROMIUM	200	206	103.0	80	120
COBALT	500	551	110.2	80	120
COPPER	250	257	102.7	80	120
IRON	1000	1110	110.9	80	120
LEAD	100	109	109.2	80	120
MAGNESIUM	5000	5450	109.0	80	120
MANGANESE	500	510	102.1	80	120
NICKEL	500	557	111.4	80	120
POTASSIUM	10000	10300	103.1	80	120
SELENIUM	100	102	102.4	80	120
SILVER	50.0	48.3	96.5	80	120
SODIUM	7500	8210	109.5	80	120
THALLIUM	100	111	110.9	80	120
VANADIUM	500	495	99.0	80	120
ZINC	500	537	107.3	80	120

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FBL

Matrix: SOIL **SDG Name:** SI3862

Lab Sample ID: SI3862-001L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ALUMINUM, TOTAL	3380		3430		1.5		MS
ANTIMONY, TOTAL	0.041	J	0.20	U	100.0		MS
ARSENIC, TOTAL	5.37		6.0		11.7		MS
BARIUM, TOTAL	13.9		13.8		0.7		MS
BERYLLIUM, TOTAL	0.111	J	0.13	J	17.1		MS
CADMIUM, TOTAL	0.015	J	0.075	U	100.0		MS
CALCIUM, TOTAL	152		180		18.4		MS
CHROMIUM, TOTAL	5.54		5.43		2.0		MS
COBALT, TOTAL	1.48		1.47		0.7		MS
COPPER, TOTAL	6.37		6.7		5.2		MS
IRON, TOTAL	7100		6740		5.1		MS
LEAD, TOTAL	6.08		6.14		1.0		MS
MAGNESIUM, TOTAL	75.2		80	J	6.4		MS
MANGANESE, TOTAL	26.1		26.3		0.8		MS
MERCURY, TOTAL	0.031	U	0.16	U			CV
NICKEL, TOTAL	4.93		4.98		1.0		MS
POTASSIUM, TOTAL	388		410	J	5.7		MS
SELENIUM, TOTAL	0.46	J	0.92	J	100.0		MS
SILVER, TOTAL	0.013	U	0.065	U			MS
SODIUM, TOTAL	36	J	42	J	16.7		MS
THALLIUM, TOTAL	0.054	J	0.095	U	100.0		MS
VANADIUM, TOTAL	44.0		43.5		1.1		MS
ZINC, TOTAL	4.97		5.8	J	16.7		MS

ICP SERIAL DILUTION

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE4TS-FBL

Matrix: WATER **SDG Name:** SI3862

Lab Sample ID: SI3862-006L

Concentration Units: ug/L

Analyte	Sample Result	C	Dilution Result	C	% Difference	Q	M
ALUMINUM, SPLP	36	J	75.	U	100.0		P
ANTIMONY, SPLP	1.3	U	16	J			P
ARSENIC, SPLP	1.4	U	7.0	U			P
BARIUM, SPLP	25.2		64.1		154.4		P
BERYLLIUM, SPLP	0.10	U	0.50	U			P
CADMIUM, SPLP	0.049	U	0.25	U			P
CALCIUM, SPLP	64	J	240	J	275.0		P
CHROMIUM, SPLP	0.36	U	3.4	J			P
COBALT, SPLP	0.36	J	1.2	U	100.0		P
COPPER, SPLP	0.63	U	4.2	J			P
IRON, SPLP	34	J	100	J	194.1		P
LEAD, SPLP	1.1	U	5.5	U			P
MAGNESIUM, SPLP	21	J	95	J	352.4		P
MANGANESE, SPLP	2.9	J	7.0	J	141.4		P
MERCURY, SPLP	0.013	U	0.065	U			CV
NICKEL, SPLP	0.28	U	1.4	U			P
POTASSIUM, SPLP	41.	U	580	J			P
SELENIUM, SPLP	2.4	U	12.	U			P
SILVER, SPLP	0.27	U	1.4	U			P
SODIUM, SPLP	24.	U	1100	J			P
THALLIUM, SPLP	1.1	U	5.5	U			P
VANADIUM, SPLP	0.23	U	1.2	U			P
ZINC, SPLP	8.31	J	22	J	164.7		P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 4/13/2015

Concentration Units: ug/L

Analyte	CRDL	IDL	M
MERCURY	0.20	0.023	CV

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 4/13/2015

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	24.	P
ANTIMONY	0.20	1.8	P
ARSENIC	1.0	2.4	P
BARIUM	0.40	0.50	P
BERYLLIUM	0.20	0.13	P
CADMIUM	0.20	0.078	P
CALCIUM	100	9.7	P
CHROMIUM	1.0	0.31	P
COBALT	0.20	0.25	P
COPPER	0.60	0.47	P
IRON	100	5.2	P
LEAD	0.20	1.2	P
MAGNESIUM	100	5.2	P
MANGANESE	0.40	1.1	P
MOLYBDENUM	1.0	1.2	P
NICKEL	0.40	0.42	P
POTASSIUM	1000	45.	P
SELENIUM	1.0	2.8	P
SILVER	0.20	0.41	P
SODIUM	1000	40.	P
THALLIUM	0.20	1.5	P
VANADIUM	1.0	0.25	P
ZINC	2.0	0.51	P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** J

Instrument Name: AGILENT 7500 ICP-MS **Date:** 4/13/2015

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	0.38	MS
ANTIMONY	0.20	0.0058	MS
ARSENIC	1.0	0.22	MS
BARIUM	0.40	0.037	MS
BERYLLIUM	0.20	0.0027	MS
CADMIUM	0.20	0.0031	MS
CALCIUM	100	4.8	MS
CHROMIUM	1.0	0.043	MS
COBALT	0.20	0.0087	MS
COPPER	0.60	0.028	MS
IRON	100	6.3	MS
LEAD	0.20	0.0096	MS
MAGNESIUM	100	1.2	MS
MANGANESE	0.40	0.031	MS
MOLYBDENUM	1.0	0.012	MS
NICKEL	0.40	0.014	MS
POTASSIUM	1000	5.3	MS
SELENIUM	1.0	0.23	MS
SILVER	0.20	0.0039	MS
SODIUM	1000	7.1	MS
THALLIUM	0.20	0.0065	MS
VANADIUM	1.0	0.11	MS
ZINC	2.0	0.12	MS

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 1/7/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
MERCURY	0.017	mg/Kg	CV	SW846 7471B / SW846 7471B

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 2/9/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
MERCURY	0.10	ug/L	CV	SW846 7470A / SW846 7470A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/19/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ALUMINUM	100.	ug/L	P	SW846 3010A / SW846 6010C
ANTIMONY	5.0	ug/L	P	SW846 3010A / SW846 6010C
ARSENIC	5.0	ug/L	P	SW846 3010A / SW846 6010C
BARIUM	3.0	ug/L	P	SW846 3010A / SW846 6010C
BERYLLIUM	0.50	ug/L	P	SW846 3010A / SW846 6010C
CADMIUM	3.0	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	80.	ug/L	P	SW846 3010A / SW846 6010C
CHROMIUM	4.0	ug/L	P	SW846 3010A / SW846 6010C
COBALT	4.0	ug/L	P	SW846 3010A / SW846 6010C
COPPER	10.	ug/L	P	SW846 3010A / SW846 6010C
IRON	80.	ug/L	P	SW846 3010A / SW846 6010C
LEAD	4.0	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	80.	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	4.0	ug/L	P	SW846 3010A / SW846 6010C
NICKEL	4.0	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	500.	ug/L	P	SW846 3010A / SW846 6010C
SELENIUM	7.0	ug/L	P	SW846 3010A / SW846 6010C
SILVER	4.0	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	500.	ug/L	P	SW846 3010A / SW846 6010C
THALLIUM	5.0	ug/L	P	SW846 3010A / SW846 6010C
VANADIUM	4.0	ug/L	P	SW846 3010A / SW846 6010C
ZINC	10.	ug/L	P	SW846 3010A / SW846 6010C

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** J

Instrument Name: AGILENT 7500 ICP-MS **Date:** 1/25/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ALUMINUM	8.0	ug/L	MS	SW846 3010A / SW846 6020A
ANTIMONY	0.10	ug/L	MS	SW846 3010A / SW846 6020A
ARSENIC	0.80	ug/L	MS	SW846 3010A / SW846 6020A
BARIUM	0.20	ug/L	MS	SW846 3010A / SW846 6020A
BERYLLIUM	0.040	ug/L	MS	SW846 3010A / SW846 6020A
CADMIUM	0.040	ug/L	MS	SW846 3010A / SW846 6020A
CALCIUM	16.	ug/L	MS	SW846 3010A / SW846 6020A
CHROMIUM	0.80	ug/L	MS	SW846 3010A / SW846 6020A
COBALT	0.060	ug/L	MS	SW846 3010A / SW846 6020A
COPPER	0.40	ug/L	MS	SW846 3010A / SW846 6020A
IRON	12.	ug/L	MS	SW846 3010A / SW846 6020A
LEAD	0.10	ug/L	MS	SW846 3010A / SW846 6020A
MAGNESIUM	16.	ug/L	MS	SW846 3010A / SW846 6020A
MANGANESE	0.20	ug/L	MS	SW846 3010A / SW846 6020A
NICKEL	0.24	ug/L	MS	SW846 3010A / SW846 6020A
POTASSIUM	80.	ug/L	MS	SW846 3010A / SW846 6020A
SELENIUM	0.60	ug/L	MS	SW846 3010A / SW846 6020A
SILVER	0.080	ug/L	MS	SW846 3010A / SW846 6020A
SODIUM	80.	ug/L	MS	SW846 3010A / SW846 6020A
THALLIUM	0.080	ug/L	MS	SW846 3010A / SW846 6020A
VANADIUM	0.80	ug/L	MS	SW846 3010A / SW846 6020A
ZINC	1.6	ug/L	MS	SW846 3010A / SW846 6020A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** J

Instrument Name: AGILENT 7500 ICP-MS **Date:** 1/26/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ALUMINUM	0.80	mg/kg	MS	SW846 3050B / SW846 6020A
ANTIMONY	0.010	mg/kg	MS	SW846 3050B / SW846 6020A
ARSENIC	0.080	mg/kg	MS	SW846 3050B / SW846 6020A
BARIUM	0.020	mg/kg	MS	SW846 3050B / SW846 6020A
BERYLLIUM	0.0040	mg/Kg	MS	SW846 3050B / SW846 6020A
CADMIUM	0.0040	mg/kg	MS	SW846 3050B / SW846 6020A
CALCIUM	1.6	mg/kg	MS	SW846 3050B / SW846 6020A
CHROMIUM	0.080	mg/kg	MS	SW846 3050B / SW846 6020A
COBALT	0.0060	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.040	mg/kg	MS	SW846 3050B / SW846 6020A
IRON	1.2	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.010	mg/Kg	MS	SW846 3050B / SW846 6020A
MAGNESIUM	1.6	mg/kg	MS	SW846 3050B / SW846 6020A
MANGANESE	0.020	mg/kg	MS	SW846 3050B / SW846 6020A
NICKEL	0.024	mg/kg	MS	SW846 3050B / SW846 6020A
POTASSIUM	8.0	mg/Kg	MS	SW846 3050B / SW846 6020A
SELENIUM	0.060	mg/kg	MS	SW846 3050B / SW846 6020A
SILVER	0.0080	mg/kg	MS	SW846 3050B / SW846 6020A
SODIUM	8.0	mg/kg	MS	SW846 3050B / SW846 6020A
THALLIUM	0.0080	mg/kg	MS	SW846 3050B / SW846 6020A
VANADIUM	0.080	mg/Kg	MS	SW846 3050B / SW846 6020A
ZINC	0.16	mg/kg	MS	SW846 3050B / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 1/7/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
MERCURY	0.0052	mg/Kg	CV	SW846 7471B / SW846 7471B

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 2/9/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
MERCURY	0.013	ug/L	CV	SW846 7470A / SW846 7470A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/19/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ALUMINUM	15.	ug/L	P	SW846 3010A / SW846 6010C
ANTIMONY	1.3	ug/L	P	SW846 3010A / SW846 6010C
ARSENIC	1.4	ug/L	P	SW846 3010A / SW846 6010C
BARIUM	0.23	ug/L	P	SW846 3010A / SW846 6010C
BERYLLIUM	0.10	ug/L	P	SW846 3010A / SW846 6010C
CADMIUM	0.049	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	11.	ug/L	P	SW846 3010A / SW846 6010C
CHROMIUM	0.36	ug/L	P	SW846 3010A / SW846 6010C
COBALT	0.24	ug/L	P	SW846 3010A / SW846 6010C
COPPER	0.63	ug/L	P	SW846 3010A / SW846 6010C
IRON	5.4	ug/L	P	SW846 3010A / SW846 6010C
LEAD	1.1	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	7.8	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	1.1	ug/L	P	SW846 3010A / SW846 6010C
NICKEL	0.28	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	41.	ug/L	P	SW846 3010A / SW846 6010C
SELENIUM	2.4	ug/L	P	SW846 3010A / SW846 6010C
SILVER	0.27	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	24.	ug/L	P	SW846 3010A / SW846 6010C
THALLIUM	1.1	ug/L	P	SW846 3010A / SW846 6010C
VANADIUM	0.23	ug/L	P	SW846 3010A / SW846 6010C
ZINC	0.72	ug/L	P	SW846 3010A / SW846 6010C

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** J

Instrument Name: AGILENT 7500 ICP-MS **Date:** 1/25/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ALUMINUM	0.88	ug/L	MS	SW846 3010A / SW846 6020A
ANTIMONY	0.011	ug/L	MS	SW846 3010A / SW846 6020A
ARSENIC	0.45	ug/L	MS	SW846 3010A / SW846 6020A
BARIUM	0.054	ug/L	MS	SW846 3010A / SW846 6020A
BERYLLIUM	0.0067	ug/L	MS	SW846 3010A / SW846 6020A
CADMIUM	0.0060	ug/L	MS	SW846 3010A / SW846 6020A
CALCIUM	4.1	ug/L	MS	SW846 3010A / SW846 6020A
CHROMIUM	0.044	ug/L	MS	SW846 3010A / SW846 6020A
COBALT	0.012	ug/L	MS	SW846 3010A / SW846 6020A
COPPER	0.037	ug/L	MS	SW846 3010A / SW846 6020A
IRON	2.6	ug/L	MS	SW846 3010A / SW846 6020A
LEAD	0.015	ug/L	MS	SW846 3010A / SW846 6020A
MAGNESIUM	1.6	ug/L	MS	SW846 3010A / SW846 6020A
MANGANESE	0.070	ug/L	MS	SW846 3010A / SW846 6020A
NICKEL	0.030	ug/L	MS	SW846 3010A / SW846 6020A
POTASSIUM	6.1	ug/L	MS	SW846 3010A / SW846 6020A
SELENIUM	0.037	ug/L	MS	SW846 3010A / SW846 6020A
SILVER	0.010	ug/L	MS	SW846 3010A / SW846 6020A
SODIUM	3.7	ug/L	MS	SW846 3010A / SW846 6020A
THALLIUM	0.012	ug/L	MS	SW846 3010A / SW846 6020A
VANADIUM	0.10	ug/L	MS	SW846 3010A / SW846 6020A
ZINC	0.78	ug/L	MS	SW846 3010A / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** J

Instrument Name: AGILENT 7500 ICP-MS **Date:** 1/26/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ALUMINUM	0.10	mg/kg	MS	SW846 3050B / SW846 6020A
ANTIMONY	0.0040	mg/kg	MS	SW846 3050B / SW846 6020A
ARSENIC	0.030	mg/kg	MS	SW846 3050B / SW846 6020A
BARIUM	0.0073	mg/kg	MS	SW846 3050B / SW846 6020A
BERYLLIUM	0.00081	mg/kg	MS	SW846 3050B / SW846 6020A
CADMIUM	0.0015	mg/kg	MS	SW846 3050B / SW846 6020A
CALCIUM	0.77	mg/kg	MS	SW846 3050B / SW846 6020A
CHROMIUM	0.0098	mg/kg	MS	SW846 3050B / SW846 6020A
COBALT	0.0011	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.014	mg/kg	MS	SW846 3050B / SW846 6020A
IRON	0.48	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.0014	mg/kg	MS	SW846 3050B / SW846 6020A
MAGNESIUM	0.27	mg/kg	MS	SW846 3050B / SW846 6020A
MANGANESE	0.0084	mg/kg	MS	SW846 3050B / SW846 6020A
NICKEL	0.0053	mg/kg	MS	SW846 3050B / SW846 6020A
POTASSIUM	0.91	mg/kg	MS	SW846 3050B / SW846 6020A
SELENIUM	0.0078	mg/kg	MS	SW846 3050B / SW846 6020A
SILVER	0.0013	mg/kg	MS	SW846 3050B / SW846 6020A
SODIUM	0.51	mg/kg	MS	SW846 3050B / SW846 6020A
THALLIUM	0.0019	mg/kg	MS	SW846 3050B / SW846 6020A
VANADIUM	0.022	mg/kg	MS	SW846 3050B / SW846 6020A
ZINC	0.026	mg/kg	MS	SW846 3050B / SW846 6020A

ICP INTERELEMENT CORRECTION FACTORS

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument Name: THERMO ICAP 6500 **Instrument ID:** I **Date:** 1/8/2015

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As	Cr	Co	Cu	Mn	Mo	Ni	Ti	V
ALUMINUM	396.15	0.0	0.0003680	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0300000	0.0	0.0	0.0
ANTIMONY	206.83	0.0000250	0.0	0.0000520	0.0	-0.0001350	0.0078600	0.0	0.0	0.0	-0.0018800	-0.0009470	0.0	-0.0017400
ARSENIC	189.04	0.0000120	0.0	-0.0001310	0.0	0.0	0.0006100	0.0	0.0	0.0	0.0020700	0.0	0.0	0.0
BARIUM	455.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BERYLLIUM	313.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0007160	0.0000820
BORON	208.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0296000	0.0	0.0	0.0
CADMIUM	226.50	0.0	0.0	0.0000630	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0000800	0.0000260	0.0
CALCIUM	315.89	0.0	0.0	0.0	0.0	0.0	0.0008850	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHROMIUM	267.72	0.0	0.0	0.0000070	0.0	0.0	0.0	0.0	0.0	0.0001110	0.0	0.0	0.0	0.0000720
COBALT	228.62	0.0	0.0	0.0	0.0	0.0	-0.0000420	0.0	0.0	0.0	0.0	0.0000640	0.0027000	0.0
COPPER	327.40	0.0000110	0.0	-0.0000060	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0005550	0.0003110
GOLD	242.79	0.0	0.0	0.0001410	0.0	0.0	0.0	0.0	0.0	-0.0019000	0.0	0.0	0.0	0.0
IRON	259.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAD	220.35	-0.0001240	0.0	0.0000190	0.0	0.0	-0.0005800	0.0000540	0.0001360	0.0	-0.0005810	0.0002080	0.0000970	0.0
LITHIUM	670.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAGNESIUM	202.58	0.0	0.0	0.0000370	0.0	0.0	0.0	0.2003000	0.0	0.0	0.0277000	0.0	0.0002000	0.0
MANGANESE	257.61	-0.0000010	0.0	0.0000150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOLYBDENUM	202.03	0.0	0.0	0.0	0.0	0.0	0.0001080	0.0	0.0	0.0000070	0.0	0.0	0.0	-0.0001920
NICKEL	231.60	0.0	0.0	-0.0000380	0.0	0.0	0.0	0.0001270	0.0	0.0	0.0008690	0.0	0.0	0.0
POTASSIUM	766.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SELENIUM	196.09	0.0000230	0.0	-0.0000020	0.0	-0.0000500	0.0	0.0000900	0.0	0.0004850	0.0	0.0	0.0	-0.0002080
SILICON	251.61	0.0	0.0	-0.0000080	0.0	0.0	0.0	0.0	0.0	0.0	0.0097100	0.0	0.0009940	0.0
SILVER	328.07	0.0	0.0	-0.0002370	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0002840	0.0
SODIUM	589.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRONTIUM	421.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THALLIUM	190.86	-0.0000020	0.0	0.0000020	0.0	0.0	0.0	0.0018400	0.0000120	-0.0021900	-0.0000380	0.0	-0.0010500	-0.0093600
TIN	189.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TITANIUM	334.90	0.0	0.0	0.0	0.0	0.0	0.0001290	0.0	0.0	0.0	0.0010500	0.0	0.0	0.0
VANADIUM	292.40	0.0	0.0	0.0000210	0.0	0.0	-0.0041100	0.0	0.0	-0.0003220	-0.0062800	0.0	0.0010900	0.0
ZINC	206.20	0.0	0.0	0.0	0.0	0.0	-0.0011400	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FORM XI - IN

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 4/6/2015

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	500000	P
ANTIMONY	45.00	20000	P
ARSENIC	45.00	20000	P
BARIUM	5.00	20000	P
BERYLLIUM	5.00	20000	P
CADMIUM	45.00	20000	P
CALCIUM	5.00	500000	P
CHROMIUM	10.00	20000	P
COBALT	45.00	20000	P
COPPER	10.00	20000	P
IRON	5.00	250000	P
LEAD	45.00	20000	P
MAGNESIUM	45.00	200000	P
MANGANESE	5.00	20000	P
MOLYBDENUM	45.00	5000	P
NICKEL	10.00	20000	P
POTASSIUM	5.00	300000	P
SELENIUM	45.00	20000	P
SILVER	10.00	2000	P
SODIUM	5.00	200000	P
THALLIUM	45.00	20000	P
VANADIUM	10.00	20000	P
ZINC	45.00	20000	P

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** J

Instrument Name: AGILENT 7500 ICP-MS **Date:** 4/7/2015

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	0.01	200000	MS
ANTIMONY	0.10	1000	MS
ARSENIC	0.30	1000	MS
BARIUM	0.10	2000	MS
BERYLLIUM	0.30	100	MS
CADMIUM	0.10	1000	MS
CALCIUM	0.03	200000	MS
CHROMIUM	0.10	1000	MS
COBALT	0.10	1000	MS
COPPER	0.10	2000	MS
IRON	0.03	100000	MS
LEAD	0.10	2000	MS
MAGNESIUM	0.05	200000	MS
MANGANESE	0.10	2000	MS
MOLYBDENUM	0.10	1000	MS
NICKEL	0.10	1000	MS
POTASSIUM	0.01	200000	MS
SELENIUM	0.30	1000	MS
SILVER	0.10	100	MS
SODIUM	0.01	200000	MS
THALLIUM	0.10	1000	MS
VANADIUM	0.10	1000	MS
ZINC	0.10	2000	MS

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IF05IMS2

Matrix: SOIL **SDG Name:** SI3862

Method: MS **Prep Date:** 06/05/2015

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSOIF05IMS2	LCSOIF05IMS2	1	0.1	
PBSIF05IMS2	PBSIF05IMS2	1	0.1	
SITE4TS-FB	SI3862-001	1.24	0.1	F
SITE4TS-FBD	SI3862-001D	1.24	0.1	F
SITE4TS-FBS	SI3862-001S	1.25	0.1	F
SITE4TS-XX	SI3862-002	1.77	0.1	F

FORM XIII - IN

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IF08HGS1

Matrix: SOIL **SDG Name:** SI3862

Method: CV **Prep Date:** 06/08/2015

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSOIF08HGS1	LCSOIF08HGS1	0.6	0.1	
PBSIF08HGS1	PBSIF08HGS1	0.6	0.1	
SITE4TS-FB	SI3862-001	0.75	0.1	P
SITE4TS-FBP	SI3862-001P	0.75	0.1	P
SITE4TS-FBS	SI3862-001S	0.75	0.1	P
SITE4TS-XX	SI3862-002	0.71	0.1	E

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IF08ICW3

Matrix: WATER **SDG Name:** SI3862

Method: P **Prep Date:** 06/08/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWIF08ICW3	LCSWIF08ICW3	0.05	0.05	
PBT1225D	PBT1225D	0.01	0.05	
PBWIF08ICW3	PBWIF08ICW3	0.05	0.05	
SITE4TS-FB	SI3862-006	0.01	0.05	P
SITE4TS-XX	SI3862-007	0.01	0.05	F

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IF08IMW2

Matrix: WATER **SDG Name:** SI3862

Method: MS **Prep Date:** 06/08/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWIF08IMW2	LCSWIF08IMW2	0.05	0.05	
PBWIF08IMW2	PBWIF08IMW2	0.05	0.05	
SITE4TS-EB	SI3862-003	0.05	0.05	D

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IF10HGW2

Matrix: WATER **SDG Name:** SI3862

Method: CV **Prep Date:** 06/10/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWIF10HGW2	LCSWIF10HGW2	0.025	0.025	
PBWIF10HGW2	PBWIF10HGW2	0.025	0.025	
SITE4TS-EB	SI3862-003	0.025	0.025	D
SITE4TS-FB	SI3862-006	0.025	0.025	P
SITE4TS-FBP	SI3862-006P	0.025	0.025	P
SITE4TS-FBS	SI3862-006S	0.025	0.025	P
SITE4TS-XX	SI3862-007	0.025	0.025	F

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IF10HGW3

Matrix: WATER **SDG Name:** SI3862

Method: CV **Prep Date:** 06/10/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWIF10HGW3	LCSWIF10HGW3	0.025	0.025	
PBT1225D	PBT1225D	0.025	0.025	
PBWIF10HGW3	PBWIF10HGW3	0.025	0.025	

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IF19ICW1

Matrix: WATER **SDG Name:** SI3862

Method: P **Prep Date:** 06/19/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWIF19ICW1	LCSWIF19ICW1	0.05	0.05	
PBWIF19ICW1	PBWIF19ICW1	0.05	0.05	
SITE4TS-FBP	SI3862-006P	0.01	0.05	O
SITE4TS-FBS	SI3862-006S	0.01	0.05	O

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: CETAC M6100 **File Name:** HIF09A

Date: 6/9/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	15:06	Hg
Standard #1 (0.2 ppb		1	15:08	Hg
Standard #2 (0.5 ppb		1	15:10	Hg
Standard #3 (1.0 ppb		1	15:13	Hg
Standard #4 (5.0 ppb		1	15:15	Hg
Standard #5 (10.0 pp		1	15:17	Hg
ICV		1	15:19	HG
ICB		1	15:21	HG
PQL		1	15:23	HG
CCV		1	15:25	HG
CCB		1	15:27	HG
LCSOIF08HGS1		1	15:29	HG
PBSIF08HGS1		1	15:32	HG
SI3862-001	SITE4TS-FB	1	15:34	HG
SI3862-001A	SITE4TS-FBA	1	15:36	HG
SI3862-001L	SITE4TS-FBL	5	15:38	HG
SI3862-001P	SITE4TS-FBP	1	15:40	HG
SI3862-001S	SITE4TS-FBS	1	15:42	HG
SI3862-002	SITE4TS-XX	1	15:44	HG
ZZZZZZ		1	15:46	
CCV		1	15:49	HG
CCB		1	15:51	HG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: CETAC M6100 **File Name:** HIF10A

Date: 6/10/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	16:43	Hg
Standard #1 (0.2 ppb		1	16:45	Hg
Standard #2 (0.5 ppb		1	16:47	Hg
Standard #3 (1.0 ppb		1	16:49	Hg
Standard #4 (5.0 ppb		1	16:52	Hg
Standard #5 (10.0 pp		1	16:54	Hg
ICV		1	16:56	HG
ICB		1	16:58	HG
PQL		1	17:00	HG
CCV		1	17:02	HG
CCB		1	17:04	HG
LCSWIF10HGW3		1	17:38	HG
PBT1225D		1	17:40	HG
ZZZZZZ		1	17:42	
ZZZZZZ		1	17:45	
ZZZZZZ		1	17:47	
PBWIF10HGW3		1	17:49	HG
ZZZZZZ		1	17:51	
ZZZZZZ		1	17:53	
ZZZZZZ		5	17:55	
CCV		1	17:57	HG
CCB		1	17:59	HG
ZZZZZZ		1	18:01	
ZZZZZZ		1	18:04	
ZZZZZZ		1	18:06	
ZZZZZZ		1	18:08	
ZZZZZZ		1	18:10	

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: CETAC M6100 **File Name:** HIF10A

Date: 6/10/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		1	18:12	
ZZZZZZ		1	18:14	
ZZZZZZ		1	18:16	
ZZZZZZ		1	18:19	
ZZZZZZ		1	18:21	
CCV		1	18:23	HG
CCB		1	18:25	HG
ZZZZZZ		1	18:27	
ZZZZZZ		1	18:29	
ZZZZZZ		1	18:31	
ZZZZZZ		1	18:33	
ZZZZZZ		1	18:36	
ZZZZZZ		1	18:38	
ZZZZZZ		1	18:40	
ZZZZZZ		1	18:42	
ZZZZZZ		1	18:44	
ZZZZZZ		1	18:46	
CCV		1	18:48	HG
CCB		1	18:50	HG
ZZZZZZ		1	18:53	
LCSWIF10HGW2		1	18:55	HG
PBWIF10HGW2		1	18:57	HG
ZZZZZZ		1	18:59	
ZZZZZZ		1	19:01	
ZZZZZZ		1	19:03	
ZZZZZZ		1	19:06	
ZZZZZZ		1	19:08	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: CETAC M6100 **File Name:** HIF10A

Date: 6/10/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		1	19:10	
ZZZZZZ		1	19:12	
CCV		1	19:14	HG
CCB		1	19:16	HG
SI3862-003	SITE4TS-EB	1	19:18	HG
SI3862-006	SITE4TS-FB	1	19:21	HG
SI3862-006A	SITE4TS-FBA	1	19:23	HG
SI3862-006L	SITE4TS-FBL	5	19:25	HG
SI3862-006P	SITE4TS-FBP	1	19:27	HG
SI3862-006S	SITE4TS-FBS	1	19:29	HG
SI3862-007	SITE4TS-XX	1	19:31	HG
ZZZZZZ		1	19:34	
ZZZZZZ		1	19:36	
ZZZZZZ		1	19:38	
CCV		1	19:40	HG
CCB		1	19:42	HG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF09B

Date: 6/9/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																							
Blank		1	18:57	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
Std 1		1	19:02	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ICV		1	19:07	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ICB		1	19:14	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
PQL		1	19:19	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ZZZZZZ		1	19:26																								
ZZZZZZ		1	19:31																								
ICSA		1	19:40	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ICSAB		1	19:45	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
CCV		1	19:52	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
CCB		1	19:57	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ZZZZZZ		1	20:02																								
ZZZZZZ		1	20:07																								
ZZZZZZ		1	20:12																								
ZZZZZZ		1	20:17																								
ZZZZZZ		1	20:21																								
ZZZZZZ		1	20:27																								
ZZZZZZ		1	20:32																								
ZZZZZZ		5	20:37																								
ZZZZZZ		1	20:42																								
ZZZZZZ		1	20:47																								
CCV		1	20:52	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
CCB		1	20:57	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ZZZZZZ		1	21:02																								
ZZZZZZ		1	21:07																								
ZZZZZZ		10	21:12																								
ZZZZZZ		500	21:17																								

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF09B

Date: 6/9/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																															
ZZZZZZ		1000	21:22																																
ZZZZZZ		500	21:27																																
ZZZZZZ		1000	21:32																																
ZZZZZZ		1	21:37																																
ZZZZZZ		1	21:43																																
ZZZZZZ		1	21:47																																
CCV		1	21:52	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL			V	ZN								
CCB		1	21:57	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL			V	ZN								
LCSWIF08ICW3		1	22:02	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL			V	ZN								
PBT1225D		1	22:08	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL			V	ZN								
PBWIF08ICW3		1	22:13	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL			V	ZN								
SI3862-006	SITE4TS-FB	1	22:18	AL		AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL			V	ZN								
SI3862-007	SITE4TS-XX	1	22:23	AL		AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL			V	ZN								
ZZZZZZ		1	22:28																																
ZZZZZZ		1	22:33																																
ZZZZZZ		1	22:38																																
ZZZZZZ		1	22:43																																
ZZZZZZ		1	22:48																																
CCV		1	22:53	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL			V	ZN								
CCB		1	22:58	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL			V	ZN								

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF23A

Date: 6/23/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																											
Blank		1	12:40	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
Std 1		1	12:45	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
ICV		1	12:49	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
ICB		1	12:56	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
PQL		1	13:01	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
ZZZZZZ		1	13:08																												
ZZZZZZ		1	13:13																												
ICSA		1	13:22	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
ICSAB		1	13:26	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
CCV		1	13:33	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
CCB		1	13:37	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
ZZZZZZ		100	13:42																												
ZZZZZZ		1	13:47																												
ZZZZZZ		5	13:52																												
ZZZZZZ		5	13:57																												
ZZZZZZ		2	14:01																												
ZZZZZZ		1	14:06																												
ZZZZZZ		2	14:11																												
ZZZZZZ		2	14:16																												
ZZZZZZ		2	14:21																												
ZZZZZZ		1	14:26																												
CCV		1	14:31	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
CCB		1	14:36	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL	V	ZN						
ZZZZZZ		1	14:41																												
ZZZZZZ		1	14:46																												
ZZZZZZ		2	14:51																												
ZZZZZZ		1	14:56																												

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF23A

Date: 6/23/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																											
LCSWIF19ICW1		1	15:01	AL	SB		BA			CA	CR	CO	CU	FE	PB	MG		NI			AG	NA		TL			V	ZN			
PBWIF19ICW1		1	15:06	AL	SB		BA			CA	CR	CO	CU	FE	PB	MG		NI			AG	NA		TL			V	ZN			
ZZZZZZ		1	15:11																												
SI3862-006P	SITE4TS-FBP	1	15:15	AL	SB	AS	BA			CA	CR	CO	CU	FE	PB	MG		NI			AG	NA		TL			V	ZN			
SI3862-006S	SITE4TS-FBS	1	15:20	AL	SB	AS	BA			CA	CR	CO	CU	FE	PB	MG		NI			AG	NA		TL			V	ZN			
SI3862-006	SITE4TS-FB	1	15:25		SB																										
CCV		1	15:30	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA		TL			V	ZN			
CCB		1	15:35	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA		TL			V	ZN			
SI3862-006A	SITE4TS-FBA	1	15:40	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA		TL			V	ZN			
SI3862-006L	SITE4TS-FBL	5	15:45	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA		TL			V	ZN			
SI3862-007	SITE4TS-XX	1	15:50		SB																										
ZZZZZZ		1	15:55																												
ZZZZZZ		1	15:59																												
ZZZZZZ		1000	16:04																												
CCV		1	16:09	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA		TL			V	ZN			
CCB		1	16:14	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA		TL			V	ZN			

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF24A

Date: 6/24/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	10:19	AL	AS	BE	CA	FE	MG MN	K
Std 1		1	10:23	AL	AS	BE	CA	FE	MG MN	K
ICV		1	10:28	AL	AS	BE	CA	FE	MG MN	K
ICB		1	10:35	AL	AS	BE	CA	FE	MG MN	K
PQL		1	10:40	AL	AS	BE	CA	FE	MG MN	K
ZZZZZZ		1	10:49							
ZZZZZZ		1	10:54							
ICSA		1	11:02	AL	AS	BE	CA	FE	MG MN	K
ICSAB		1	11:07	AL	AS	BE	CA	FE	MG MN	K
CCV		1	11:13	AL	AS	BE	CA	FE	MG MN	K
CCB		1	11:18	AL	AS	BE	CA	FE	MG MN	K
ZZZZZZ		1	11:23							
ZZZZZZ		1	11:28							
ZZZZZZ		2	11:33							
ZZZZZZ		2	11:38							
ZZZZZZ		2	11:43							
ZZZZZZ		2	11:48							
ZZZZZZ		5	11:53							
ZZZZZZ		1	11:58							
ZZZZZZ		1	12:02							
ZZZZZZ		1	12:07							
CCV		1	12:12	AL	AS	BE	CA	FE	MG MN	K
CCB		1	12:17	AL	AS	BE	CA	FE	MG MN	K
ZZZZZZ		2	12:22							
ZZZZZZ		1	12:27							
ZZZZZZ		1	12:32							
ZZZZZZ		2	12:37							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF24A

Date: 6/24/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	12:42							
ZZZZZZ		25	12:47							
ZZZZZZ		25	12:52							
ZZZZZZ		2	12:57							
ZZZZZZ		25	13:02							
ZZZZZZ		10	13:07							
CCV		1	13:12	AL	AS	BE	CA	FE	MG MN	K
CCB		1	13:17	AL	AS	BE	CA	FE	MG MN	K
ZZZZZZ		25	13:22							
ZZZZZZ		2	13:27							
ZZZZZZ		1	13:32							
ZZZZZZ		2	13:37							
ZZZZZZ		5	13:42							
ZZZZZZ		1	13:47							
ZZZZZZ		1	13:52							
ZZZZZZ		1	13:56							
ZZZZZZ		1	14:01							
ZZZZZZ		1	14:06							
CCV		1	14:11	AL	AS	BE	CA	FE	MG MN	K
CCB		1	14:16	AL	AS	BE	CA	FE	MG MN	K
ZZZZZZ		1	14:21							
ZZZZZZ		5	14:26							
ZZZZZZ		1	14:31							
ZZZZZZ		1	14:36							
ZZZZZZ		2	14:40							
ZZZZZZ		2	14:45							
ZZZZZZ		1	14:50							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF24A

Date: 6/24/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	14:55							
ZZZZZZ		1	15:00							
ZZZZZZ		2	15:05							
CCV		1	15:10	AL	AS	BE	CA	FE	MG MN	K
CCB		1	15:15	AL	AS	BE	CA	FE	MG MN	K
ZZZZZZ		2	15:20							
ZZZZZZ		1	15:25							
ZZZZZZ		1	15:30							
ZZZZZZ		1	15:35							
ZZZZZZ		5	15:40							
ZZZZZZ		1	15:45							
ZZZZZZ		1	15:50							
ZZZZZZ		1	15:55							
ZZZZZZ		1	16:00							
ZZZZZZ		10	16:05							
CCV		1	16:10	AL	AS	BE	CA	FE	MG MN	K
CCB		1	16:15	AL	AS	BE	CA	FE	MG MN	K
ZZZZZZ		25	16:20							
ZZZZZZ		10	16:25							
ZZZZZZ		10	16:30							
ZZZZZZ		2	16:35							
ZZZZZZ		1	16:40							
ZZZZZZ		1	16:45							
ZZZZZZ		2	16:50							
ZZZZZZ		2	16:55							
ZZZZZZ		10	16:59							
ZZZZZZ		1	17:05							

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF24A

Date: 6/24/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
CCV		1	17:09	AL	AS	BE	CA	FE	MG MN	K
CCB		1	17:14	AL	AS	BE	CA	FE	MG MN	K
ZZZZZZ		1	17:19							
ZZZZZZ		25	17:24							
ZZZZZZ		10	17:29							
ZZZZZZ		10	17:34							
ZZZZZZ		10	17:39							
ZZZZZZ		2	17:44							
ZZZZZZ		5	17:49							
ZZZZZZ		1	17:54							
ZZZZZZ		1	17:58							
ZZZZZZ		1	18:03							
CCV		1	18:08	AL	AS	BE	CA	FE	MG MN	K
CCB		1	18:13	AL	AS	BE	CA	FE	MG MN	K
ZZZZZZ		2	18:18							
ZZZZZZ		1	18:23							
ZZZZZZ		1	18:28							
ZZZZZZ		2	18:33							
ZZZZZZ		1	18:37							
ZZZZZZ		25	18:42							
ZZZZZZ		25	18:47							
ZZZZZZ		2	18:52							
ZZZZZZ		25	18:57							
LCSWIF19ICW1		1	19:02		AS	BE			MN	K
CCV		1	19:07	AL	AS	BE	CA	FE	MG MN	K
CCB		1	19:12	AL	AS	BE	CA	FE	MG MN	K
ZZZZZZ		1	19:17							

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF24A

Date: 6/24/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements							
PBWIF19ICW1		1	19:22		AS				MN	K	
ZZZZZZ		1	19:27								
ZZZZZZ		1	19:32								
ZZZZZZ		5	19:37								
ZZZZZZ		2	19:42								
CCV		1	19:47	AL	AS	BE	CA	FE	MG MN	K	
CCB		1	19:51	AL	AS	BE	CA	FE	MG MN	K	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF25A

Date: 6/25/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
Blank		1	9:55	AL	BE	CA	FE	MG
Std 1		1	10:00	AL	BE	CA	FE	MG
ICV		1	10:04	AL	BE	CA	FE	MG
ICB		1	10:11	AL	BE	CA	FE	MG
PQL		1	10:16	AL	BE	CA	FE	MG
ZZZZZZ		1	10:24					
ZZZZZZ		1	10:29					
ICSA		1	10:37	AL	BE	CA	FE	MG
ICSAB		1	10:42	AL	BE	CA	FE	MG
CCV		1	10:48	AL	BE	CA	FE	MG
CCB		1	10:53	AL	BE	CA	FE	MG
CCV		1	10:58	AL	BE	CA	FE	MG
CCB		1	11:03	AL	BE	CA	FE	MG
ZZZZZZ		2	11:08					
ZZZZZZ		1	11:13					
ZZZZZZ		1	11:17					
ZZZZZZ		1	11:22					
ZZZZZZ		1	11:27					
ZZZZZZ		1	11:31					
ZZZZZZ		1	11:36					
ZZZZZZ		1	11:40					
CCV		1	11:45	AL	BE	CA	FE	MG
CCB		1	11:50	AL	BE	CA	FE	MG
ZZZZZZ		1	11:55					
ZZZZZZ		1	12:00					
ZZZZZZ		2	12:05					
ZZZZZZ		1	12:10					

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF25A

Date: 6/25/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements				
PBWIF19ICW1		1	12:15		BE			
ZZZZZZ		2	12:20					
ZZZZZZ		1	12:25					
ZZZZZZ		1	12:30					
ZZZZZZ		1	12:35					
ZZZZZZ		1	12:40					
CCV		1	12:45	AL	BE	CA	FE	MG
CCB		1	12:50	AL	BE	CA	FE	MG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF25B

Date: 6/25/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
Blank		1	14:03	AL	BE	CD CA	FE	MG MN	K	SE
Std 1		1	14:08	AL	BE	CD CA	FE	MG MN	K	SE
ICV		1	14:13	AL	BE	CD CA	FE	MG MN	K	SE
ICB		1	14:20	AL	BE	CD CA	FE	MG MN	K	SE
PQL		1	14:25	AL	BE	CD CA	FE	MG MN	K	SE
ZZZZZZ		1	14:32							
ZZZZZZ		1	14:37							
ICSA		1	14:45	AL	BE	CD CA	FE	MG MN	K	SE
ICSAB		1	14:50	AL	BE	CD CA	FE	MG MN	K	SE
CCV		1	14:56	AL	BE	CD CA	FE	MG MN	K	SE
CCB		1	15:01	AL	BE	CD CA	FE	MG MN	K	SE
ZZZZZZ		1	15:06							
ZZZZZZ		1	15:11							
ZZZZZZ		1	15:16							
ZZZZZZ		1	15:21							
ZZZZZZ		1	15:25							
ZZZZZZ		1	15:30							
ZZZZZZ		1	15:35							
ZZZZZZ		1	15:40							
ZZZZZZ		1	15:45							
ZZZZZZ		1	15:50							
CCV		1	15:55	AL	BE	CD CA	FE	MG MN	K	SE
CCB		1	16:00	AL	BE	CD CA	FE	MG MN	K	SE
ZZZZZZ		1	16:05							
ZZZZZZ		1	16:10							
ZZZZZZ		1	16:15							
ZZZZZZ		1	16:20							

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF25B

Date: 6/25/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements						
ZZZZZZ		1	16:25							
ZZZZZZ		1	16:30							
ZZZZZZ		1	16:35							
ZZZZZZ		1	16:39							
ZZZZZZ		1	16:44							
ZZZZZZ		1	16:49							
CCV		1	16:54	AL	BE	CD CA	FE	MG MN	K	SE
CCB		1	16:59	AL	BE	CD CA	FE	MG MN	K	SE
ZZZZZZ		1	17:04							
ZZZZZZ		1	17:09							
ZZZZZZ		1	17:14							
ZZZZZZ		1	17:19							
ZZZZZZ		1	17:24							
ZZZZZZ		1	17:29							
ZZZZZZ		1	17:34							
ZZZZZZ		1	17:39							
ZZZZZZ		1	17:43							
ZZZZZZ		1	17:48							
CCV		1	17:53	AL	BE	CD CA	FE	MG MN	K	SE
CCB		1	17:58	AL	BE	CD CA	FE	MG MN	K	SE
LCSWIF19ICW1		1	18:03			CD				SE
ZZZZZZ		1	18:07							
ZZZZZZ		1	18:12							
PBWIF19ICW1		1	18:17			CD				SE
ZZZZZZ		1	18:22							
SI3862-006P	SITE4TS-FBP	1	18:27		BE	CD		MN	K	SE
SI3862-006S	SITE4TS-FBS	1	18:32		BE	CD		MN	K	SE

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: THERMO ICAP 6500 **File Name:** IIF25B

Date: 6/25/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		1	18:36								
ZZZZZZ		1	18:41								
ZZZZZZ		1	18:46								
CCV		1	18:51	AL	BE	CD CA	FE	MG MN	K	SE	
CCB		1	18:56	AL	BE	CD CA	FE	MG MN	K	SE	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF06A

Date: 6/6/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements																			
6020 Tune		1	10:20																				
200.8 Tune		1	10:23																				
Cal Blank		1	10:59	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
Cal Std 1		1	11:02	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
Cal Std 2		1	11:05	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
Cal Std 3		1	11:09	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
Cal Std 4		1	11:12	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
ICV		1	11:15	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
ICB		1	11:18	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
PQL		1	11:22	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
ZZZZZZ		1	11:25																				
ZZZZZZ		1	11:28																				
ZZZZZZ		1	11:31																				
ICSA		1	11:35	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
ICSAB		1	11:38	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
ZZZZZZ		1	11:42																				
CCV		1	11:45	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
CCB		1	11:49	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
ZZZZZZ		1	11:52																				
ZZZZZZ		1	11:55																				
ZZZZZZ		5	11:59																				
ZZZZZZ		1	12:02																				
ZZZZZZ		5	12:06																				
ZZZZZZ		5	12:09																				
ZZZZZZ		5	12:12																				
ZZZZZZ		1	12:15																				
ZZZZZZ		5	12:19																				

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF06A

Date: 6/6/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements																	
ZZZZZZ		1	12:22																		
CCV		1	12:25	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl	V
CCB		1	12:29	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl	V
ZZZZZZ		5	12:32																		
ZZZZZZ		5	12:36																		
ZZZZZZ		5	12:39																		
ZZZZZZ		1	12:42																		
ZZZZZZ		5	12:46																		
ZZZZZZ		1	12:49																		
ZZZZZZ		1	12:53																		
ZZZZZZ		1	12:56																		
ZZZZZZ		1	13:00																		
ZZZZZZ		5	13:03																		
CCV		1	13:06	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl	V
CCB		1	13:10	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl	V
ZZZZZZ		1	13:13																		
ZZZZZZ		1	13:17																		
ZZZZZZ		5	13:20																		
ZZZZZZ		5	13:23																		
ZZZZZZ		5	13:27																		
ZZZZZZ		1	13:30																		
ZZZZZZ		1	13:33																		
ZZZZZZ		1	13:37																		
ZZZZZZ		1	13:40																		
ZZZZZZ		1	13:44																		
CCV		1	13:47	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl	V
CCB		1	13:50	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl	V

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF06A

Date: 6/6/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements																	
ZZZZZZ		1	13:54																		
ZZZZZZ		1	13:57																		
ZZZZZZ		1	14:01																		
ZZZZZZ		1	14:04																		
ZZZZZZ		5	14:08																		
ZZZZZZ		5	14:11																		
ZZZZZZ		5	14:15																		
ZZZZZZ		5	14:18																		
ZZZZZZ		5	14:22																		
ZZZZZZ		5	14:25																		
CCV		1	14:29	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl	V
CCB		1	14:32	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl	V
ZZZZZZ		5	14:36																		
ZZZZZZ		5	14:39																		
ZZZZZZ		5	14:43																		
ZZZZZZ		5	14:46																		
ZZZZZZ		5	14:49																		
ZZZZZZ		5	14:53																		
ZZZZZZ		50	14:56																		
ZZZZZZ		250	15:00																		
ZZZZZZ		50	15:03																		
ZZZZZZ		50	15:07																		
CCV		1	15:10	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl	V
CCB		1	15:13	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl	V
ZZZZZZ		1	15:17																		
ZZZZZZ		5	15:21																		
ZZZZZZ		1	15:24																		

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF06A

Date: 6/6/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements																			
ZZZZZZ		5	15:27																				
ZZZZZZ		5	15:31																				
ZZZZZZ		1	15:34																				
ZZZZZZ		1	15:38																				
ZZZZZZ		1	15:41																				
ZZZZZZ		1	15:45																				
ZZZZZZ		1	15:48																				
CCV		1	15:52	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
CCB		1	15:55	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
ZZZZZZ		5	15:59																				
ZZZZZZ		5	16:02																				
ZZZZZZ		1	16:05																				
ZZZZZZ		1	16:09																				
ZZZZZZ		1	16:12																				
PBSIF05IMS2		5	16:16		Sb	As	Ba	Cd		Co	Cu	Fe	Pb			Ni		Se	Ag		Tl		V
LCSOIF05IMS2		5	16:19		Sb	As	Ba	Cd		Co	Cu	Fe	Pb			Ni		Se	Ag		Tl		V
SI3862-001	SITE4TS-FB	5	16:23		Sb	As	Ba	Cd		Co	Cu	Fe	Pb			Ni		Se	Ag		Tl		V
SI3862-001L	SITE4TS-FBL	25	16:26		Sb	As	Ba	Cd		Co	Cu	Fe	Pb			Ni		Se	Ag		Tl		V
SI3862-001A	SITE4TS-FBA	5	16:30		Sb	As	Ba	Cd		Co	Cu	Fe	Pb			Ni		Se	Ag		Tl		V
CCV		1	16:33	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
CCB		1	16:36	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
SI3862-001D	SITE4TS-FBD	5	16:40		Sb	As	Ba	Cd		Co	Cu	Fe	Pb			Ni		Se	Ag		Tl		V
SI3862-001S	SITE4TS-FBS	5	16:43		Sb	As	Ba	Cd		Co	Cu	Fe	Pb			Ni		Se	Ag		Tl		V
SI3862-002	SITE4TS-XX	5	16:47		Sb	As	Ba	Cd		Co	Cu	Fe	Pb			Ni		Se	Ag		Tl		V
CCV		1	16:50	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V
CCB		1	16:54	Al	Sb	As	Ba	Cd	Ca	Co	Cu	Fe	Pb	Mg	Mo	Ni	K	Se	Ag	Na	Tl		V

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF08A

Date: 6/8/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
6020 Tune		1	15:22	
200.8 Tune		1	15:25	
Cal Blank		1	16:00	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
Cal Std 1		1	16:03	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
Cal Std 2		1	16:06	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
Cal Std 3		1	16:09	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
Cal Std 4		1	16:12	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
ICV		1	16:15	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
ICB		1	16:19	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
PQL		1	16:22	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
ZZZZZZ		1	16:25	
ZZZZZZ		1	16:28	
ZZZZZZ		1	16:31	
ICSA		1	16:34	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
ICSAB		1	16:38	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
ZZZZZZ		1	16:41	
CCV		1	16:45	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
CCB		1	16:48	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
PQL		1	16:51	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
CCV		1	16:54	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
CCB		1	16:57	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
ZZZZZZ		5	17:01	
ZZZZZZ		1	17:04	
ZZZZZZ		1	17:07	
ZZZZZZ		1	17:11	
ZZZZZZ		1	17:14	
ZZZZZZ		1	17:17	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF08A

Date: 6/8/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements																							
ZZZZZZ		1	17:20																								
ZZZZZZ		1	17:24																								
ZZZZZZ		1	17:27																								
ZZZZZZ		1	17:30																								
CCV		1	17:34	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V	Zn
CCB		1	17:37	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V	Zn
ZZZZZZ		1	17:40																								
ZZZZZZ		1	17:43																								
ZZZZZZ		5	17:47																								
ZZZZZZ		1	17:50																								
ZZZZZZ		1	17:53																								
ZZZZZZ		1	17:56																								
ZZZZZZ		1	18:00																								
ZZZZZZ		1	18:03																								
ZZZZZZ		5	18:06																								
ZZZZZZ		5	18:10																								
CCV		1	18:13	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V	Zn
CCB		1	18:16	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V	Zn
ZZZZZZ		5	18:20																								
ZZZZZZ		5	18:23																								
ZZZZZZ		5	18:26																								
ZZZZZZ		5	18:30																								
ZZZZZZ		5	18:33																								
ZZZZZZ		5	18:36																								
ZZZZZZ		5	18:40																								
ZZZZZZ		5	18:43																								
ZZZZZZ		1	18:46																								

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF08A

Date: 6/8/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	18:50	
CCV		1	18:53	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
CCB		1	18:56	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
ZZZZZZ		1	19:00	
ZZZZZZ		1	19:03	
ZZZZZZ		1	19:07	
ZZZZZZ		1	19:10	
ZZZZZZ		1	19:14	
ZZZZZZ		1	19:17	
ZZZZZZ		1	19:20	
ZZZZZZ		5	19:24	
ZZZZZZ		1	19:27	
ZZZZZZ		1	19:31	
CCV		1	19:34	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
CCB		1	19:37	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
ZZZZZZ		5	19:41	
ZZZZZZ		5	19:44	
ZZZZZZ		5	19:48	
ZZZZZZ		1	19:51	
ZZZZZZ		1	19:55	
ZZZZZZ		1	19:58	
ZZZZZZ		5	20:01	
ZZZZZZ		5	20:05	
ZZZZZZ		5	20:08	
ZZZZZZ		5	20:12	
CCV		1	20:15	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn
CCB		1	20:19	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V Zn

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF08A

Date: 6/8/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements																							
ZZZZZZ		1	20:22																								
ZZZZZZ		5	20:26																								
ZZZZZZ		1	20:29																								
PBSIF05IMS2		5	20:32	Al			Be		Ca	Cr				Mg	Mn		K			Na							Zn
LCSOIF05IMS2		5	20:36	Al			Be		Ca	Cr				Mg	Mn		K			Na							Zn
SI3862-001	SITE4TS-FB	5	20:39	Al			Be		Ca	Cr				Mg	Mn		K			Na							Zn
SI3862-001L	SITE4TS-FBL	25	20:42	Al			Be		Ca	Cr				Mg	Mn		K			Na							Zn
SI3862-001A	SITE4TS-FBA	5	20:46	Al			Be		Ca	Cr				Mg	Mn		K			Na							Zn
SI3862-001D	SITE4TS-FBD	5	20:49	Al			Be		Ca	Cr				Mg	Mn		K			Na							Zn
SI3862-001S	SITE4TS-FBS	5	20:53	Al			Be		Ca	Cr				Mg	Mn		K			Na							Zn
CCV		1	20:56	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V	Zn
CCB		1	20:59	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V	Zn
SI3862-002	SITE4TS-XX	5	21:03	Al			Be		Ca	Cr				Mg	Mn		K			Na							Zn
ZZZZZZ		1	21:06																								
ZZZZZZ		5	21:10																								
ZZZZZZ		1	21:13																								
ZZZZZZ		1	21:17																								
ZZZZZZ		1	21:20																								
ZZZZZZ		5	21:24																								
ZZZZZZ		5	21:27																								
ZZZZZZ		5	21:31																								
ZZZZZZ		100	21:34																								
CCV		1	21:38	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V	Zn
CCB		1	21:41	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V	Zn
ZZZZZZ		1	21:44																								
ZZZZZZ		1	21:48																								
ZZZZZZ		1	21:51																								

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI3862

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF08A

Date: 6/8/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements																										
ZZZZZZ		1	21:55																											
ZZZZZZ		1	21:58																											
PBWIF08IMW2		5	22:02	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn		Ni	K	Se	Ag	Na	Tl		V	Zn
LCSWIF08IMW2		5	22:05	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn		Ni	K	Se	Ag	Na	Tl		V	Zn
SI3862-003	SITE4TS-EB	5	22:08	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn		Ni	K	Se	Ag	Na	Tl		V	Zn
CCV		1	22:12	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V	Zn
CCB		1	22:15	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V	Zn

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES, INC. — Non-Volatile TCLP/SPLP Extraction Log

I. EXTRACTION CONDITIONS

Extraction Method:	SW846 1311 (TCLP) ☐ / SW846 1312 (SPLP) ☑	Extractor ID: #2	Room Thermometer ID: DIG-23	(Room Temp Criteria. 23(±2)°C)
		Balance ID: BAL-0615	pH Meter ID: Orion 520A s/n 7422	pH Probe ID: 7
Solid pH Determination:	Date: 06.05.15	GEJ 06.05.15	Analyst: GEJ	
Rotary Extraction Started:	Date: 06.05.15	Time: 15:50	Analyst: GEJ	Room Temp. (degrees °C): 18.1
Rotary Extraction Completed:	Date: 06-06-15	Time: 08:06	Analyst: EGM	Room Temp. (degrees °C): 17.8
Extraction Filtered:	Date: 06/06/15	Time: 15:05	Analyst: [illegible]	Filter Lot #: R5AA49484
Elapsed Extraction Time (HH:MM): 16:16		5% HNO_3 ID (used to wash filters): MR147		HNO_3 Lot # (used to preserve extracts): 104117
Fluid 1 pH (Day of use): 4.24 (1225)		Fluid 1 Expiration Date: 01.14.16		
Fluid 2 pH (Day of use):		Fluid 2 Expiration Date:		

II. EXTRACTION SETUP

TCLP Fluid pH: #1 - 4.93 ± 0.05 #2 - 2.88 ± 0.05 SPLP Fluid pH: #1 - 4.20 ± 0.05 #2 - 5.00 ± 0.05

Katahdin Sample No. (include bottle ID) EGM 06291	Matrix	Check One: 100% Wet Solids-waste will yield no liquid upon filtration	Check One: < 100% Wet Solids (Perform Solids Determination below)	SPLP FLUID # (1 for east and 2 for west of Mississippi River)	TCLP pH Determination and Fluid Selection (date & init. above): Initial pH of solid phase: (if <5, use Fluid #1; if >5 add 3.5 mL of 1 N HCl)	TCLP pH Determination and Fluid Selection (date & init. above): pH after 1 N HCL addition (if <5, use Fluid #1; if >5, use Fluid #2	Extraction Setup: Volume of Extraction Fluid (mL)	Extraction Setup: Fluid # used	Extraction Setup: Associated Extraction Blank ID: 2 EGM 06191	Extraction Setup: Weight of Waste (g)	pH of extract after extraction: 06054 GEJ	Extract to be analyzed for: Metals (M), SVOA (S), PEST (P), HERB (H), Cyanide (C)	Extraction Bottle ID (if applicable)
SI3862-X6	SL	✓		1	—	—	2000	—	PBT1225D	100.38	6.48	M, S	18
SI3862-Z7	SL	✓		1	—	—	↓	—	↓	100.59	6.53	M, S	3
PBT1225D	Aq	—		1	—	—	↓	—	↓	—	6.59	M, S	1

ME-001 – Revision 4 – 07/05/2011

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 104736 **HCL:** 99513 **H2O2:** 403AP 423 **Method:** 3050H-MS

LCS / Spike **LCS/Spiking Information:**

- [x] [x] CLPP-SPK-1 (ID/Vol): MS1928 / 0.1 mL
- [x] [x] CLPP-SPK-INT1 (ID/Vol): MW15522 / 1.0 mL
- [x] [x] CLPP-SPK-INT2 (ID/Vol): MW15498 / 1.0 mL
- [ ] [ ] _____ Spike (ID/Vol): N/A / _____ mL
- [ ] [ ] CLPP-SPK-4 (ID/Vol): ↓ / _____ mL

LCSS: N/A **Balance ID:** BAL15

Hot Plate/Block ID: A **Filter Paper:** 9627499A

Start Time/Temp.: 10:26 / 95 °C

End Time/Temp.: 15:55 / 94 °C

Thermometer ID/Pos.: ALC11 / 6.5

REVIEWED
gm 06-06-15
KATAHDIN ANALYTICAL
METALS SECTION

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Texture	Final Color	Final Clarity	Artifacts	Bottle
LCSOIF05IMS2	IF05IMS2	1.0	g	0.10	L	SL	IM	TCS	06/05/2015	N/A	N/A	N/A	N/A		
PBSIF05IMS2	IF05IMS2	1.0	g		L	SL	IM	TCS	06/05/2015	N/A	N/A	N/A	N/A		
SI3862-001	IF05IMS2	1.24	g		L	SL	IM	TCS	06/05/2015						F
SI3862-001D	IF05IMS2	1.24	g		L	SL	IM	TCS	06/05/2015						
SI3862-001S	IF05IMS2	1.25	g		L	SL	IM	TCS	06/05/2015						
SI3862-002	IF05IMS2	1.77	g		L	SL	IM	TCS	06/05/2015						

gm 06-06-15

QA-065-Revision 1 - 09/23/2010 **Digestion performed by:** TCS **On:** 06-05-15 **Page:** IF045 **Revision:** 00

Katahdin Analytical Services 0000486

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 104736 HCL: 99513 H2SO4: N/A Method: 7471

KMNO4: me1469 K2S2O8: N/A NH2OH-HCl: me1468

Standards/Spiking Information:

1ppm A : mw15521

1ppm B : mw15492

LCSO = 500uL of 1ppm A to 100mL

Spike(S/P) = 100uL of 1ppm A to 100mL

ICV = 600uL of 1ppm A to 100 mL

S0.2 = 20uL of 1ppm B to 100 mL

S0.5 = 50uL of 1ppm B to 100 mL

S1.0 = 100uL of 1ppm B to 100 mL

S5.0 = 500uL of 1ppm B to 100 mL

S10.0 = 1000uL of 1ppm B to 100 mL

REVIEWED
ga 06-10-15
KATAHDIN ANALYTICAL
METALS SECTION

Balance ID: BAL 15

PS 6/8/15 ~~Water Bath~~ modblock ID : A

Thermometer ID : ALC 11

Start Time: 15:51 /Temp. 95 °C) End Time: 16:21 /Temp. 95 °C)

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Texture	Final Color	Final Clarity	Artifacts	Bottle
LCSOIF08HGS1	IF08HGS1	0.60	g	0.10	L	SL	HG	TCS	06/08/2015	N/A	N/A	N/A	N/A		N/A
PBSIF08HGS1	IF08HGS1	0.60	g		L	SL	HG	TCS	06/08/2015	N/A	N/A	N/A	N/A		N/A
SI3835-001	IF08HGS1	0.61	g		L	SL	HG	TCS	06/08/2015						H
SI3862-001	IF08HGS1	0.75	g		L	SL	HG	TCS	06/08/2015						P
SI3862-001P	IF08HGS1	0.75	g		L	SL	HG	TCS	06/08/2015						P
SI3862-001S	IF08HGS1	0.75	g		L	SL	HG	TCS	06/08/2015						P
SI3862-002	IF08HGS1	0.71	g		L	SL	HG	TCS	06/08/2015						E

ga 06-10-15

QA-067-Revision 1 - 09/23/2010 Digestion performed by: TCS On: 06-08-15 Page: IF054 Revision: 00

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 104736 HCL: 99513 H2O2: N/A **Method:** 3010

LCS / Spike **LCS/Spiking Information:**

- [x] [x] CLPP-SPK-1 (ID/Vol): MS1928 / 0.05 mL
- [x] [x] CLPP-SPK-INT1 (ID/Vol): MW15522 / 0.5 mL
- [x] [x] CLPP-SPK-INT2 (ID/Vol): MW15498 / 0.5 mL
- [ ] [ ] _____ Spike (ID/Vol): N/A / _____ mL
- [ ] [ ] CLPP-SPK-4 (ID/Vol): N/A / _____ mL

Hot Plate/Block ID : B

Start Time: 10:50 /Temp.(90-95°C) : 93°

End Time: 17:17 /Temp.(90-95°C) : 90°

Thermometer ID/Pos.: ALC 24 / 1.1

Filter Paper: N/A

REVIEWED
SAM 06-09-15
KATAHDIN ANALYTICAL
METALS SECTION

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWIF08ICW3	IF08ICW3	0.05	L	0.05	L	AQ	IC	TCS	06/08/2015	N/A	N/A	N/A	N/A		N/A
PBT1225D	IF08ICW3	0.01	L		L	AQ	IC	TCS	06/08/2015						N/A
PBWIF08ICW3	IF08ICW3	0.05	L		L	AQ	IC	TCS	06/08/2015	N/A	N/A	N/A	N/A		N/A
SI3863-008	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						E
SI3863-009	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						E
SI3863-010	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						E
SI3863-011	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						E
SI3863-012	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						E
SI3897-038	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						A
SI3897-038D	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						A
SI3897-038S	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						A
SI3907-001	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						D
SI3907-002	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						D
SI3907-004	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						D
SI3907-006	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						D
~~SI3916-001~~ SF3862 6	IF08ICW3	0.01	L		L	AQ	IC	TCS	06/08/2015						P
~~SI3916-002~~ SF3863 -7	IF08ICW3		L		L	AQ	IC	TCS	06/08/2015						F

TRS 6/8/15

TRS 6/8/15

QA-064-Revision 2 - 01/08/2014 **Digestion performed by:** TRS **On:** 6/8/15 **Page:** IF049 **Revision:** 00

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 104736 **HCL:** 99513 **H2O2:** N/A **Method:** 3010-MS

LCS / Spike **LCS/Spiking Information:** TRS 6/8/15

- [x] [x] CLPP-SPK-1 (ID/Vol): MS1928 / ~~0.1~~ 0.05 mL
- [x] [x] CLPP-SPK-INT1 (ID/Vol): MW15522 / ~~1.0~~ 0.5 mL
- [x] [x] CLPP-SPK-INT2 (ID/Vol): MW15498 / ~~1.0~~ 0.5 mL
- [ ] [ ] _____ Spike (ID/Vol): N/A / _____ mL
- [ ] [ ] CLPP-SPK-4 (ID/Vol): N/A / _____ mL

Hot Plate/Block ID: B **Filter Paper:** N/A

Start Time: 10:50 **/Temp.(90-95°C):** 93°

End Time: 17:17 **/Temp.(90-95°C):** 90°

Thermometer ID/Pos.: ALC24 / 1.1

REVIEWED

EA 06-09-15

KATAHDIN ANALYTICAL METALS SECTION

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWIF08IMW2	IF08IMW2	0.05	L	0.05	L	AQ	IM	TCS	06/08/2015	N/A	N/A	N/A	N/A		N/A
PBWIF08IMW2	IF08IMW2		L		L	AQ	IM	TCS	06/08/2015	N/A	N/A	N/A	N/A		N/A
SI3862-003	IF08IMW2		L		L	AQ	IM	TCS	06/08/2015						D
SI3897-038	IF08IMW2		L		L	AQ	IM	TCS	06/08/2015						A
SI3897-038D	IF08IMW2		L		L	AQ	IM	TCS	06/08/2015						A
SI3897-038S	IF08IMW2		L		L	AQ	IM	TCS	06/08/2015						A

TRS 6/8/15

Digestion performed by: TRS **On:** 6/8/15

Katahdin Analytical Services 0000489

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 104117 HCL: N/A H2SO4: 71333 **Method:** 7470

KMNO4: MR1469 K2S2O8: MR1463 NH2OH-HCl: MR1468

Standards/Spiking Information:

1ppm A : MW15521

1ppm B : MW15492

LCSW = 125uL of 1ppm A to 25mL

Spike(S/P) = 25uL of 1ppm A to 25mL

ICV = 600uL of 1ppm A to 100 mL

S0.2 = 20uL of 1ppm B to 100 mL

S0.5 = 50uL of 1ppm B to 100 mL

S1.0 = 100uL of 1ppm B to 100 mL

S5.0 = 500uL of 1ppm B to 100 mL

S10.0 = 1000uL of 1ppm B to 100 mL

REVIEWED
KAT 06-11-15
KATAHDIN ANALYTICAL
METALS SECTION

Water Bath ID : B

Thermometer ID : DIG65

Start Time: 11:58 /Temp. 90 °C) End Time: 13:58 /Temp. 91 °C)

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWIF10HGW2	IF10HGW2	0.025	L	0.025	L	AQ	HG	TCS	06/10/2015	N/A	N/A	N/A	N/A		N/A
PBWIF10HGW2	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015	N/A	N/A	N/A	N/A		N/A
SI3789-001	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						A
SI3811-001	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						A
SI3811-002	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						A
SI3811-003	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						A
SI3811-004	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						A
SI3811-005	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						A
SI3811-006	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						A
SI3862-003	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						D SI3862-1
SI3862-006	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						P
SI3862-006P	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						P
SI3862-006S	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						P
SI3862-007	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						F SI3862-2
SI3867-005	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						A
SI3891-001	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						A
SI3891-003	IF10HGW2		L		L	AQ	HG	TCS	06/10/2015						A

TRS 6/10/15

Katahdin Analytical Services 0000490

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 104117 HCL: N/A H2SO4: 71333 **Method:** 7470

KMNO4: MR1469 K2S2O8: MR1463 NH2OH-HCl: MR1468

Standards/Spiking Information:

1ppm A : MW15521

1ppm B : MW15492

LCSW = 125uL of 1ppm A to 25mL

Spike(S/P) = 25uL of 1ppm A to 25mL

ICV = 600uL of 1ppm A to 100 mL

S0.2 = 20uL of 1ppm B to 100 mL

S0.5 = 50uL of 1ppm B to 100 mL

S1.0 = 100uL of 1ppm B to 100 mL

S5.0 = 500uL of 1ppm B to 100 mL

S10.0 = 1000uL of 1ppm B to 100 mL

REVIEWED
06-11-15
KATAHDIN ANALYTICAL
METALS SECTION

Water Bath ID : B

Thermometer ID : D1665

Start Time: 11:58 /Temp. 90 °C) End Time: 13:58 /Temp. 91 °C)

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWIF10HGW3	IF10HGW3	0.025	L	0.025	L	AQ	HG	TCS	06/10/2015	N/A	N/A	N/A	N/A		N/A
PBT1225D	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						N/A
PBT1245A	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						N/A
PBT1246A	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						N/A
PBT1247A	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						N/A
PBWIF10HGW3	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015	N/A	N/A	N/A	N/A		N/A
SI3920-001	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						E
SI3920-001P	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						E
SI3920-001S	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						E
SI3920-002	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						E
SI3920-003	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						E
SI3920-004	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						E
SI3920-005	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						E
SI3920-006	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						E
SI3920-007	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						E
SI3920-008	IF10HGW3		L		L	AQ	HG	TCS	06/10/2015						E
SI3944-7															D
SI3944-8															D
SI3984-1		0.005		0.026											A

TRS 6/10/15

QA-066-Revision 2 - 04/23/2015 Digestion performed by: TRS On: 6/10/15 Page: IF067 Revision: 00

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 1047360 HCL: 97264 H2O2: N/A **Method:** 3010

LCS / Spike **LCS/Spiking Information:** 1929

- [x] [x] CLPP-SPK-1 (ID/Vol): MW15522 / 0.05 mL
- [x] [x] CLPP-SPK-INT1 (ID/Vol): MW15522 / 0.50 mL
- [x] [x] CLPP-SPK-INT2 (ID/Vol): MW15542 / 0.50 mL
- [ ] [ ] _____ Spike (ID/Vol): N/A / — mL
- [ ] [ ] CLPP-SPK-4 (ID/Vol): N/A / — mL

Hot Plate/Block ID : A

Start Time: 12:10 /Temp.(90-95°C) : 95

End Time: 17:13 /Temp.(90-95°C) : 96

Thermometer ID/Pos.: A1C 11 / 4:5

Filter Paper: N/A

REVIEWED
S 2-06-23-15
KATAHDIN ANALYTICAL
METALS SECTION

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWIF19ICW1	IF19ICW1	0.050	L	0.05	L	AQ	IC	EAM	06/19/2015	N/A	N/A	N/A	N/A		N/A
PBT1250A	IF19ICW1	0.010	L		L	AQ	IC	EAM	06/19/2015						N/A
PBT1251A	IF19ICW1	0.010	L		L	AQ	IC	EAM	06/19/2015						N/A
PBWIF19ICW1	IF19ICW1	0.050	L		L	AQ	IC	EAM	06/19/2015	N/A	N/A	N/A	N/A		N/A
SI3836-009R	IF19ICW1	↓	L		L	AQ	IC	EAM	06/19/2015						B
SI3862-006P	IF19ICW1	0.010	L		L	AQ	IC	EAM	06/19/2015						O
SI3862-006S	IF19ICW1	↓	L		L	AQ	IC	EAM	06/19/2015						O
SI3944-007R	IF19ICW1	0.020	L	0.020	L	AQ	IC	EAM	06/19/2015						H
SI3944-007RP	IF19ICW1	0.050	L		L	AQ	IC	EAM	06/19/2015						H
SI3944-007RS	IF19ICW1	↓	L		L	AQ	IC	EAM	06/19/2015						H
SI4143-001	IF19ICW1	0.010	L	0.05	L	AQ	IC	EAM	06/19/2015						B
SI4190-002	IF19ICW1	↓	L		L	AQ	IC	EAM	06/19/2015						G
SI4197-001	IF19ICW1		L		L	AQ	IC	EAM	06/19/2015						A
SI4234-001	IF19ICW1		L		L	AQ	IC	EAM	06/19/2015						B
SI4234-002	IF19ICW1		L		L	AQ	IC	EAM	06/19/2015						A
SI4234-003	IF19ICW1		L		L	AQ	IC	EAM	06/19/2015						~~B~~A EL 06/22/15
SI4240-001	IF19ICW1		L		L	AQ	IC	EAM	06/19/2015						A
SI4291-006	IF19ICW1	↓	L		L	AQ	IC	EAM	06/19/2015						D
SI4291-007	IF19ICW1	0.050	L		L	AQ	IC	EAM	06/19/2015						D
SI4291-009	IF19ICW1	0.010	L		L	AQ	IC	EAM	06/19/2015						D
SI4291-010	IF19ICW1	0.050	L		L	AQ	IC	EAM	06/19/2015						D

GES 06.19.15

Digestion performed by: GES **On:** 06.19.15

Katahdin Analytical Services 0000492

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG164253	SM2540	06-JUN-15	05-JUN-15	U 1 %	1 %	N/A

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG164253-2	LCS	WG164253	06-JUN-15	05-JUN-15	%	90	90.	100	90-110	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG164253-3	SI3862-1	WG164253	06-JUN-15	%	93.	92.	1	20

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfide H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI3862-1
Report Date: 27-JUN-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI3862

Sample Description	Matrix	Date Sampled	Date Received
SITE4TS-FB	SL	04-JUN-15 12:00:00	05-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	93. %	1		N/A	SM2540G	WG164253	06-JUN-15 12:01:33	SM2540G	05-JUN-15	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI3862-2
Report Date: 27-JUN-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI3862

Sample Description	Matrix	Date Sampled	Date Received
SITE4TS-XX	SL	04-JUN-15 00:00:00	05-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	92. %	1		N/A	SM2540G	WG164253	06-JUN-15 12:01:42	SM2540G	05-JUN-15	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI3862-4
Report Date: 27-JUN-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI3862

Sample Description	Matrix	Date Sampled	Date Received
SITE4TS-TB-SOIL	SL	04-JUN-15 15:00:00	05-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	100 %	1		N/A	SM2540G	WG164253	06-JUN-15 12:01:43	SM2540G	05-JUN-15	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Raw Data Section

TOTAL SOLIDS BATCH REPORT
Jun 08 2015, 09:44 am
Batch: WG164253

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SI3327-2	SL	SAMP	05-JUN-15	1.3209 g	42.451 g	33.4211 g	33.4211 g	AZ	06-JUN-15	78.0460	78. %		
SI3862-1	SL	SAMP	05-JUN-15	1.3181 g	33.0851 g	30.7528 g	30.7528 g	AZ	06-JUN-15	92.6580	93. %		
SI3862-2	SL	SAMP	05-JUN-15	1.3171 g	36.5812 g	33.6687 g	33.6687 g	AZ	06-JUN-15	91.7410	92. %		
SI3862-4	SL	SAMP	05-JUN-15	1 g	5 g	5 g	5 g	AZ	06-JUN-15	100.0000	100 %		
WG164253-1	SL	MBLANK	05-JUN-15	1.3156 g	1.809 g	1.3147 g	1.3147 g	AZ	06-JUN-15	-0.1820	1 %		
WG164253-2	SL	LCS	05-JUN-15	1.308 g	6.3163 g	5.8253 g	5.8253 g	AZ	06-JUN-15	90.1960	90. %	100	
WG164253-3	SL	DUP	05-JUN-15	1.3139 g	33.7483 g	31.143 g	31.143 g	AZ	06-JUN-15	91.9670	92. %		1

Comments:

SI3862-1	MS/MSD
SI3862-4	Trip blank, no TS jar.
WG164253-1	SI3327-2
WG164253-2	SI3327-2
WG164253-3	SI3862-1

Entered by: [signature] Date: 6-8-15 Accepted by: [signature] Date: 06/08/15

TOTAL SOLIDS BATCH REPORT
Jun 08 2015, 09:44 am
Batch: WG164255

Sample	Matrix	Type	Prep Date	Tare	Initial	Finall	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SI3821-12	SL	SAMP	05-JUN-15	1 g	5 g	5 g	5 g	AZ	07-JUN-15	100.0000	100 %		
SI3821-6	SL	SAMP	05-JUN-15	1.3107 g	24.6758 g	24.0958 g	24.0636 g	AZ	07-JUN-15	97.3800	97. %		
SI3835-1	SL	SAMP	05-JUN-15	1.3032 g	40.6643 g	36.2978 g	36.2474 g	AZ	07-JUN-15	88.7780	89. %		
SI3852-1	SL	SAMP	05-JUN-15	1.3143 g	16.7131 g	13.3451 g	12.3786 g	AZ	07-JUN-15	71.8520	72. %		
SI3852-2	SL	SAMP	05-JUN-15	1.3144 g	15.9257 g	12.8443 g	11.9 g	AZ	07-JUN-15	72.4480	72. %		
SI3852-3	SL	SAMP	05-JUN-15	1.303 g	15.4019 g	11.9522 g	11.1228 g	AZ	07-JUN-15	69.6490	70. %		
SI3852-4	SL	SAMP	05-JUN-15	1.3172 g	16.8729 g	13.4483 g	12.472 g	AZ	07-JUN-15	71.7090	72. %		
WG164255-1	SL	MBLANK	05-JUN-15	1.3156 g	1.809 g	1.3147 g	1.3147 g	AZ	07-JUN-15	-0.1820	1 %		
WG164255-2	SL	LCS	05-JUN-15	1.308 g	6.3163 g	5.8253 g	5.8244 g	AZ	07-JUN-15	90.1780	90. %	100	

Comments:

SI3821-12	tb, no ts jar
WG164255-1	SI3821-6
WG164255-2	SI3821-6

Entered by: _____ Date: 6-8-15 Accepted by: _____ Date: 06/08/15

R 320322
WG164253

R 320323
Temp WG164253

KATAHDIN ANALYTICAL SERVICES

Total Solids: SM2540 G / ASTM D2216			PQL: 0.10%	Total Volatile Solids: SM2540 G / E160.4			PQL: 0.10%	Balance Calibrated?
TS/TVS	In 1	In 2	TS Only	Out 1	Out 2	TVS Only		Y / N
ANALYST IN:	AB	AB	ANALYST OUT:	AB	AB	ANALYST OUT:		In: Y
DATE IN:	6-5-15	6-6-15	DATE OUT:	6-6-15	6-7-15	DATE OUT:		Out (TS): Y
TIME IN:	14:17	12:08	TIME OUT:	10:29	9:20	TIME OUT:		Out (TVS):
TEMP IN:	104°C	104°C	TEMP OUT:	103°C	104°C	TEMP OUT:		Balance ID:
Oven ID: Imperial ✓			Muffle Oven ID: 030807 (assigned)					S/N 112401631

	SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)	1st DISH DRY WT (g)	2nd DISH DRY WT (g)	DISH/ASH WT (g)	TIME
1	Blank	4A	1.3156	1.8090	1.3147			
2	LCS	5A	1.3080	6.3163	5.8253			
3	SI 3327-2	1A						
4	SI 3862-1	2A						
5	-2	3A						
100% 6	-4	—	1	5	5			
7	SI 3862-1 DUP	6A						
8	SI 3821-6	7A						
100% 9	-12	—	1	5	5	5		
10	SI 3875-1	8A						
11	SI 3852-1	9A						
12	-2	10A						
13	-3	11A						
14	-4	12A						
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

6-8-15

Katahdin Analytical Services 0000506

Reviewed By: [signature]
QAWL772

Reviewed Date: 06/08/15

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, Maine

CASE NO. WE15 SDG NO. 514291 SDG NOS. TO FOLLOW
SAS NO.

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. **Inventory Sheet** (Form DC-2) (Do not Number)	0000001	0000010	✓	
2. **SDG Case Narrative**	0000013	0000019	✓	
3. **SDG Cover Sheet/Traffic Report**	0000011	0000012	✓	
4. **Volatiles Data**				
a. QC Summary				
System Monitoring Compound Summary (Form II	0000032	0000035	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	—	—	—	
Method Blank Summary (Form IV VOA)	0000036	0000037	✓	
GC/MS Instrument Performance Check (Form V VOA)	0000050	0000052	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	0000053	0000056	✓	
b. Sample Data	0000057	0000086		
TCL Results - (Form I VOA-1, VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	0000087	0000102		
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB	—	—	—	
Blank Data	0000038	0000043	✓	
Martix Spike/Matrix Spike Duplicate Data	0000044	0000049	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, Maine

CASE NO. WP15 SDG NO. S14291 SDG NOS. TO FOLLOW
SAS NO.

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. **Inventory Sheet** (Form DC-2) (Do not Number)	NA	NA	NA	
2. **SDG Case Narrative**	↓	↓	↓	
3. **SDG Cover Sheet/Traffic Report**	↓	↓	↓	
4. **Volatiles Data** – SPLP				
a. QC Summary				
System Monitoring Compound Summary (Form II	0000109	0000111	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	—	—	—	
Method Blank Summary (Form IV VOA)	0000112	0000112	✓	
GC/MS Instrument Performance Check (Form V VOA)	0000119	0000120	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	0000121	0000122	✓	
b. Sample Data	0000123	0000133		
TCL Results - (Form I VOA-1, VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	0000134	0000141		
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB	—	—	—	
Blank Data	0000113	0000116	✓	
Martix Spike/Matrix Spike Duplicate Data	0000117	0000118	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. S142911 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000150	0000153	✓	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000154	0000155	✓	
GC/MS Instrument Performance Check (Form V SV)	0000164	0000166	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000167	0000170	✓	
b. Sample Data	0000171	0000185		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000186	0000200		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000156	0000159	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000160	0000163	✓	
e. ~~Raw GPC Data~~ Logbooks	0000201	0000208	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. S14291 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** - SIM				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000209	0000212	✓	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000213	0000214	✓	
GC/MS Instrument Performance Check (Form V SV)	0000219	0000224	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000225	0000228	✓	
b. Sample Data	0000229	0000242		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000243	0000253		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000215	0000216	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000217	0000218	✓	
e. ~~Raw GPC Data~~ Logbooks	0000254	0000262	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. S14291 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** -SPLP				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000263	0000265	✓	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000266	0000266	✓	
GC/MS Instrument Performance Check (Form V SV)	0000270	0000272	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000273	0000274	✓	
b. Sample Data	0000275	0000281		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000282	0000287		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000267	0000268	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000269	0000269	✓	
e. ~~Raw GPC Data~~ Logbooks	0000288	0000291	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. S14291 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** SPLP Sim				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000292	0000294	✓	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000295	0000295	✓	
GC/MS Instrument Performance Check (Form V SV)	0000302	0000303	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000304	0000305	✓	
b. Sample Data	0000306	0000316		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000317	0000324		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000296	0000299	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000300	0000301	✓	
e. ~~Raw GPC Data~~ Logbooks	0000325	0000328	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. 514291 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. ~~Pesticides Data~~ (Cont.) VOA SPLP				
e. ~~Raw GPC Data~~ Logbooks	0000142	0000149	✓	
f. Raw Florisil Data	NA	NA	NA	
7. **Miscellaneous Data**				
Original preparation and analysis forms or of preparation and analysis logbook pages—VOA	0000103	0000108	✓	
Internal sample and sample extract transfer chain-of-custody records	0000026	0000031	✓	
Screening records	NA	NA	NA	
All instrument output, including strip charts from screening activities (describe or list)				
8. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments _____)	NA	NA	NA	
Chain-of-Custody Records	0000022	0000022	✓	
Sample Tags				
Sample Log-in Sheet (Lab & DC1)	NA	NA	NA	
Miscellaneous Shipping/Receiving Records (describe or list)				
Sample Receipt Condition Report	0000021	0000021	✓	
Login Chain of Custody	0000023	0000025	✓	
9. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
	NA	NA	NA	
10. **Other Records** (describe or list)				
Telephone Communication Log				

11. **Comments:** _____

FORM DC-2-4 OLM04.2

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. S14291 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

Completed by: (CLP Lab)	[signature] (Signature)	Heather Manzi/PM (Printed Name/Title)	7-14-15 (Date)
Verified by: (CLP Lab)	(Signature)	(Printed Name/Title)	(Date)
Audited by: (EPA)	(Signature)	(Printed Name/Title)	(Date)

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, ME
CASE NO. WE15 SDG NO. 512291 SDG NOS. TO FOLLOW

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - ILM05.4, Exhibit B Section 2.6)

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1. Cover Page	0000011	0000012	✓	
2. SDG Narrative	0000013	0000019	✓	
3. Sample Log-In Sheet (DC-1)	—	—	—	
4. Inventory Sheet (DC-2))	0000001	0000010	✓	
5. Traffic Report/Chain of Custody Record(s)	0000022	0000022	✓	
Inorganic Analysis				
6. Data Sheet (Form I-IN)	0000333	0000338	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	NA	NA	NA	
8. CRQL Standard(Form IIB-IN)	↓	↓	↓	
9. Blanks (Form III-IN)	0000329	0000331	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	NA	NA	NA	
11. ICP-MS Interference Check Sample(Form IVB-IN)	↓	↓	↓	
12. Matrix Spike Sample Recovery(Form VA-IN)	↓	↓	↓	
13. Post-Digestion Spike Sample Recovery(Form VB-IN)	↓	↓	↓	
14. Duplicates (Form VI-IN)	↓	↓	↓	
15. Laboratory Control Sample(Form VII-IN)	0000332	0000332	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	NA	NA	NA	
17. Method Detection Limits (Annually) (Form IX-IN)	↓	↓	↓	
18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN)	↓	↓	↓	
19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN)	↓	↓	↓	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN)	↓	↓	↓	
21. Preparation Log (Form XII-IN)	↓	↓	↓	
22. Analysis Run Log (Form XIII-IN)	↓	↓	↓	

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23. ICP-MS Tune (Form XIV-IN)	NA	NA	NA	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)				
25. ~~ICP-AES~~ Raw Data wet chemistry	0000539	0000541	✓	
26. ICP-MS Raw Data	NA	NA	NA	
27. Mercury Raw Data				
28. Cyanide Raw Data				
29. Preparation Logs Raw Data (Wet Chemistry)				
30. Percent Solids Determination Log				
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)				
Sample Tags				
Sample Log-In Sheet (Lab)				
32. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs				
Sample Receipt Condition Report	0000021	0000021	✓	
	NA	NA	NA	
33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)				
Internal Chain of Custody	0000026	0000031	✓	
Login Chain of Custody Report	0000023	0000025	✓	
34. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	NA	NA	NA	
Analysis Records				
Description Duplicate Precision Form				
35. Other Records (describe or list)				
Telephone Communications Log				
DAS Specifications				

36. Comments

Completed by:
(CLP Lab) [signature] (Signature) Heather Manz / DM (Print Name & Title) 7-14-15 (Date)

Audited by:
(USEPA) _____ (Signature) _____ (Print Name & Title) _____ (Date)

FORM DC-2-2 M&E DAS

ENSAFE
NAVY CLEAN WE08 NWIRP
BETHPAGE, NY
SI4291

KATAHDIN ANALYTICAL SERVICES, LLC
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

SAMPLE DATA PACKAGE

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
ENSAFE
NAVY CLEAN WE08 NWIRP BETHPAGE, NY
SI4291

Sample Receipt

The following samples were received on June 18, 2015 and were logged in under Katahdin Analytical Services work order number SI4291 for a hardcopy due date of July 07, 2015.

KATAHDIN Sample No.	AECOM Sample Identification
SI4291-1	SITE 4TS-HWF1-B
SI4291-2	SITE 4TS-HWF1-B
SI4291-3	SITE 4TS-HWF2-B
SI4291-4	SITE 4TS-HWF2-B
SI4291-5	SITE 4TS-HWF1-PT
SI4291-6	SITE 4TS-HWF1-PT
SI4291-7	SITE 4TS-HWF2-L1
SI4291-8	SITE 4TS-HWF2-PT
SI4291-9	SITE 4TS-HWF2-PT
SI4291-10	SITE 4TS-HWF2-L2
SI4291-11	SITE 4TS-TB-061715
SI4291-12	SITE 47S-TB-061715

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Jennifer Obrin.** This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SI4291 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

8270D SIM Analysis

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Samples SI4291-1, 3, 5 and 8 were concentrated to a final volume of 2 mL instead of the laboratory procedure of 1 mL and analyzed at dilutions of 1:20 or 1:30 due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQLs were elevated by a factor of 40 or 60.

Samples SI4291-7DL and 10 had high recoveries for one surrogate, which were outside the laboratory established acceptance limits.

Samples SI4291-1DL, 1DL2, 3DL, 3DL2, 5DL, 5DL2 and 8DL had low responses for one or more internal standards that resulted in %D's which were outside the DoD QSM acceptance limit of -50% to +100% of the response of the internal standard of the ICAL midpoint standard. Since the samples were twice, no further action was taken.

The CV's (files N6700, N6752) had low and/or high responses for the target analytes chrysene, benzo(b)fluoranthene, and/or benzo(g,h,i)perylene, which resulted in %D's that were greater than the DoD QSM acceptance limit of 20%.

The target analytes fluoranthene, pyrene and/or benzo(a)anthracene were detected at or below ½ of the LOQ in the method blank WG164996-1 or WG165103-1. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). Since the method blanks were acceptable, no further action was taken.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived limits for the full list of spiked compounds. Although DoD QSM acceptance limits were requested for this project, laboratory established acceptance limits were used because the DoD QSM does not list acceptance limits for 8270SIM. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these statistical acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

8260C SPLP Analysis

The target analyte methylene chloride was detected below ½ the reporting limit in the method blank WG165462-2 and the SPLP blank WG165462-5. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit. Since the blanks were acceptable, no further action was taken.

The independent check standard (file P1539A), associated with the initial calibration analyzed on the P instrument on 06/22/15, had a high concentration for the target analyte chloroethane, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

8260C Analysis

Samples SI4291-1, 3 and 5 had low and/or high recoveries for one or more of the surrogates, which were outside of the DoD QSM acceptance limits. These samples were reanalyzed and had similar surrogate deviations. Some of the samples also had low responses for one or more internal standards that resulted in %D's which were outside the DoD QSM acceptance limit of -50% to +100% of the response of the internal standard of the midpoint of the ICAL. The results from both analyses are included in the report.

Sample SI4291-8 had low recoveries for three surrogates, which were outside the DoD QSM acceptance limits. Only one low level ($NaHSO_4$) vial was sent for analysis, so the sample could not be reanalyzed. Based on the sample chromatography, the surrogate deviations are likely attributed to a matrix effect.

The method blank WG165286-9 had a recovery for the surrogate toluene-d8 that was high and outside of the DoD QSM acceptance limit. Since a high recovery would indicate a high bias, and there were no target analytes detected above the MDL, no further action was taken.

The independent check standard (file P1539A), associated with the initial calibration analyzed on the P instrument on 06/22/15, had a high concentration for the target analyte chloroethane, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The initial calibration analyzed on the T instrument on 6/22/15 had %RSD values for some target analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The analyte chloroethane failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990, respectively. This analyte was calibrated using the average model. The corresponding independent check standard (file T3891A) had a high concentration for the target analyte 2-hexanone and naphthalene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The calibration verification standard (file P1581) had a high response for the target analyte chloroethane and low responses for the target analytes carbon disulfide, 2,2-dichloropropane, naphthalene and methyl acetate that resulted in %D's that exceeded the DoD QSM acceptance limits of 20%.

8270D SIM SPLP Analysis

The initial calibration analyzed on the N instrument on 06/23/2015 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analyte 2,4-dinitrophenol failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the

method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model. The corresponding independent check standard (file N6784) had a high concentration for the target analytes nitrobenzene, 4-nitroaniline, 3,4-methylphenol, and low concentrations for hexachlorocyclopentadiene, 2,3,4,6-tetrachlorophenol, and 2,4-dinitrophenol, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The CV (file N6791) had high responses for the target analytes 4-nitroaniline. 3,3'-dichlorobenzidine and benzo(b)fluoranthene, which resulted in %D's that were greater than the acceptance limit of 20% from DoD QSM.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived limits for the full list of spiked compounds. Although DoD QSM acceptance limits were requested for this project, laboratory established acceptance limits were used because the DoD QSM does not list acceptance limits for 8270SIM. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these statistical acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

The target analyte benzo(b)fluoranthene was detected above ½ of the LOQ, but less than the LOQ and benzo(k)fluoranthene was detected below ½ of the LOQ in the method blank WG165249-1. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample or 1/10 the regulatory limit (whichever is greater). If the target analyte benzo(b)fluoranthene was detected in any samples associated with the blank, it was flagged with a "B" qualifier indicating that the analyte was detected in the method blank analyzed and/or extracted concurrently with the sample.

The LCS WG165249-2 and the LCSD WG165249-3 had high and/or low recoveries for several spiked target analytes that were outside of the laboratory established acceptance limits. The DoD QSM allowable number of exceedances for 50 target analytes is two analytes. DoD QSM Version 4.1 Section G.7 lists the acceptance limits of the SW-846 Method 8270 target analytes.

<u>8270D SCAN Analysis</u>

All soil samples and associated QC were subjected to the GPC sample clean-up process.

Samples SI4291-1, 3, 5 and 8 were concentrated to a final volume of 2 mL instead of the laboratory procedure of 1 mL and analyzed at a dilution of 1:3 due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQLs were elevated by a factor of 6.

Samples SI4291-1DL, 3DL, 5DL and 8DL had high recoveries for one or more surrogates, which were outside the DoD QSM acceptance limits. These samples also had low responses for two internal standards that resulted in %D's which were outside the laboratory acceptance limit of -

50% to +100% of the response of the internal standard of the ICAL midpoint standard. Based on the sample chromatograms, the deviations are likely attributable to a matrix effect. Therefore, no further action was taken.

The semivolatile organics instrument performance check (DFTPP) Decafluorotriphenylphosphine (files UD389 and UD391) did not meet, according to DoD QSM, the tailing criteria for pentachlorophenol, which were above the maximum amount of 2%. Since all other criteria were met and the continuing calibration standards were acceptable, analysis proceeded.

The initial calibration analyzed on the U instrument on 06/19/2015 had %RSD values for one analyte that exceeded the method acceptance limit of 15%. For this analyte, a quadratic model was used for quantitation instead of an average response factor. The target analytes bis(2-chloroethyl)ether, benzoic acid and 4-chlorophenyl-phenylether failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. These compounds were calibrated using the average model. The corresponding independent check standard (file U0733) had high concentrations for the target analytes benzoic acid and pentachlorophenol, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The initial calibration analyzed on the U instrument on 06/22/2015 had %RSD values for a few analytes that exceeded the method acceptance limit of 15%. For these analytes, a quadratic model was used for quantitation instead of an average response factor. The target analytes benzoic acid, 1,1'-biphenyl, dibenzofuran and 4-chlorophenyl-phenylether failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. These compounds were calibrated using the average model. The corresponding independent check standard (file U0763) had high concentrations for the target analytes bis(2-chloroethyl)ether, benzoic acid, 2,4,5-trichlorophenol, dibenzofuran and pentachlorophenol, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The CV (file U0788) had a high response for the target analyte 4,6-dintro-2-methylphenol, N-nitroso-diphenylamine, 1,2-diphenylhydrazine, 4-bromophenyl-phenylether, benzidine and a low concentration for di-n-octylphthalate, which resulted in a %D that was greater than the DoD QSM acceptance limit of 20%.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on the DoD QSM for the full list of spiked compounds and all additional compounds are statistically derived. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable.

There was no recovery for the spiked analyte benzoic acid in the LCSD WG164995-3. According to the DoD QSM section G.5, this compound is identified as a poor performing analyte for this method. Therefore, no further action was taken.

8270D SCAN SPLP Analysis

Samples SI4291-6 had a low recovery for the surrogate 2-fluorophenol that was outside of the DoD QSM acceptance limits. Since the recovery was greater than 10% and there was no SPLP extract remaining, the sample was not re-extracted.

The initial calibration analyzed on the U instrument on 06/22/2015 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analyte fluorene failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model. The corresponding independent check standard (file U0763) had a low concentration for the target analyte benzaldehyde, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The CV (file U0788) had a high response for the target analyte 4-Bromophenyl-phenylether, which resulted in a %D that was greater than the DoD QSM acceptance limit of 20%.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on the DoD QSM for the full list of spiked compounds and all additional compounds are statistically derived. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long the LCS is acceptable.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Wet Chemistry Analysis

The samples of Work Order SI4291 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are

flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times. All quality control criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Leslie Dimond
07.14.15

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, Inc. — Sample Receipt Condition Report

Client:	Ensafe	KAS PM:	JO	Sampled By:	Client
Project:		KIMS Entry By:	GN	Delivered By:	FedEx
KAS Work Order#:	SI 4291	KIMS Review By:	JO	Received By:	GN
SDG #:	Cooler: 1 of 1			Date/Time Rec.:	6-18-15 / 0915

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.6
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?	✓				
Soil/Sediment: Received in airtight container?	✓				
Received in methanol?	✓				
Methanol covering soil?	✓				
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?			✓		8 L TB vials filled w/water, Not used.
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

2 ~~8~~ Sodium Bisulfate vials received dry: HWF2-PT

Jennifer Obrin

From: Jeff Parillo [jparillo@Ensafe.com]
Sent: Wednesday, July 01, 2015 1:30 PM
To: Jennifer Obrin
Subject: RE: Login COC for the samples received 06/24 - Bethpage WE08 _SI4463

Confirmed and thank you.

Jeff Parillo, PE
Environmental Engineer
ENSAFE
1233 Silas Deane Highway
Wethersfield, CT 06109
Office – 860.665.1140 Ext. 6002
Cell – 203.915.0566

From: Jennifer Obrin [mailto:jobrin@katahdinlab.com]
Sent: Wednesday, July 1, 2015 1:03 PM
To: Jeff Parillo
Subject: RE: Login COC for the samples received 06/24 - Bethpage WE08 _SI4463

Jeff,

Can you please confirm that you want to cancel the Metals for:
SITE4TS-HWF1-PT
SITE4TS-HWF2-PT
SITE4TS-SEE1-PT

Thank you,

Jennifer Obrin
Federal Programs Project Manager
Katahdin Analytical Services
A Small Business Enterprise
DoD ELAP Accredited
600 Technology Way
Scarborough, Maine 04074
Office - 207.874.2400 x17
Mobile - 207.333.7469
Fax - 207.775.4029
www.katahdinlab.com

000026

Katahdin ANALYTICAL SERVICES
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client:	Contact:	Phone #:	Fax #:
Ensafe	Jeff Parillo	860-665-1140	( )
Address: 1233 Silas Dean Hwy	City: Westerfield	State: CT	Zip Code: 06109
Purchase Order #: NWIRP Belth	Proj. Name/No.:		Katahdin Quote #:
Bill (if different than above):		Address:	
Sampler (Print/Sign): Tommy Jordan			Copies To: tjordan@kemron.com afortune@terratherm.com

LAB USE ONLY
Work Order #: 51421
Katahdin Project Number
Remarks:
Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C Temp Blank Intact Not Intact

Analysis and Container Type Preservatives

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Filt. Y / N VOC 8260	Filt. Y / N SVOC 8270	Filt. Y / N TAL Metals 6010/7471	Filt. Y / N SPLP VOC 1312/8260	Filt. Y / N SPLP SVOC 1312/8270	Filt. Y / N SPLP Metals 1312/7470A	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N
	Stie 4TS-HWF1-B	6/15/2015 1400	S	7	X	X		X	X					
	Stie 4TS-HWF2-B	6/15/2015 1415	S	7	X	X		X	X					
	Stie 4TS-HWF1-PT	6/16/2015 1430	S	7	X	X	X**	X	X	X**				
	Stie 4TS-HWF2-L1	6/16/2015 1330	W	5	X	X	X							
	Stie 4TS-HWF2-PT	6/17/2015 1515	S	7	X	X	X**	X	X	X**				
	Stie 4TS-HWF2-L2	6/17/2015 1430	W	5	X	X	X							
	Stie 4TS-TB-061715	~~6/17/2015~~ 6/29/15 ~~1300~~ 11:15	W	4	X			X						

COMMENTS: ** Hold Metals analysis unitl instructed by client to analyze. 6-18-15 6/29/15 2 WEEK TAT

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
	6/19/15 1530				
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (Ino1)

Jul. 01, 2015
02:07 PM

Login Number: SI4291

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Primary Report Address:
Dana Miller
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134
dmiller@Ensafe.com

Primary Invoice Address:
Accounts Payable
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: ENSAFE-BETHPAGI

Login Information:

ANALYSIS INSTRUCTIONS	:	Follow DoD QSM Version 4.2 using DoD limits. "U" LOD. "J" flag between DL and LOQ. VOA soils are NaHSO4 and MeOH pres.
CHECK NO.	:	
CLIENT PO#	:	18884
CLIENT PROJECT MANAGE	:	Brian Caldwell
CONTRACT	:	
COOLER TEMPERATURE	:	1.6
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	KAS135QC-CSV & KAS062-CSV
LOGIN INITIALS	:	GN
PM	:	JO
PROJECT NAME	:	Navy Clean WE08 NWIRP Bethpage, NY
QC LEVEL	:	III
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	Send CD only to Dana. Upload to SDS folder. Email invoice to purchasing@ensafe.com.
SDG ID	:	
SDG STATUS	:	

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI4291-1	SITE 4TS-HWF1-B	15-JUN-15 14:00	18-JUN-15		**25-JUN-15**	07-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	29-JUN-15	40 mL Vial+DI+MEOH		
Solid	S	SW8270-S	29-JUN-15	1L N-Amber Glass		
Solid	S	SW8270SIM-S	29-JUN-15	100g Glass		
Solid	S	TS	15-JUL-15			

SI4291-2	SITE 4TS-HWF1-B	15-JUN-15 14:00	18-JUN-15		**25-JUN-15**	07-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	P	SPLP-SVOA				
SPLP-SW8270		SW1312-EXT-SVOA				
Aqueous	S	SPLP-SW8270SIM	22-JUN-15	1L N-Amber Glass		
Solid	P	SPLP-VOA				
SPLP-SW8260		SW1312-EXT-VOA				

SI4291-3	SITE 4TS-HWF2-B	15-JUN-15 14:15	18-JUN-15		**25-JUN-15**	07-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	29-JUN-15	40 mL Vial+DI+MEOH		
Solid	S	SW8270-S	29-JUN-15	1L N-Amber Glass		
Solid	S	SW8270SIM-S	29-JUN-15	100g Glass		
Solid	S	TS	15-JUL-15			

SI4291-4	SITE 4TS-HWF2-B	15-JUN-15 14:15	18-JUN-15		**25-JUN-15**	07-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	P	SPLP-SVOA				
SPLP-SW8270		SW1312-EXT-SVOA				
Aqueous	S	SPLP-SW8270SIM	22-JUN-15	1L N-Amber Glass		
Solid	P	SPLP-VOA				
SPLP-SW8260		SW1312-EXT-VOA				

SI4291-5	SITE 4TS-HWF1-PT	16-JUN-15 14:30	18-JUN-15		**25-JUN-15**	07-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	30-JUN-15	40 mL Vial+DI+MEOH		
Solid	S	SW8270-S	30-JUN-15	1L N-Amber Glass		
Solid	S	SW8270SIM-S	30-JUN-15	100g Glass		
Solid	S	TS	16-JUL-15			

07.01.15

0000023

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (Ino1)

Jul. 01, 2015
02:07 PM

Login Number: SI4291

Quote/Incoming: ENSAFE-BETHPAGI

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI4291-6	SITE 4TS-HWF1-PT	16-JUN-15 14:30	18-JUN-15		**25-JUN-15**	07-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	P	SPLP-SVOA				
SPLP-SW8270		SW1312-EXT-SVOA				
Aqueous	S	SPLP-SW8270SIM	23-JUN-15	1L N-Amber Glass		
Solid	P	SPLP-VOA				
SPLP-SW8260		SW1312-EXT-VOA				

SI4291-7	SITE 4TS-HWF2-L1	16-JUN-15 13:30	18-JUN-15	**25-JUN-15**	07-JUL-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	30-JUN-15	40mL Vial+HCl		
Aqueous	S	SW8270-S	23-JUN-15	1L N-Amber Glass		
Aqueous	S	SW8270SIM-S	23-JUN-15	1L N-Amber Glass		
Aqueous	P	TAL-MET-SW846-ICPMS				
SW3010MS-PREP		SW6020-ALUMINUM		SW6020-ANTIMONY		
SW6020-ARSENIC		SW6020-BARIUM		SW6020-BERYLLIUM		
SW6020-CADMIUM		SW6020-CALCIUM		SW6020-CHROMIUM		
SW6020-COBALT		SW6020-COPPER		SW6020-IRON		
SW6020-LEAD		SW6020-MAGNESIUM		SW6020-MANGANESE		
SW6020-NICKEL		SW6020-POTASSIUM		SW6020-SELENIUM		
SW6020-SILVER		SW6020-SODIUM		SW6020-THALLIUM		
SW6020-VANADIUM		SW6020-ZINC		SW7470-MERCURY		

SI4291-8	SITE 4TS-HWF2-PT	17-JUN-15 15:15	18-JUN-15	**25-JUN-15**	07-JUL-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	01-JUL-15	40 mL Vial+DI+MEOH		
Solid	S	SW8270-S	01-JUL-15	1L N-Amber Glass		
Solid	S	SW8270SIM-S	01-JUL-15	100g Glass		
Solid	S	TS	17-JUL-15			

SI4291-9	SITE 4TS-HWF2-PT	17-JUN-15 15:15	18-JUN-15	**25-JUN-15**	07-JUL-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	P	SPLP-SVOA				
SPLP-SW8270		SW1312-EXT-SVOA				
Aqueous	S	SPLP-SW8270SIM	24-JUN-15	1L N-Amber Glass		
Solid	P	SPLP-VOA				
SPLP-SW8260		SW1312-EXT-VOA				

SI4291-10	SITE 4TS-HWF2-L2	17-JUN-15 14:30	18-JUN-15	**25-JUN-15**	07-JUL-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SW8260-S	01-JUL-15	40mL Vial+HCl		
Aqueous	S	SW8270-S	24-JUN-15	1L N-Amber Glass		
Aqueous	S	SW8270SIM-S	24-JUN-15	1L N-Amber Glass		
Aqueous	P	TAL-MET-SW846-ICPMS				
SW3010MS-PREP		SW6020-ALUMINUM		SW6020-ANTIMONY		
SW6020-ARSENIC		SW6020-BARIUM		SW6020-BERYLLIUM		
SW6020-CADMIUM		SW6020-CALCIUM		SW6020-CHROMIUM		
SW6020-COBALT		SW6020-COPPER		SW6020-IRON		
SW6020-LEAD		SW6020-MAGNESIUM		SW6020-MANGANESE		
SW6020-NICKEL		SW6020-POTASSIUM		SW6020-SELENIUM		
SW6020-SILVER		SW6020-SODIUM		SW6020-THALLIUM		
SW6020-VANADIUM		SW6020-ZINC		SW7470-MERCURY		

SI4291-11	SITE 4TS-TB-061715	17-JUN-15 00:00	18-JUN-15	**25-JUN-15**	07-JUL-15

Matrix	Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
					Trip blank vials filled with water-unable to use.

QP 07.01.15

0000024

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jul. 01, 2015
02:07 PM

Login Number: SI4291

Quote/Incoming: ENSAFE-BETHPAGI

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI4291-12	SITE 47S-TB-061715	17-JUN-15 00:00	18-JUN-15		**25-JUN-15**	07-JUL-15	

Matrix	*Product*	*Hold Date (shortest)*	*Bottle Type*	*Bottle Count*	*Comments*
					Trip blank vials filled with water-unable to use.

Total Samples: ***10*** ***Total Analyses:*** ***36***

QP
07.01.15

0000025

Katahdin Analytical Services, Inc.

Container Transfer History for SI4291

Samplenum SI4291-1

Container Id SI4291-1A **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-1B **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	
22-JUN-15 15:18	VOA_WALK-IN	GC/MS	EEVERETT	N	
23-JUN-15 14:52	GC/MS	VOA_FREEZER1	EEVERETT	N	
23-JUN-15 15:01	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/23/15 14:52 .

Container Id SI4291-1C **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-1D **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	
22-JUN-15 15:18	VOA_WALK-IN	GC/MS	EEVERETT	N	
23-JUN-15 14:52	GC/MS	VOA_FREEZER1	EEVERETT	N	
23-JUN-15 15:01	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/23/15 14:52 .

Container Id SI4291-1E **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 16:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
18-JUN-15 17:29	WET CHEMISTRY	WALK-IN	AZAZZARA	N	

Container Id SI4291-1F **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 15:10	WALK-IN	WALK-IN	HGOULD	Y	This container has not been properly returned to CUSTODY! It was last assigned to GNICKERSON for department CUSTODY on 06/18/15 12:58 .
19-JUN-15 16:38	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
19-JUN-15 17:44	WET CHEMISTRY	WALK-IN	AZAZZARA	N	

Samplenum SI4291-2

Container Id SI4291-2A **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 13:00	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-2B **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 16:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
18-JUN-15 17:29	WET CHEMISTRY	WALK-IN	AZAZZARA	N	
23-JUN-15 12:47	WALK-IN	METALS PREP	TSWETT	N	
24-JUN-15 08:36	METALS PREP	WALK-IN	TSWETT	N	

000076

Katahdin Analytical Services, Inc.
Container Transfer History for SI4291

Samplenum SI4291-3

Container Id SI4291-3A **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-3B **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	
22-JUN-15 15:18	VOA_WALK-IN	GC/MS	EEVERETT	N	
23-JUN-15 14:52	GC/MS	VOA_FREEZER1	EEVERETT	N	
23-JUN-15 15:01	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/23/15 14:52 .

Container Id SI4291-3C **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	
22-JUN-15 15:18	VOA_WALK-IN	GC/MS	EEVERETT	N	
23-JUN-15 14:52	GC/MS	VOA_FREEZER1	EEVERETT	N	
23-JUN-15 15:01	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/23/15 14:52 .

Container Id SI4291-3D **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-3E **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 16:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
18-JUN-15 17:29	WET CHEMISTRY	WALK-IN	AZAZZARA	N	

Container Id SI4291-3F **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 15:10	WALK-IN	WALK-IN	HGOULD	Y	This container has not been properly returned to CUSTODY! It was last assigned to GNICKERSON for department CUSTODY on 06/18/15 12:58 .
19-JUN-15 16:38	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
19-JUN-15 17:44	WET CHEMISTRY	WALK-IN	AZAZZARA	N	

Samplenum SI4291-4

Container Id SI4291-4A **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 13:00	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-4B **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 16:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
18-JUN-15 17:29	WET CHEMISTRY	WALK-IN	AZAZZARA	N	
23-JUN-15 12:47	WALK-IN	METALS PREP	TSWETT	N	
24-JUN-15 08:36	METALS PREP	WALK-IN	TSWETT	N	

000027

Katahdin Analytical Services, Inc.

Container Transfer History for SI4291

Samplenum SI4291-5

Container Id SI4291-5A **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-5B **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	
22-JUN-15 15:18	VOA_WALK-IN	GC/MS	EEVERETT	N	
23-JUN-15 14:52	GC/MS	VOA_FREEZER1	EEVERETT	N	
23-JUN-15 15:01	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/23/15 14:52 .

Container Id SI4291-5C **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	
22-JUN-15 15:18	VOA_WALK-IN	GC/MS	EEVERETT	N	
23-JUN-15 14:52	GC/MS	VOA_FREEZER1	EEVERETT	N	
23-JUN-15 15:01	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/23/15 14:52 .

Container Id SI4291-5D **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-5E **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 16:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
18-JUN-15 17:29	WET CHEMISTRY	WALK-IN	AZAZZARA	N	
19-JUN-15 11:59	WALK-IN	METALS PREP	EMORGAN	N	
19-JUN-15 17:55	METALS PREP	WALK-IN	GJOHNSON	N	

Container Id SI4291-5F **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 15:10	WALK-IN	WALK-IN	HGOULD	Y	This container has not been properly returned to CUSTODY! It was last assigned to GNICKERSON for department CUSTODY on 06/18/15 12:58 .
19-JUN-15 16:38	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
19-JUN-15 17:44	WET CHEMISTRY	WALK-IN	AZAZZARA	N	
23-JUN-15 12:47	WALK-IN	METALS PREP	TSWETT	N	
24-JUN-15 14:47	METALS PREP	WALK-IN	ELITTLEFIELD	N	
25-JUN-15 08:48	WALK-IN	METALS PREP	ELITTLEFIELD	N	
25-JUN-15 14:22	METALS PREP	WALK-IN	ELITTLEFIELD	N	
26-JUN-15 11:17	WALK-IN	METALS PREP	ELITTLEFIELD	N	
26-JUN-15 12:31	METALS PREP	WALK-IN	ELITTLEFIELD	N	

Samplenum SI4291-6

Container Id SI4291-6A **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 13:00	LOGIN	VOA_WALK-IN	GNICKERSON	N	

0000028

Katahdin Analytical Services, Inc.

Container Transfer History for SI4291

Samplenum SI4291-6

Container Id SI4291-6B **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 16:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
18-JUN-15 17:29	WET CHEMISTRY	WALK-IN	AZAZZARA	N	

Samplenum SI4291-7

Container Id SI4291-7A **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	
24-JUN-15 11:20	VOA_WALK-IN	GC/MS	EEVERETT	N	
25-JUN-15 15:51	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI4291-7B **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-7C **Containertype 40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-7D **Containertype 250mL Plastic+HNO3** **Matrix AQ**

Product *SW7470-MERCURY, SW6020-SODIUM, SW6020-SELENIUM, SW6020-NICKEL, SW6020-MAGNESIUM, SW6020-IRON, SW6020-ANTIMONY SW6020-ARSENIC, SW6020-BARIUM, SW6020-BERYLLIUM, SW6020-CADMIUM, SW6020-CALCIUM, SW6020-CHROMIUM, SW6020-COBAL SW6020-COPPER, SW6020-ALUMINUM, SW6020-LEAD, SW6020-MANGANESE, SW6020-POTASSIUM, SW6020-SILVER, SW6020-THALLIU SW6020-VANADIUM, SW6020-ZINC*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
19-JUN-15 11:31	WALK-IN	METALS PREP	EMORGAN	N	
19-JUN-15 17:55	METALS PREP	WALK-IN	GJOHNSON	N	
22-JUN-15 15:57	WALK-IN	WALK-IN	TSWETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to GJOHNSON for department CUSTODY on 06/19/15 17:55 .

Container Id SI4291-7E **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	

Container Id SI4291-7F **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	

Samplenum SI4291-8

Container Id SI4291-8A **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-8B **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	
22-JUN-15 15:18	VOA_WALK-IN	GC/MS	EEVERETT	N	
23-JUN-15 14:52	GC/MS	VOA_FREEZER1	EEVERETT	N	
23-JUN-15 15:01	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	

0000029

Katahdin Analytical Services, Inc.

Container Transfer History for SI4291

Samplenum SI4291-8

Container Id SI4291-8B **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
					This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/23/15 14:52 .

Container Id SI4291-8C **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-8D **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-8E **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 16:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
18-JUN-15 17:29	WET CHEMISTRY	WALK-IN	AZAZZARA	N	
19-JUN-15 11:59	WALK-IN	METALS PREP	EMORGAN	N	
19-JUN-15 17:55	METALS PREP	WALK-IN	GJOHNSON	N	
23-JUN-15 12:47	WALK-IN	METALS PREP	TSWETT	N	
24-JUN-15 14:47	METALS PREP	WALK-IN	ELITTLEFIELD	N	
25-JUN-15 08:48	WALK-IN	METALS PREP	ELITTLEFIELD	N	
25-JUN-15 14:22	METALS PREP	WALK-IN	ELITTLEFIELD	N	

Container Id SI4291-8F **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 15:10	WALK-IN	WALK-IN	HGOULD	Y	This container has not been properly returned to CUSTODY! It was last assigned to GNICKERSON for department CUSTODY on 06/18/15 12:58 .
19-JUN-15 16:38	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
19-JUN-15 17:44	WET CHEMISTRY	WALK-IN	AZAZZARA	N	
26-JUN-15 11:17	WALK-IN	METALS PREP	ELITTLEFIELD	N	
26-JUN-15 12:31	METALS PREP	WALK-IN	ELITTLEFIELD	N	

Samplenum SI4291-9

Container Id SI4291-9A **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 13:00	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-9B **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
18-JUN-15 16:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
18-JUN-15 17:29	WET CHEMISTRY	WALK-IN	AZAZZARA	N	
24-JUN-15 14:47	METALS PREP	WALK-IN	ELITTLEFIELD	Y	This container has not been properly returned to CUSTODY! It was last assigned to AZAZZARA for department CUSTODY on 06/18/15 17:29 .

Samplenum SI4291-10

Container Id SI4291-10A **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

000030

Katahdin Analytical Services, Inc.
Container Transfer History for SI4291

Samplenum SI4291-10

Container Id SI4291-10A **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	
24-JUN-15 11:20	VOA_WALK-IN	GC/MS	EEVERETT	N	
25-JUN-15 15:51	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI4291-10B **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-10C **Containertype** **40mL Vial+HCl** **Matrix AQ**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:50	LOGIN	VOA_WALK-IN	GNICKERSON	N	

Container Id SI4291-10D **Containertype** **250mL Plastic+HNO3** **Matrix AQ**

Product *SW7470-MERCURY, SW6020-THALLIUM, SW6020-SILVER, SW6020-POTASSIUM, SW6020-MANGANESE, SW6020-LEAD, SW6020-ARSENIC, SW6020-BARIUM, SW6020-BERYLLIUM, SW6020-CADMIUM, SW6020-CALCIUM, SW6020-CHROMIUM, SW6020-COBALT, SW6020-COPPER, SW6020-IRON, SW6020-ALUMINUM, SW6020-ANTIMONY, SW6020-MAGNESIUM, SW6020-NICKEL, SW6020-SELENIUM SW6020-SODIUM, SW6020-VANADIUM, SW6020-ZINC*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	
19-JUN-15 11:31	WALK-IN	METALS PREP	EMORGAN	N	
19-JUN-15 17:55	METALS PREP	WALK-IN	GJOHNSON	N	

Container Id SI4291-10E **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	

Container Id SI4291-10F **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
18-JUN-15 12:58	LOGIN	WALK-IN	GNICKERSON	N	

0000031

VOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI4291

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SITE 4TS-HWF1-B	SI4291-1		141.	*	127.		144.	*	72.6	*
SITE 4TS-HWF1-B	SI4291-1RA		97.0		130.		143.	*	72.8	*
SITE 4TS-HWF2-B	SI4291-3		85.1		115.		124.		73.4	*
SITE 4TS-HWF2-B	SI4291-3RA		79.2	*	103.		126.		58.5	*
SITE 4TS-HWF1-PT	SI4291-5		120.		116.		124.		52.9	*
SITE 4TS-HWF1-PT	SI4291-5RA		122.	*	128.		148.	*	59.9	*
SITE 4TS-HWF2-PT	SI4291-8		76.8	*	54.3	*	68.9		21.8	*
Laboratory Control S	WG165286-8		104.		114.		115.		113.	
Method Blank Sample	WG165286-9		109.		114.		109.		117.	*

		QC Limits
DBF	DIBROMOFLUOROMETHANE	64-130
TOL	TOLUENE-D8	85-115
BFB	P-BROMOFLUOROBENZENE	85-120
DCA	1,2-DICHLOROETHANE-D4	58-134

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4291

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SITE 4TS-HWF2-L2	SI4291-10		106.		103.		108.		107.	
SITE 4TS-HWF2-L1	SI4291-7		97.0		101.		102.		101.	
Laboratory Control S	WG165388-1		92.8		93.6		94.0		96.7	
Method Blank Sample	WG165388-2		92.1		92.1		95.3		96.4	

		QC Limits
DCA	1,2-DICHLOROETHANE-D4	70-120
BFB	P-BROMOFLUOROBENZENE	75-120
DBF	DIBROMOFLUOROMETHANE	85-115
TOL	TOLUENE-D8	85-120

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : P1585.D
Instrument ID : GCMS-P
Heated Purge : No

SDG : SI4291
Lab Sample ID : WG165388-2
Date Analyzed : 24-JUN-15
Time Analyzed : 12:08

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165388-1	P1582.D	06/24/15	10:35
SITE 4TS-HWF2-L1	SI4291-7	P1597.D	06/24/15	17:22
SITE 4TS-HWF2-L2	SI4291-10	P1598.D	06/24/15	17:48

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : T3893.D
Instrument ID : GCMS-T
Heated Purge : Yes

SDG : SI4291
Lab Sample ID : WG165286-9
Date Analyzed : 22-JUN-15
Time Analyzed : 15:22

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165286-8	T3891.D	06/22/15	13:59
SITE 4TS-HWF1-B	SI4291-1	T3894.D	06/22/15	16:00
SITE 4TS-HWF1-B	SI4291-1RA	T3895.D	06/22/15	16:37
SITE 4TS-HWF2-B	SI4291-3	T3896.D	06/22/15	17:15
SITE 4TS-HWF2-B	SI4291-3RA	T3897.D	06/22/15	17:52
SITE 4TS-HWF1-PT	SI4291-5	T3898.D	06/22/15	18:30
SITE 4TS-HWF1-PT	SI4291-5RA	T3899.D	06/22/15	19:07
SITE 4TS-HWF2-PT	SI4291-8	T3900.D	06/22/15	19:45

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165388-2
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: P1585.D

Sample Date:
Received Date:
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165388-2
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: P1585.D

Sample Date:
Received Date:
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
1,1-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2,3-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.27	0.50
1,2,3-Trichloropropane	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,3-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Chlorotoluene	U	0.50	ug/L	1	1	1.0	0.20	0.50
2,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
Bromochloromethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
Dibromomethane	U	0.50	ug/L	1	1	1.0	0.46	0.50
Hexachlorobutadiene	U	0.75	ug/L	1	1	1.0	0.52	0.75
m+p-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
n-Propylbenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
o-xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
p-Isopropyltoluene	U	0.50	ug/L	1	1	1.0	0.25	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
4-Chlorotoluene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
Xylenes (Total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Ethylbenzene	U	2.5	ug/L	1	5	5.0	0.65	2.5
Benzene	U	2.5	ug/L	1	5	5.0	0.93	2.5
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
1,3,5-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165388-2
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: P1585.D

Sample Date:
Received Date:
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Diethyl Ether	U	0.50	ug/L	1	1	1.0	0.40	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
Tetrahydrofuran	U	5.0	ug/L	1	10	10.	1.7	5.0
Vinyl Acetate	U	0.50	ug/L	1	1	1.0	0.40	0.50
P-Bromofluorobenzene		92.1	%					
Toluene-d8		96.4	%					
1,2-Dichloroethane-d4		95.3	%					
Dibromofluoromethane		92.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165286-9
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: T3893.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	U	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	U	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
Methylene Chloride	U	12	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone	U	12	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165286-9
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: T3893.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylenes	U	2.5	ug/Kgdrywt	1	10	10.	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Xylenes (Total)	U	7.5	ug/Kgdrywt	1	15	15.	1.3	7.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
1,1-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
1,2,3-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,2,3-Trichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
2,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.50	2.5
Bromobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
Bromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Dibromomethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Hexachlorobutadiene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
n-Propylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.83	2.5
p-Isopropyltoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,3-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
2-Hexanone	U	12	ug/Kgdrywt	1	25	25.	4.8	12.
4-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.49	2.5
1,2-Dichloroethylene (Total)	U	5.0	ug/Kgdrywt	1	10	10.	0.71	5.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165286-9
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: T3893.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,3,5-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Diethyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	0.80	2.5
Di-Isopropyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Tetrahydrofuran	U	25	ug/Kgdrywt	1	50	50.	4.5	25.
Vinyl Acetate	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
p-Bromofluorobenzene		109.	%					
Toluene-D8	*	117.	%					
1,2-Dichloroethane-D4		109.	%					
Dibromofluoromethane		114.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165388-1
Client ID: LCS
Project:
SDG: SI4291
LCS File ID: P1582.D

Sample Date:
Received Date:
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	106.	50.0	53.0	ug/L	30-155
Chloromethane	107.	50.0	53.3	ug/L	40-125
Vinyl Chloride	102.	50.0	50.8	ug/L	50-145
Bromomethane	93.4	50.0	46.7	ug/L	30-145
Chloroethane	118.	50.0	58.9	ug/L	60-135
Trichlorofluoromethane	110.	50.0	54.8	ug/L	60-145
1,1-Dichloroethene	107.	50.0	53.6	ug/L	70-130
Carbon Disulfide	105.	50.0	52.7	ug/L	35-160
Methylene Chloride	96.4	50.0	48.2	ug/L	55-140
Acetone	94.6	50.0	47.3	ug/L	40-140
trans-1,2-Dichloroethene	110.	50.0	55.0	ug/L	60-140
Methyl tert-butyl Ether	108.	100.	108.	ug/L	65-125
1,1-Dichloroethane	107.	50.0	53.7	ug/L	70-135
cis-1,2-Dichloroethene	91.6	50.0	45.8	ug/L	70-125
Chloroform	101.	50.0	50.4	ug/L	65-135
1,1,1-Trichloroethane	106.	50.0	52.9	ug/L	65-130
2-Butanone	102.	50.0	51.1	ug/L	30-150
Carbon Tetrachloride	113.	50.0	56.6	ug/L	65-140
1,2-Dichloroethane	105.	50.0	52.5	ug/L	70-130
Trichloroethene	99.8	50.0	49.9	ug/L	70-125
1,2-Dichloropropane	99.2	50.0	49.6	ug/L	75-125
Bromodichloromethane	103.	50.0	51.4	ug/L	75-120
cis-1,3-Dichloropropene	106.	50.0	52.8	ug/L	70-130
Toluene	99.0	50.0	49.5	ug/L	75-120
4-Methyl-2-Pentanone	108.	50.0	53.9	ug/L	60-135
trans-1,3-Dichloropropene	114.	50.0	57.0	ug/L	55-140
1,1,2-Trichloroethane	98.4	50.0	49.2	ug/L	75-125
Tetrachloroethene	102.	50.0	51.2	ug/L	45-150
Dibromochloromethane	105.	50.0	52.5	ug/L	60-135
1,2-Dibromoethane	104.	50.0	52.1	ug/L	80-120
Chlorobenzene	99.6	50.0	49.8	ug/L	80-120
Styrene	105.	50.0	52.4	ug/L	65-135
Bromoform	108.	50.0	53.9	ug/L	70-130
Isopropylbenzene	103.	50.0	51.4	ug/L	75-125
1,1,2,2-Tetrachloroethane	95.6	50.0	47.8	ug/L	65-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165388-1
Client ID: LCS
Project:
SDG: SI4291
LCS File ID: P1582.D

Sample Date:
Received Date:
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
1,3-Dichlorobenzene	98.0	50.0	49.0	ug/L	75-125
1,4-Dichlorobenzene	98.4	50.0	49.2	ug/L	75-125
1,2-Dichlorobenzene	101.	50.0	50.6	ug/L	70-120
1,2-Dibromo-3-Chloropropane	107.	50.0	53.4	ug/L	50-130
1,2,4-Trichlorobenzene	101.	50.0	50.5	ug/L	65-135
1,1-Dichloropropene	106.	50.0	52.8	ug/L	75-130
1,2,3-Trichlorobenzene	104.	50.0	52.2	ug/L	55-140
1,2,3-Trichloropropane	101.	50.0	50.3	ug/L	75-125
1,2,4-Trimethylbenzene	105.	50.0	52.7	ug/L	75-130
1,3,5-Trimethylbenzene	101.	50.0	50.7	ug/L	75-130
1,3-Dichloropropane	97.2	50.0	48.6	ug/L	75-125
2-Chlorotoluene	102.	50.0	50.9	ug/L	75-125
2,2-Dichloropropane	111.	50.0	55.6	ug/L	70-135
Bromobenzene	97.0	50.0	48.5	ug/L	75-125
Bromochloromethane	102.	50.0	51.0	ug/L	65-130
Dibromomethane	103.	50.0	51.7	ug/L	75-125
Hexachlorobutadiene	101.	50.0	50.4	ug/L	50-140
m+p-Xylenes	103.	100.	103.	ug/L	75-130
Naphthalene	105.	50.0	52.6	ug/L	55-140
n-Butylbenzene	104.	50.0	52.1	ug/L	70-135
n-Propylbenzene	107.	50.0	53.5	ug/L	70-130
o-xylene	103.	50.0	51.3	ug/L	80-120
p-Isopropyltoluene	104.	50.0	52.0	ug/L	75-130
sec-Butylbenzene	104.	50.0	52.1	ug/L	70-125
tert-Butylbenzene	97.8	50.0	48.9	ug/L	70-130
2-Hexanone	104.	50.0	52.2	ug/L	55-130
4-Chlorotoluene	101.	50.0	50.4	ug/L	75-130
1,2-Dichloroethylene (Total)	101.	100.	101.	ug/L	84-121
Xylenes (Total)	103.	150.	154.	ug/L	89-116
Ethylbenzene	99.0	50.0	49.5	ug/L	75-125
Benzene	101.	50.0	50.3	ug/L	80-120
Freon-113	110.	50.0	55.0	ug/L	73-126
1,3,5-Trichlorobenzene	101.	50.0	50.5	ug/L	77-120
Cyclohexane	98.0	50.0	49.0	ug/L	71-133
Diethyl Ether	107.	50.0	53.7	ug/L	78-124

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165388-1
Client ID: LCS
Project:
SDG: SI4291
LCS File ID: P1582.D

Sample Date:
Received Date:
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Di-Isopropyl Ether	107.	50.0	53.7	ug/L	81-123
Methyl Acetate	105.	50.0	52.7	ug/L	70-132
Methylcyclohexane	107.	50.0	53.4	ug/L	73-125
Tetrahydrofuran	98.0	50.0	49.0	ug/L	74-123
Vinyl Acetate	109.	50.0	54.4	ug/L	56-129
P-Bromofluorobenzene	92.8				75-120
Toluene-d8	96.7				85-120
1,2-Dichloroethane-d4	94.0				70-120
Dibromofluoromethane	93.6				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165286-8
Client ID: LCS
Project:
SDG: SI4291
LCS File ID: T3891.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 25-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	101.	50.0	50.3	ug/Kgdrywt	35-135
Chloromethane	118.	50.0	59.0	ug/Kgdrywt	50-130
Vinyl Chloride	108.	50.0	54.1	ug/Kgdrywt	60-125
Bromomethane	111.	50.0	55.6	ug/Kgdrywt	30-160
Chloroethane	112.	50.0	56.2	ug/Kgdrywt	40-155
Trichlorofluoromethane	106.	50.0	53.0	ug/Kgdrywt	25-185
1,1-Dichloroethene	113.	50.0	56.6	ug/Kgdrywt	65-135
Carbon Disulfide	111.	50.0	55.6	ug/Kgdrywt	45-160
Methylene Chloride	102.	50.0	51.2	ug/Kgdrywt	55-140
Acetone	119.	50.0	59.7	ug/Kgdrywt	20-160
trans-1,2-Dichloroethene	116.	50.0	57.8	ug/Kgdrywt	65-135
Methyl tert-butyl Ether	93.5	100.	93.5	ug/Kgdrywt	81-125
1,1-Dichloroethane	114.	50.0	57.0	ug/Kgdrywt	75-125
cis-1,2-Dichloroethene	102.	50.0	51.1	ug/Kgdrywt	65-125
Chloroform	108.	50.0	53.9	ug/Kgdrywt	70-125
Carbon Tetrachloride	107.	50.0	53.7	ug/Kgdrywt	65-135
1,1,1-Trichloroethane	110.	50.0	54.8	ug/Kgdrywt	70-135
2-Butanone	106.	50.0	53.2	ug/Kgdrywt	30-160
Benzene	110.	50.0	55.0	ug/Kgdrywt	75-125
1,2-Dichloroethane	107.	50.0	53.6	ug/Kgdrywt	70-135
Trichloroethene	108.	50.0	54.0	ug/Kgdrywt	75-125
1,2-Dichloropropane	110.	50.0	55.0	ug/Kgdrywt	70-120
Bromodichloromethane	109.	50.0	54.6	ug/Kgdrywt	70-130
cis-1,3-Dichloropropene	114.	50.0	56.9	ug/Kgdrywt	70-125
Toluene	105.	50.0	52.4	ug/Kgdrywt	70-125
4-Methyl-2-Pentanone	118.	50.0	58.9	ug/Kgdrywt	45-145
Tetrachloroethene	104.	50.0	52.1	ug/Kgdrywt	65-140
trans-1,3-Dichloropropene	117.	50.0	58.6	ug/Kgdrywt	65-125
1,1,2-Trichloroethane	110.	50.0	55.1	ug/Kgdrywt	60-125
Dibromochloromethane	103.	50.0	51.5	ug/Kgdrywt	65-130
1,2-Dibromoethane	106.	50.0	53.2	ug/Kgdrywt	70-125
Chlorobenzene	106.	50.0	53.2	ug/Kgdrywt	75-125
Ethylbenzene	104.	50.0	52.0	ug/Kgdrywt	75-125
Styrene	106.	50.0	52.9	ug/Kgdrywt	75-125
Bromoform	112.	50.0	55.8	ug/Kgdrywt	55-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165286-8
Client ID: LCS
Project:
SDG: SI4291
LCS File ID: T3891.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 25-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Isopropylbenzene	111.	50.0	55.6	ug/Kgdrywt	75-130
1,1,2,2-Tetrachloroethane	109.	50.0	54.6	ug/Kgdrywt	55-130
1,3-Dichlorobenzene	104.	50.0	51.8	ug/Kgdrywt	70-125
1,4-Dichlorobenzene	102.	50.0	50.8	ug/Kgdrywt	70-125
1,2-Dichlorobenzene	105.	50.0	52.5	ug/Kgdrywt	75-120
1,2-Dibromo-3-Chloropropane	118.	50.0	58.8	ug/Kgdrywt	40-135
1,2,4-Trichlorobenzene	103.	50.0	51.6	ug/Kgdrywt	65-130
1,2,4-Trimethylbenzene	105.	50.0	52.3	ug/Kgdrywt	65-135
1,3,5-Trimethylbenzene	111.	50.0	55.6	ug/Kgdrywt	65-135
n-Butylbenzene	105.	50.0	52.4	ug/Kgdrywt	65-140
sec-Butylbenzene	111.	50.0	55.4	ug/Kgdrywt	65-130
tert-Butylbenzene	109.	50.0	54.6	ug/Kgdrywt	65-130
m+p-Xylenes	107.	100.	107.	ug/Kgdrywt	80-125
o-Xylene	108.	50.0	54.1	ug/Kgdrywt	75-125
Xylenes (Total)	107.	150.	161.	ug/Kgdrywt	81-114
Naphthalene	122.	50.0	61.2	ug/Kgdrywt	40-125
1,1-Dichloropropene	113.	50.0	56.7	ug/Kgdrywt	70-135
1,2,3-Trichlorobenzene	105.	50.0	52.6	ug/Kgdrywt	60-135
1,2,3-Trichloropropane	111.	50.0	55.6	ug/Kgdrywt	65-130
2-Chlorotoluene	108.	50.0	53.9	ug/Kgdrywt	70-130
2,2-Dichloropropane	100.	50.0	50.1	ug/Kgdrywt	65-135
Bromobenzene	107.	50.0	53.3	ug/Kgdrywt	65-120
Bromochloromethane	111.	50.0	55.6	ug/Kgdrywt	70-125
Dibromomethane	106.	50.0	53.0	ug/Kgdrywt	75-130
Hexachlorobutadiene	99.8	50.0	49.9	ug/Kgdrywt	55-140
n-Propylbenzene	111.	50.0	55.3	ug/Kgdrywt	65-135
p-Isopropyltoluene	107.	50.0	53.4	ug/Kgdrywt	75-135
1,3-Dichloropropane	109.	50.0	54.6	ug/Kgdrywt	75-125
2-Hexanone	127.	50.0	63.3	ug/Kgdrywt	45-145
4-Chlorotoluene	106.	50.0	53.2	ug/Kgdrywt	75-125
1,2-Dichloroethylene (Total)	109.	100.	109.	ug/Kgdrywt	82-120
Methylcyclohexane	90.8	50.0	45.4	ug/Kgdrywt	71-127
Freon-113	108.	50.0	54.1	ug/Kgdrywt	67-135
1,3,5-Trichlorobenzene	96.6	50.0	48.3	ug/Kgdrywt	64-133
Cyclohexane	102.	50.0	51.1	ug/Kgdrywt	75-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165286-8
Client ID: LCS
Project:
SDG: SI4291
LCS File ID: T3891.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 25-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Diethyl Ether	112.	50.0	55.9	ug/Kgdrywt	76-135
Di-Isopropyl Ether	113.	50.0	56.7	ug/Kgdrywt	68-131
Methyl Acetate	102.	50.0	51.2	ug/Kgdrywt	72-133
Tetrahydrofuran	111.	50.0	55.3	ug/Kgdrywt	78-137
Vinyl Acetate	95.6	50.0	47.8	ug/Kgdrywt	77-119
p-Bromofluorobenzene	104.				85-120
Toluene-D8	113.				85-115
1,2-Dichloroethane-D4	115.				58-134
Dibromofluoromethane	114.				64-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB295.D
Instrument ID : GCMS-P

SDG : SI4291
Date Analyzed : 22-JUN-15
Time Analyzed : 09:27
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	22.5		
75	30.0 - 60.0% of mass 95	50.9		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	8.0		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	65.3		
175	5.0 - 9.0% of mass 174	5.6	8.62	1
176	95.0 - 101.0% of mass 174	62.5	95.70	1
177	5.0 - 9.0% of mass 176	4.3	6.90	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165276-4	P1533.D	06/22/15	10:02
Initial Calibration	WG165276-3	P1534.D	06/22/15	10:29
Initial Calibration	WG165276-2	P1535.D	06/22/15	10:55
Initial Calibration	WG165276-1	P1536.D	06/22/15	11:21
Initial Calibration	WG165276-6	P1537.D	06/22/15	11:47
Initial Calibration	WG165276-5	P1538.D	06/22/15	12:13
Independent Source	WG165276-7	P1539A.D	06/22/15	12:59

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB297.D
Instrument ID : GCMS-P

SDG : SI4291
Date Analyzed : 24-JUN-15
Time Analyzed : 09:29
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	23.8		
75	30.0 - 60.0% of mass 95	53.3		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.9		
173	Less than 2.0% of mass 174	0.4	0.62	1
174	Greater than 50.0% of mass 95	65.5		
175	5.0 - 9.0% of mass 174	5.5	8.37	1
176	95.0 - 101.0% of mass 174	64.1	97.87	1
177	5.0 - 9.0% of mass 176	4.2	6.53	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165388-4	P1581.D	06/24/15	09:54
Laboratory Control S	WG165388-1	P1582.D	06/24/15	10:35
Method Blank Sample	WG165388-2	P1585.D	06/24/15	12:08
SITE 4TS-HWF2-L1	SI4291-7	P1597.D	06/24/15	17:22
SITE 4TS-HWF2-L2	SI4291-10	P1598.D	06/24/15	17:48

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : TB916.D
Instrument ID : GCMS-T

SDG : SI4291
Date Analyzed : 22-JUN-15
Time Analyzed : 09:26
Heated Purge : Yes

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	17.2		
75	30.0 - 60.0% of mass 95	45.0		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.5		
173	Less than 2.0% of mass 174	0.3	0.38	1
174	Greater than 50.0% of mass 95	77.7		
175	5.0 - 9.0% of mass 174	5.6	7.17	1
176	95.0 - 101.0% of mass 174	77.2	99.46	1
177	5.0 - 9.0% of mass 176	5.1	6.58	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165286-4	T3885.D	06/22/15	10:03
Initial Calibration	WG165286-3	T3886.D	06/22/15	10:41
Initial Calibration	WG165286-2	T3887.D	06/22/15	11:19
Initial Calibration	WG165286-1	T3888.D	06/22/15	11:57
Initial Calibration	WG165286-6	T3889.D	06/22/15	12:34
Initial Calibration	WG165286-5	T3890.D	06/22/15	13:12
Laboratory Control S	WG165286-8	T3891.D	06/22/15	13:59
Independent Source	WG165286-7	T3891A.D	06/22/15	13:59
Method Blank Sample	WG165286-9	T3893.D	06/22/15	15:22
SITE 4TS-HWF1-B	SI4291-1	T3894.D	06/22/15	16:00
SITE 4TS-HWF1-B	SI4291-1RA	T3895.D	06/22/15	16:37
SITE 4TS-HWF2-B	SI4291-3	T3896.D	06/22/15	17:15
SITE 4TS-HWF2-B	SI4291-3RA	T3897.D	06/22/15	17:52
SITE 4TS-HWF1-PT	SI4291-5	T3898.D	06/22/15	18:30
SITE 4TS-HWF1-PT	SI4291-5RA	T3899.D	06/22/15	19:07
SITE 4TS-HWF2-PT	SI4291-8	T3900.D	06/22/15	19:45

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165276-4
Lab File ID : P1533.D

SDG: SI4291
Analytical Date: 06/22/15 10:02
Instrument ID: GCMS-P

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	409293		8.72		766451		9.57		699533		13.93	
	Upper Limit	818586		9.22		1532902		10.07		1399066		14.43	
	Lower Limit	204646.5		8.22		383225.5		9.07		349766.5		13.43	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165388-4	374498		8.72		697146		9.57		659498		13.94	
Laboratory Control S	WG165388-1	397134		8.72		744272		9.58		674374		13.93	
Method Blank Sample	WG165388-2	392259		8.72		726062		9.58		656543		13.93	
SITE 4TS-HWF2-L1	SI4291-7	371288		8.72		692642		9.58		635694		13.93	
SITE 4TS-HWF2-L2	SI4291-10	370683		8.72		686729		9.58		633667		13.94	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165276-4
Lab File ID : P1533.D

SDG: SI4291
Analytical Date: 06/22/15 10:02
Instrument ID: GCMS-P

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	376902		16.92	
	Upper Limit	753804		17.42	
	Lower Limit	188451		16.42	
Client Sample ID	Lab Sample ID				
Continuing Calibrati	WG165388-4	363288		16.92	
Laboratory Control S	WG165388-1	372850		16.92	
Method Blank Sample	WG165388-2	368399		16.93	
SITE 4TS-HWF2-L1	SI4291-7	356725		16.93	
SITE 4TS-HWF2-L2	SI4291-10	358450		16.92	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165286-4
Lab File ID : T3885.D

SDG: SI4291
Analytical Date: 06/22/15 10:03
Instrument ID: GCMS-T

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	372145		7.99		643114		8.75		586699		12.82	
	Upper Limit	744290		8.49		1286228		9.25		1173398		13.32	
	Lower Limit	186072.5		7.49		321557		8.25		293349.5		12.32	
Client Sample ID	Lab Sample ID												
Laboratory Control S	WG165286-8	360701		7.99		597252		8.75		550985		12.82	
Method Blank Sample	WG165286-9	327004		7.99		499824		8.75		517802		12.82	
SITE 4TS-HWF1-B	SI4291-1	224239		7.99		436237		8.75		240720	*	12.82	
SITE 4TS-HWF1-B	SI4291-1RA	227593		7.99		464259		8.75		258687	*	12.82	
SITE 4TS-HWF2-B	SI4291-3	5521	*	7.99		10377	*	8.75		4711	*	12.83	
SITE 4TS-HWF2-B	SI4291-3RA	24359	*	7.99		53220	*	8.75		22186	*	12.82	
SITE 4TS-HWF1-PT	SI4291-5	223223		7.99		426340		8.75		247119	*	12.82	
SITE 4TS-HWF1-PT	SI4291-5RA	195359		7.99		409694		8.75		198599	*	12.82	
SITE 4TS-HWF2-PT	SI4291-8	240172		7.99		455231		8.75		293478		12.82	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165286-4
Lab File ID : T3885.D

SDG: SI4291
Analytical Date: 06/22/15 10:03
Instrument ID: GCMS-T

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	334473		15.96	
	Upper Limit	668946		16.46	
	Lower Limit	167236.5		15.46	
Client Sample ID	Lab Sample ID				
Laboratory Control S	WG165286-8	300840		15.96	
Method Blank Sample	WG165286-9	281420		15.95	
SITE 4TS-HWF1-B	SI4291-1	50133	*	15.96	
SITE 4TS-HWF1-B	SI4291-1RA	55103	*	15.96	
SITE 4TS-HWF2-B	SI4291-3	1066	*	15.95	
SITE 4TS-HWF2-B	SI4291-3RA	7752	*	15.96	
SITE 4TS-HWF1-PT	SI4291-5	56892	*	15.96	
SITE 4TS-HWF1-PT	SI4291-5RA	51532	*	15.96	
SITE 4TS-HWF2-PT	SI4291-8	67513	*	15.96	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-1
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3894.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.3	ug/Kgdrywt	1	10	8.6	0.79	4.3
Chloromethane	U	4.3	ug/Kgdrywt	1	10	8.6	1.2	4.3
Vinyl Chloride	U	4.3	ug/Kgdrywt	1	10	8.6	0.75	4.3
Bromomethane	U	4.3	ug/Kgdrywt	1	10	8.6	0.95	4.3
Chloroethane	U	4.3	ug/Kgdrywt	1	10	8.6	1.1	4.3
Trichlorofluoromethane	U	4.3	ug/Kgdrywt	1	10	8.6	0.78	4.3
1,1-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.3	0.80	2.2
Carbon Disulfide		4.7	ug/Kgdrywt	1	5	4.3	0.67	2.2
Methylene Chloride	J	8.0	ug/Kgdrywt	1	25	22.	6.8	11.
Acetone		240	ug/Kgdrywt	1	25	22.	4.4	11.
trans-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.3	0.61	2.2
Methyl tert-butyl Ether	U	2.2	ug/Kgdrywt	1	5	4.3	0.95	2.2
1,1-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.3	1.5	2.2
cis-1,2-Dichloroethene	J	2.0	ug/Kgdrywt	1	5	4.3	0.78	2.2
Chloroform	U	2.2	ug/Kgdrywt	1	5	4.3	0.30	2.2
Carbon Tetrachloride	U	2.2	ug/Kgdrywt	1	5	4.3	1.1	2.2
1,1,1-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.3	0.36	2.2
2-Butanone		62	ug/Kgdrywt	1	25	22.	5.1	11.
Benzene	J	2.9	ug/Kgdrywt	1	5	4.3	0.79	2.2
1,2-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.3	0.86	2.2
Trichloroethene	U	2.2	ug/Kgdrywt	1	5	4.3	0.51	2.2
1,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.3	1.2	2.2
Bromodichloromethane	U	2.2	ug/Kgdrywt	1	5	4.3	0.52	2.2
cis-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.3	0.62	2.2
Toluene	J	3.8	ug/Kgdrywt	1	5	4.3	1.2	2.2
4-Methyl-2-Pentanone	U	11	ug/Kgdrywt	1	25	22.	5.1	11.
Tetrachloroethene		10	ug/Kgdrywt	1	5	4.3	1.0	2.2
trans-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.3	0.74	2.2
1,1,2-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.3	0.83	2.2
Dibromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.3	0.86	2.2
1,2-Dibromoethane	U	2.2	ug/Kgdrywt	1	5	4.3	1.0	2.2
Chlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.44	2.2
Ethylbenzene		30	ug/Kgdrywt	1	5	4.3	0.56	2.2
Styrene	U	2.2	ug/Kgdrywt	1	5	4.3	0.44	2.2
Bromoform	U	2.2	ug/Kgdrywt	1	5	4.3	0.60	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-1
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3894.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		35	ug/Kgdrywt	1	5	4.3	0.79	2.2
1,1,2,2-Tetrachloroethane	U	2.2	ug/Kgdrywt	1	5	4.3	0.72	2.2
1,3-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.53	2.2
1,4-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.38	2.2
1,2-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.67	2.2
1,2-Dibromo-3-Chloropropane	U	2.2	ug/Kgdrywt	1	5	4.3	1.3	2.2
1,2,4-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.68	2.2
1,2,4-Trimethylbenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.75	2.2
1,3,5-Trimethylbenzene		35	ug/Kgdrywt	1	5	4.3	0.58	2.2
n-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.79	2.2
sec-Butylbenzene		35	ug/Kgdrywt	1	5	4.3	0.78	2.2
tert-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.77	2.2
m+p-Xylenes		8.7	ug/Kgdrywt	1	10	8.6	1.5	2.2
o-Xylene		7.4	ug/Kgdrywt	1	5	4.3	1.1	2.2
Xylenes (Total)		16	ug/Kgdrywt	1	15	13.	1.1	6.4
Naphthalene		48	ug/Kgdrywt	1	5	4.3	0.76	2.2
1,1-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.3	0.78	2.2
1,2,3-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.65	2.2
1,2,3-Trichloropropane	U	2.2	ug/Kgdrywt	1	5	4.3	1.0	2.2
2-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.3	0.95	2.2
2,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.3	0.43	2.2
Bromobenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.64	2.2
Bromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.3	0.78	2.2
Dibromomethane	U	2.2	ug/Kgdrywt	1	5	4.3	0.44	2.2
Hexachlorobutadiene	U	2.2	ug/Kgdrywt	1	5	4.3	0.64	2.2
n-Propylbenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.71	2.2
p-Isopropyltoluene		46	ug/Kgdrywt	1	5	4.3	0.65	2.2
1,3-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.3	0.81	2.2
2-Hexanone	U	11	ug/Kgdrywt	1	25	22.	4.1	11.
4-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.3	0.42	2.2
1,2-Dichloroethylene (Total)	J	2.0	ug/Kgdrywt	1	10	8.6	0.61	4.3
Methylcyclohexane		120	ug/Kgdrywt	1	5	4.3	0.82	2.2
Freon-113	J	1.3	ug/Kgdrywt	1	5	4.3	0.77	2.2
1,3,5-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.3	0.75	2.2
Cyclohexane		34	ug/Kgdrywt	1	5	4.3	1.2	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-1
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3894.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.2	ug/Kgdrywt	1	5	4.3	0.69	2.2
Di-Isopropyl Ether	U	2.2	ug/Kgdrywt	1	5	4.3	1.8	2.2
Methyl Acetate	U	2.6	ug/Kgdrywt	1	5	4.3	2.3	2.6
Tetrahydrofuran	U	22	ug/Kgdrywt	1	50	43.	3.9	22.
Vinyl Acetate	U	2.2	ug/Kgdrywt	1	5	4.3	0.81	2.2
p-Bromofluorobenzene	*	141.	%					
Toluene-D8	*	72.6	%					
1,2-Dichloroethane-D4	*	144.	%					
Dibromofluoromethane		127.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-1RA
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3895.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.8	ug/Kgdrywt	1	10	9.7	0.89	4.8
Chloromethane	U	4.8	ug/Kgdrywt	1	10	9.7	1.4	4.8
Vinyl Chloride	U	4.8	ug/Kgdrywt	1	10	9.7	0.84	4.8
Bromomethane	U	4.8	ug/Kgdrywt	1	10	9.7	1.1	4.8
Chloroethane	U	4.8	ug/Kgdrywt	1	10	9.7	1.3	4.8
Trichlorofluoromethane	U	4.8	ug/Kgdrywt	1	10	9.7	0.88	4.8
1,1-Dichloroethene	U	2.4	ug/Kgdrywt	1	5	4.8	0.90	2.4
Carbon Disulfide	J	4.2	ug/Kgdrywt	1	5	4.8	0.76	2.4
Methylene Chloride	J	8.8	ug/Kgdrywt	1	25	24.	7.7	12.
Acetone		310	ug/Kgdrywt	1	25	24.	4.9	12.
trans-1,2-Dichloroethene	U	2.4	ug/Kgdrywt	1	5	4.8	0.69	2.4
Methyl tert-butyl Ether	U	2.4	ug/Kgdrywt	1	5	4.8	1.1	2.4
1,1-Dichloroethane	U	2.4	ug/Kgdrywt	1	5	4.8	1.6	2.4
cis-1,2-Dichloroethene	J	2.0	ug/Kgdrywt	1	5	4.8	0.88	2.4
Chloroform	U	2.4	ug/Kgdrywt	1	5	4.8	0.34	2.4
Carbon Tetrachloride	U	2.4	ug/Kgdrywt	1	5	4.8	1.3	2.4
1,1,1-Trichloroethane	U	2.4	ug/Kgdrywt	1	5	4.8	0.41	2.4
2-Butanone		77	ug/Kgdrywt	1	25	24.	5.7	12.
Benzene	J	2.9	ug/Kgdrywt	1	5	4.8	0.89	2.4
1,2-Dichloroethane	U	2.4	ug/Kgdrywt	1	5	4.8	0.97	2.4
Trichloroethene	U	2.4	ug/Kgdrywt	1	5	4.8	0.57	2.4
1,2-Dichloropropane	U	2.4	ug/Kgdrywt	1	5	4.8	1.4	2.4
Bromodichloromethane	U	2.4	ug/Kgdrywt	1	5	4.8	0.58	2.4
cis-1,3-Dichloropropene	U	2.4	ug/Kgdrywt	1	5	4.8	0.70	2.4
Toluene	J	3.9	ug/Kgdrywt	1	5	4.8	1.4	2.4
4-Methyl-2-Pentanone	U	12	ug/Kgdrywt	1	25	24.	5.7	12.
Tetrachloroethene		12	ug/Kgdrywt	1	5	4.8	1.2	2.4
trans-1,3-Dichloropropene	U	2.4	ug/Kgdrywt	1	5	4.8	0.83	2.4
1,1,2-Trichloroethane	U	2.4	ug/Kgdrywt	1	5	4.8	0.94	2.4
Dibromochloromethane	U	2.4	ug/Kgdrywt	1	5	4.8	0.97	2.4
1,2-Dibromoethane	U	2.4	ug/Kgdrywt	1	5	4.8	1.2	2.4
Chlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.49	2.4
Ethylbenzene		27	ug/Kgdrywt	1	5	4.8	0.63	2.4
Styrene	U	2.4	ug/Kgdrywt	1	5	4.8	0.49	2.4
Bromoform	U	2.4	ug/Kgdrywt	1	5	4.8	0.68	2.4

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-1RA
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3895.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		32	ug/Kgdrywt	1	5	4.8	0.89	2.4
1,1,2,2-Tetrachloroethane	U	2.4	ug/Kgdrywt	1	5	4.8	0.81	2.4
1,3-Dichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.60	2.4
1,4-Dichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.43	2.4
1,2-Dichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.76	2.4
1,2-Dibromo-3-Chloropropane	U	2.4	ug/Kgdrywt	1	5	4.8	1.4	2.4
1,2,4-Trichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.77	2.4
1,2,4-Trimethylbenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.84	2.4
1,3,5-Trimethylbenzene		32	ug/Kgdrywt	1	5	4.8	0.65	2.4
n-Butylbenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.89	2.4
sec-Butylbenzene		33	ug/Kgdrywt	1	5	4.8	0.88	2.4
tert-Butylbenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.87	2.4
m+p-Xylenes	J	8.3	ug/Kgdrywt	1	10	9.7	1.6	2.4
o-Xylene		7.2	ug/Kgdrywt	1	5	4.8	1.3	2.4
Xylenes (Total)		16	ug/Kgdrywt	1	15	14.	1.3	7.3
Naphthalene		48	ug/Kgdrywt	1	5	4.8	0.85	2.4
1,1-Dichloropropene	U	2.4	ug/Kgdrywt	1	5	4.8	0.88	2.4
1,2,3-Trichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.74	2.4
1,2,3-Trichloropropane	U	2.4	ug/Kgdrywt	1	5	4.8	1.2	2.4
2-Chlorotoluene	U	2.4	ug/Kgdrywt	1	5	4.8	1.1	2.4
2,2-Dichloropropane	U	2.4	ug/Kgdrywt	1	5	4.8	0.48	2.4
Bromobenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.72	2.4
Bromochloromethane	U	2.4	ug/Kgdrywt	1	5	4.8	0.88	2.4
Dibromomethane	U	2.4	ug/Kgdrywt	1	5	4.8	0.49	2.4
Hexachlorobutadiene	U	2.4	ug/Kgdrywt	1	5	4.8	0.72	2.4
n-Propylbenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.80	2.4
p-Isopropyltoluene		44	ug/Kgdrywt	1	5	4.8	0.74	2.4
1,3-Dichloropropane	U	2.4	ug/Kgdrywt	1	5	4.8	0.91	2.4
2-Hexanone	U	12	ug/Kgdrywt	1	25	24.	4.6	12.
4-Chlorotoluene	U	2.4	ug/Kgdrywt	1	5	4.8	0.48	2.4
1,2-Dichloroethylene (Total)	J	2.0	ug/Kgdrywt	1	10	9.7	0.69	4.8
Methylcyclohexane		110	ug/Kgdrywt	1	5	4.8	0.93	2.4
Freon-113	J	1.5	ug/Kgdrywt	1	5	4.8	0.87	2.4
1,3,5-Trichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.8	0.84	2.4
Cyclohexane		31	ug/Kgdrywt	1	5	4.8	1.4	2.4

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-1RA
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3895.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.4	ug/Kgdrywt	1	5	4.8	0.78	2.4
Di-Isopropyl Ether	U	2.4	ug/Kgdrywt	1	5	4.8	2.0	2.4
Methyl Acetate	U	2.9	ug/Kgdrywt	1	5	4.8	2.6	2.9
Tetrahydrofuran	U	24	ug/Kgdrywt	1	50	48.	4.4	24.
Vinyl Acetate	U	2.4	ug/Kgdrywt	1	5	4.8	0.91	2.4
p-Bromofluorobenzene		97.0	%					
Toluene-D8	*	72.8	%					
1,2-Dichloroethane-D4	*	143.	%					
Dibromofluoromethane		130.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-3
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3896.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.2	6.5
Chloromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.8	6.5
Vinyl Chloride	U	6.5	ug/Kgdrywt	1	10	13.	1.1	6.5
Bromomethane	U	6.5	ug/Kgdrywt	1	10	13.	1.4	6.5
Chloroethane	U	6.5	ug/Kgdrywt	1	10	13.	1.7	6.5
Trichlorofluoromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.2	6.5
1,1-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Carbon Disulfide	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
Methylene Chloride	U	16	ug/Kgdrywt	1	25	32.	10.	16.
Acetone		350	ug/Kgdrywt	1	25	32.	6.6	16.
trans-1,2-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	0.92	3.2
Methyl tert-butyl Ether	U	3.2	ug/Kgdrywt	1	5	6.5	1.4	3.2
1,1-Dichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	2.2	3.2
cis-1,2-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Chloroform	U	3.2	ug/Kgdrywt	1	5	6.5	0.46	3.2
Carbon Tetrachloride	U	3.2	ug/Kgdrywt	1	5	6.5	1.7	3.2
1,1,1-Trichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	0.55	3.2
2-Butanone	U	16	ug/Kgdrywt	1	25	32.	7.7	16.
Benzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
1,2-Dichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
Trichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	0.77	3.2
1,2-Dichloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
Bromodichloromethane	U	3.2	ug/Kgdrywt	1	5	6.5	0.78	3.2
cis-1,3-Dichloropropene	U	3.2	ug/Kgdrywt	1	5	6.5	0.94	3.2
Toluene	J	6.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
4-Methyl-2-Pentanone	U	16	ug/Kgdrywt	1	25	32.	7.7	16.
Tetrachloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	1.6	3.2
trans-1,3-Dichloropropene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,1,2-Trichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
Dibromochloromethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
1,2-Dibromoethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.6	3.2
Chlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.66	3.2
Ethylbenzene		55	ug/Kgdrywt	1	5	6.5	0.84	3.2
Styrene	U	3.2	ug/Kgdrywt	1	5	6.5	0.66	3.2
Bromoform	U	3.2	ug/Kgdrywt	1	5	6.5	0.91	3.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-3
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3896.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		69	ug/Kgdrywt	1	5	6.5	1.2	3.2
1,1,2,2-Tetrachloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,3-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.81	3.2
1,4-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.57	3.2
1,2-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
1,2-Dibromo-3-Chloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	2.0	3.2
1,2,4-Trichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
1,2,4-Trimethylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,3,5-Trimethylbenzene		69	ug/Kgdrywt	1	5	6.5	0.87	3.2
n-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
sec-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
tert-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
m+p-Xylenes		22	ug/Kgdrywt	1	10	13.	2.2	3.2
o-Xylene		18	ug/Kgdrywt	1	5	6.5	1.7	3.2
Xylenes (Total)		40	ug/Kgdrywt	1	15	20.	1.7	9.8
Naphthalene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,1-Dichloropropene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
1,2,3-Trichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.99	3.2
1,2,3-Trichloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	1.6	3.2
2-Chlorotoluene	U	3.2	ug/Kgdrywt	1	5	6.5	1.4	3.2
2,2-Dichloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	0.65	3.2
Bromobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.96	3.2
Bromochloromethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Dibromomethane	U	3.2	ug/Kgdrywt	1	5	6.5	0.66	3.2
Hexachlorobutadiene	U	3.2	ug/Kgdrywt	1	5	6.5	0.96	3.2
n-Propylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
p-Isopropyltoluene	U	3.2	ug/Kgdrywt	1	5	6.5	0.99	3.2
1,3-Dichloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
2-Hexanone	U	16	ug/Kgdrywt	1	25	32.	6.2	16.
4-Chlorotoluene	U	3.2	ug/Kgdrywt	1	5	6.5	0.64	3.2
1,2-Dichloroethylene (Total)	U	6.5	ug/Kgdrywt	1	10	13.	0.92	6.5
Methylcyclohexane		110	ug/Kgdrywt	1	5	6.5	1.2	3.2
Freon-113	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
1,3,5-Trichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
Cyclohexane		24	ug/Kgdrywt	1	5	6.5	1.8	3.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-3
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3896.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
Di-Isopropyl Ether	U	3.2	ug/Kgdrywt	1	5	6.5	2.7	3.2
Methyl Acetate	U	3.9	ug/Kgdrywt	1	5	6.5	3.5	3.9
Tetrahydrofuran	U	32	ug/Kgdrywt	1	50	65.	5.8	32.
Vinyl Acetate	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
p-Bromofluorobenzene		85.1	%					
Toluene-D8	*	73.4	%					
1,2-Dichloroethane-D4		124.	%					
Dibromofluoromethane		115.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-3RA
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3897.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.9	ug/Kgdrywt	1	10	9.8	0.90	4.9
Chloromethane	J	3.0	ug/Kgdrywt	1	10	9.8	1.4	4.9
Vinyl Chloride	U	4.9	ug/Kgdrywt	1	10	9.8	0.85	4.9
Bromomethane	J	8.5	ug/Kgdrywt	1	10	9.8	1.1	4.9
Chloroethane	U	4.9	ug/Kgdrywt	1	10	9.8	1.3	4.9
Trichlorofluoromethane	U	4.9	ug/Kgdrywt	1	10	9.8	0.89	4.9
1,1-Dichloroethene	U	2.4	ug/Kgdrywt	1	5	4.9	0.91	2.4
Carbon Disulfide		5.6	ug/Kgdrywt	1	5	4.9	0.76	2.4
Methylene Chloride	U	12	ug/Kgdrywt	1	25	24.	7.7	12.
Acetone		400	ug/Kgdrywt	1	25	24.	5.0	12.
trans-1,2-Dichloroethene	U	2.4	ug/Kgdrywt	1	5	4.9	0.70	2.4
Methyl tert-butyl Ether	U	2.4	ug/Kgdrywt	1	5	4.9	1.1	2.4
1,1-Dichloroethane	U	2.4	ug/Kgdrywt	1	5	4.9	1.7	2.4
cis-1,2-Dichloroethene	J	1.8	ug/Kgdrywt	1	5	4.9	0.89	2.4
Chloroform	U	2.4	ug/Kgdrywt	1	5	4.9	0.34	2.4
Carbon Tetrachloride	U	2.4	ug/Kgdrywt	1	5	4.9	1.3	2.4
1,1,1-Trichloroethane	U	2.4	ug/Kgdrywt	1	5	4.9	0.41	2.4
2-Butanone		96	ug/Kgdrywt	1	25	24.	5.8	12.
Benzene	J	4.6	ug/Kgdrywt	1	5	4.9	0.90	2.4
1,2-Dichloroethane	U	2.4	ug/Kgdrywt	1	5	4.9	0.98	2.4
Trichloroethene	U	2.4	ug/Kgdrywt	1	5	4.9	0.58	2.4
1,2-Dichloropropane	U	2.4	ug/Kgdrywt	1	5	4.9	1.4	2.4
Bromodichloromethane	U	2.4	ug/Kgdrywt	1	5	4.9	0.59	2.4
cis-1,3-Dichloropropene	U	2.4	ug/Kgdrywt	1	5	4.9	0.70	2.4
Toluene		6.5	ug/Kgdrywt	1	5	4.9	1.4	2.4
4-Methyl-2-Pentanone	U	12	ug/Kgdrywt	1	25	24.	5.8	12.
Tetrachloroethene		20	ug/Kgdrywt	1	5	4.9	1.2	2.4
trans-1,3-Dichloropropene	U	2.4	ug/Kgdrywt	1	5	4.9	0.84	2.4
1,1,2-Trichloroethane	U	2.4	ug/Kgdrywt	1	5	4.9	0.95	2.4
Dibromochloromethane	U	2.4	ug/Kgdrywt	1	5	4.9	0.98	2.4
1,2-Dibromoethane	U	2.4	ug/Kgdrywt	1	5	4.9	1.2	2.4
Chlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.50	2.4
Ethylbenzene		62	ug/Kgdrywt	1	5	4.9	0.64	2.4
Styrene	U	2.4	ug/Kgdrywt	1	5	4.9	0.50	2.4
Bromoform	U	2.4	ug/Kgdrywt	1	5	4.9	0.69	2.4

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-3RA
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3897.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		41	ug/Kgdrywt	1	5	4.9	0.90	2.4
1,1,2,2-Tetrachloroethane	U	2.4	ug/Kgdrywt	1	5	4.9	0.82	2.4
1,3-Dichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.61	2.4
1,4-Dichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.43	2.4
1,2-Dichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.76	2.4
1,2-Dibromo-3-Chloropropane	U	2.4	ug/Kgdrywt	1	5	4.9	1.5	2.4
1,2,4-Trichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.77	2.4
1,2,4-Trimethylbenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.85	2.4
1,3,5-Trimethylbenzene		41	ug/Kgdrywt	1	5	4.9	0.66	2.4
n-Butylbenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.90	2.4
sec-Butylbenzene		41	ug/Kgdrywt	1	5	4.9	0.89	2.4
tert-Butylbenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.88	2.4
m+p-Xylenes		20	ug/Kgdrywt	1	10	9.8	1.7	2.4
o-Xylene		17	ug/Kgdrywt	1	5	4.9	1.3	2.4
Xylenes (Total)		38	ug/Kgdrywt	1	15	15.	1.3	7.4
Naphthalene		35	ug/Kgdrywt	1	5	4.9	0.86	2.4
1,1-Dichloropropene	U	2.4	ug/Kgdrywt	1	5	4.9	0.89	2.4
1,2,3-Trichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.74	2.4
1,2,3-Trichloropropane	U	2.4	ug/Kgdrywt	1	5	4.9	1.2	2.4
2-Chlorotoluene	U	2.4	ug/Kgdrywt	1	5	4.9	1.1	2.4
2,2-Dichloropropane	U	2.4	ug/Kgdrywt	1	5	4.9	0.49	2.4
Bromobenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.72	2.4
Bromochloromethane	U	2.4	ug/Kgdrywt	1	5	4.9	0.89	2.4
Dibromomethane	U	2.4	ug/Kgdrywt	1	5	4.9	0.50	2.4
Hexachlorobutadiene	U	2.4	ug/Kgdrywt	1	5	4.9	0.72	2.4
n-Propylbenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.81	2.4
p-Isopropyltoluene		51	ug/Kgdrywt	1	5	4.9	0.74	2.4
1,3-Dichloropropane	U	2.4	ug/Kgdrywt	1	5	4.9	0.92	2.4
2-Hexanone	U	12	ug/Kgdrywt	1	25	24.	4.7	12.
4-Chlorotoluene	U	2.4	ug/Kgdrywt	1	5	4.9	0.48	2.4
1,2-Dichloroethylene (Total)	J	1.8	ug/Kgdrywt	1	10	9.8	0.70	4.9
Methylcyclohexane		190	ug/Kgdrywt	1	5	4.9	0.94	2.4
Freon-113	U	2.4	ug/Kgdrywt	1	5	4.9	0.88	2.4
1,3,5-Trichlorobenzene	U	2.4	ug/Kgdrywt	1	5	4.9	0.85	2.4
Cyclohexane		44	ug/Kgdrywt	1	5	4.9	1.4	2.4

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-3RA
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3897.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.4	ug/Kgdrywt	1	5	4.9	0.78	2.4
Di-Isopropyl Ether	U	2.4	ug/Kgdrywt	1	5	4.9	2.0	2.4
Methyl Acetate		14	ug/Kgdrywt	1	5	4.9	2.6	2.9
Tetrahydrofuran	U	24	ug/Kgdrywt	1	50	49.	4.4	24.
Vinyl Acetate	U	2.4	ug/Kgdrywt	1	5	4.9	0.92	2.4
p-Bromofluorobenzene	*	79.2	%					
Toluene-D8	*	58.5	%					
1,2-Dichloroethane-D4		126.	%					
Dibromofluoromethane		103.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-5
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3898.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.4	ug/Kgdrywt	1	10	8.7	0.80	4.4
Chloromethane	U	4.4	ug/Kgdrywt	1	10	8.7	1.2	4.4
Vinyl Chloride	U	4.4	ug/Kgdrywt	1	10	8.7	0.76	4.4
Bromomethane	U	4.4	ug/Kgdrywt	1	10	8.7	0.96	4.4
Chloroethane	U	4.4	ug/Kgdrywt	1	10	8.7	1.1	4.4
Trichlorofluoromethane	U	4.4	ug/Kgdrywt	1	10	8.7	0.79	4.4
1,1-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.81	2.2
Carbon Disulfide		6.4	ug/Kgdrywt	1	5	4.4	0.68	2.2
Methylene Chloride	J	8.4	ug/Kgdrywt	1	25	22.	6.9	11.
Acetone		230	ug/Kgdrywt	1	25	22.	4.4	11.
trans-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.62	2.2
Methyl tert-butyl Ether	U	2.2	ug/Kgdrywt	1	5	4.4	0.96	2.2
1,1-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	1.5	2.2
cis-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.79	2.2
Chloroform		20	ug/Kgdrywt	1	5	4.4	0.30	2.2
Carbon Tetrachloride	U	2.2	ug/Kgdrywt	1	5	4.4	1.1	2.2
1,1,1-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.36	2.2
2-Butanone		66	ug/Kgdrywt	1	25	22.	5.1	11.
Benzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
1,2-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.87	2.2
Trichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.51	2.2
1,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.2	2.2
Bromodichloromethane	J	3.3	ug/Kgdrywt	1	5	4.4	0.52	2.2
cis-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.63	2.2
Toluene	J	2.0	ug/Kgdrywt	1	5	4.4	1.2	2.2
4-Methyl-2-Pentanone	U	11	ug/Kgdrywt	1	25	22.	5.1	11.
Tetrachloroethene		12	ug/Kgdrywt	1	5	4.4	1.0	2.2
trans-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.75	2.2
1,1,2-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.84	2.2
Dibromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.87	2.2
1,2-Dibromoethane	U	2.2	ug/Kgdrywt	1	5	4.4	1.0	2.2
Chlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
Ethylbenzene	J	3.0	ug/Kgdrywt	1	5	4.4	0.56	2.2
Styrene	U	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
Bromoform	U	2.2	ug/Kgdrywt	1	5	4.4	0.61	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-5
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3898.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
1,1,2,2-Tetrachloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.73	2.2
1,3-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.54	2.2
1,4-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.38	2.2
1,2-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.68	2.2
1,2-Dibromo-3-Chloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.3	2.2
1,2,4-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.69	2.2
1,2,4-Trimethylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.76	2.2
1,3,5-Trimethylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.58	2.2
n-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
sec-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.79	2.2
tert-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.78	2.2
m+p-Xylenes	J	6.9	ug/Kgdrywt	1	10	8.7	1.5	2.2
o-Xylene		7.0	ug/Kgdrywt	1	5	4.4	1.1	2.2
Xylenes (Total)		14	ug/Kgdrywt	1	15	13.	1.1	6.5
Naphthalene	U	2.2	ug/Kgdrywt	1	5	4.4	0.76	2.2
1,1-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.79	2.2
1,2,3-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.66	2.2
1,2,3-Trichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.0	2.2
2-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.4	0.96	2.2
2,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
Bromobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.64	2.2
Bromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.79	2.2
Dibromomethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
Hexachlorobutadiene	U	2.2	ug/Kgdrywt	1	5	4.4	0.64	2.2
n-Propylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.72	2.2
p-Isopropyltoluene		39	ug/Kgdrywt	1	5	4.4	0.66	2.2
1,3-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	0.82	2.2
2-Hexanone	U	11	ug/Kgdrywt	1	25	22.	4.2	11.
4-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.4	0.43	2.2
1,2-Dichloroethylene (Total)	U	4.4	ug/Kgdrywt	1	10	8.7	0.62	4.4
Methylcyclohexane		120	ug/Kgdrywt	1	5	4.4	0.84	2.2
Freon-113	J	0.95	ug/Kgdrywt	1	5	4.4	0.78	2.2
1,3,5-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.76	2.2
Cyclohexane		31	ug/Kgdrywt	1	5	4.4	1.2	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-5
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3898.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.2	ug/Kgdrywt	1	5	4.4	0.70	2.2
Di-Isopropyl Ether	U	2.2	ug/Kgdrywt	1	5	4.4	1.8	2.2
Methyl Acetate	U	2.6	ug/Kgdrywt	1	5	4.4	2.3	2.6
Tetrahydrofuran	U	22	ug/Kgdrywt	1	50	44.	3.9	22.
Vinyl Acetate	U	2.2	ug/Kgdrywt	1	5	4.4	0.82	2.2
p-Bromofluorobenzene		120.	%					
Toluene-D8	*	52.9	%					
1,2-Dichloroethane-D4		124.	%					
Dibromofluoromethane		116.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-5RA
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3899.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.2	ug/Kgdrywt	1	10	8.5	0.78	4.2
Chloromethane	U	4.2	ug/Kgdrywt	1	10	8.5	1.2	4.2
Vinyl Chloride	U	4.2	ug/Kgdrywt	1	10	8.5	0.74	4.2
Bromomethane	U	4.2	ug/Kgdrywt	1	10	8.5	0.94	4.2
Chloroethane	U	4.2	ug/Kgdrywt	1	10	8.5	1.1	4.2
Trichlorofluoromethane	U	4.2	ug/Kgdrywt	1	10	8.5	0.77	4.2
1,1-Dichloroethene	U	2.1	ug/Kgdrywt	1	5	4.2	0.79	2.1
Carbon Disulfide		6.4	ug/Kgdrywt	1	5	4.2	0.66	2.1
Methylene Chloride	J	8.1	ug/Kgdrywt	1	25	21.	6.7	11.
Acetone		280	ug/Kgdrywt	1	25	21.	4.3	11.
trans-1,2-Dichloroethene	U	2.1	ug/Kgdrywt	1	5	4.2	0.60	2.1
Methyl tert-butyl Ether	U	2.1	ug/Kgdrywt	1	5	4.2	0.94	2.1
1,1-Dichloroethane	U	2.1	ug/Kgdrywt	1	5	4.2	1.4	2.1
cis-1,2-Dichloroethene	U	2.1	ug/Kgdrywt	1	5	4.2	0.77	2.1
Chloroform		21	ug/Kgdrywt	1	5	4.2	0.30	2.1
Carbon Tetrachloride	U	2.1	ug/Kgdrywt	1	5	4.2	1.1	2.1
1,1,1-Trichloroethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.36	2.1
2-Butanone		70	ug/Kgdrywt	1	25	21.	5.0	11.
Benzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.78	2.1
1,2-Dichloroethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.85	2.1
Trichloroethene	U	2.1	ug/Kgdrywt	1	5	4.2	0.50	2.1
1,2-Dichloropropane	U	2.1	ug/Kgdrywt	1	5	4.2	1.2	2.1
Bromodichloromethane	J	3.3	ug/Kgdrywt	1	5	4.2	0.51	2.1
cis-1,3-Dichloropropene	U	2.1	ug/Kgdrywt	1	5	4.2	0.61	2.1
Toluene	J	2.0	ug/Kgdrywt	1	5	4.2	1.2	2.1
4-Methyl-2-Pentanone	U	11	ug/Kgdrywt	1	25	21.	5.0	11.
Tetrachloroethene		15	ug/Kgdrywt	1	5	4.2	1.0	2.1
trans-1,3-Dichloropropene	U	2.1	ug/Kgdrywt	1	5	4.2	0.73	2.1
1,1,2-Trichloroethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.82	2.1
Dibromochloromethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.85	2.1
1,2-Dibromoethane	U	2.1	ug/Kgdrywt	1	5	4.2	1.0	2.1
Chlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.43	2.1
Ethylbenzene	J	2.9	ug/Kgdrywt	1	5	4.2	0.55	2.1
Styrene	U	2.1	ug/Kgdrywt	1	5	4.2	0.43	2.1
Bromoform	U	2.1	ug/Kgdrywt	1	5	4.2	0.60	2.1

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-5RA
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3899.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.78	2.1
1,1,2,2-Tetrachloroethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.71	2.1
1,3-Dichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.53	2.1
1,4-Dichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.37	2.1
1,2-Dichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.66	2.1
1,2-Dibromo-3-Chloropropane	U	2.1	ug/Kgdrywt	1	5	4.2	1.3	2.1
1,2,4-Trichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.67	2.1
1,2,4-Trimethylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.74	2.1
1,3,5-Trimethylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.57	2.1
n-Butylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.78	2.1
sec-Butylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.77	2.1
tert-Butylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.76	2.1
m+p-Xylenes		8.8	ug/Kgdrywt	1	10	8.5	1.4	2.1
o-Xylene		8.5	ug/Kgdrywt	1	5	4.2	1.1	2.1
Xylenes (Total)		17	ug/Kgdrywt	1	15	13.	1.1	6.4
Naphthalene	U	2.1	ug/Kgdrywt	1	5	4.2	0.75	2.1
1,1-Dichloropropene	U	2.1	ug/Kgdrywt	1	5	4.2	0.77	2.1
1,2,3-Trichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.65	2.1
1,2,3-Trichloropropane	U	2.1	ug/Kgdrywt	1	5	4.2	1.0	2.1
2-Chlorotoluene	U	2.1	ug/Kgdrywt	1	5	4.2	0.94	2.1
2,2-Dichloropropane	U	2.1	ug/Kgdrywt	1	5	4.2	0.42	2.1
Bromobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.63	2.1
Bromochloromethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.77	2.1
Dibromomethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.43	2.1
Hexachlorobutadiene	U	2.1	ug/Kgdrywt	1	5	4.2	0.63	2.1
n-Propylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.70	2.1
p-Isopropyltoluene		42	ug/Kgdrywt	1	5	4.2	0.65	2.1
1,3-Dichloropropane	U	2.1	ug/Kgdrywt	1	5	4.2	0.80	2.1
2-Hexanone	U	11	ug/Kgdrywt	1	25	21.	4.1	11.
4-Chlorotoluene	U	2.1	ug/Kgdrywt	1	5	4.2	0.42	2.1
1,2-Dichloroethylene (Total)	U	4.2	ug/Kgdrywt	1	10	8.5	0.60	4.2
Methylcyclohexane		150	ug/Kgdrywt	1	5	4.2	0.82	2.1
Freon-113	J	1.1	ug/Kgdrywt	1	5	4.2	0.76	2.1
1,3,5-Trichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.74	2.1
Cyclohexane		36	ug/Kgdrywt	1	5	4.2	1.2	2.1

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-5RA
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3899.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 93.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.1	ug/Kgdrywt	1	5	4.2	0.68	2.1
Di-Isopropyl Ether	U	2.1	ug/Kgdrywt	1	5	4.2	1.8	2.1
Methyl Acetate	U	2.6	ug/Kgdrywt	1	5	4.2	2.3	2.6
Tetrahydrofuran	J	14	ug/Kgdrywt	1	50	42.	3.8	21.
Vinyl Acetate	U	2.1	ug/Kgdrywt	1	5	4.2	0.80	2.1
p-Bromofluorobenzene	*	122.	%					
Toluene-D8	*	59.9	%					
1,2-Dichloroethane-D4	*	148.	%					
Dibromofluoromethane		128.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-7
Client ID: SITE 4TS-HWF2-L1
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1597.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	J	0.25	ug/L	1	1	1.0	0.25	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone		110	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform		2.9	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone		11	ug/L	1	5	5.0	1.3	2.5
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dichloroethane		2.2	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	J	0.40	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-7
Client ID: SITE 4TS-HWF2-L1
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1597.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	J	0.39	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
1,1-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2,3-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.27	0.50
1,2,3-Trichloropropane		14	ug/L	1	1	1.0	0.19	0.50
1,2,4-Trimethylbenzene	J	0.21	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,3-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Chlorotoluene	U	0.50	ug/L	1	1	1.0	0.20	0.50
2,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
Bromochloromethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
Dibromomethane	U	0.50	ug/L	1	1	1.0	0.46	0.50
Hexachlorobutadiene	U	0.75	ug/L	1	1	1.0	0.52	0.75
m+p-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
Naphthalene		15	ug/L	1	1	1.0	0.30	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
n-Propylbenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
o-xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
p-Isopropyltoluene	U	0.50	ug/L	1	1	1.0	0.25	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
4-Chlorotoluene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
Xylenes (Total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Ethylbenzene	U	2.5	ug/L	1	5	5.0	0.65	2.5
Benzene	U	2.5	ug/L	1	5	5.0	0.93	2.5
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
1,3,5-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Diethyl Ether	U	0.50	ug/L	1	1	1.0	0.40	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-7
Client ID: SITE 4TS-HWF2-L1
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1597.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
Tetrahydrofuran	U	5.0	ug/L	1	10	10.	1.7	5.0
Vinyl Acetate	U	0.50	ug/L	1	1	1.0	0.40	0.50
P-Bromofluorobenzene		97.0	%					
Toluene-d8		101.	%					
1,2-Dichloroethane-d4		102.	%					
Dibromofluoromethane		101.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-8
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3900.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	3.9	ug/Kgdrywt	1	10	7.8	0.72	3.9
Chloromethane	U	3.9	ug/Kgdrywt	1	10	7.8	1.1	3.9
Vinyl Chloride	U	3.9	ug/Kgdrywt	1	10	7.8	0.68	3.9
Bromomethane	U	3.9	ug/Kgdrywt	1	10	7.8	0.86	3.9
Chloroethane	U	3.9	ug/Kgdrywt	1	10	7.8	1.0	3.9
Trichlorofluoromethane	U	3.9	ug/Kgdrywt	1	10	7.8	0.71	3.9
1,1-Dichloroethene	U	2.0	ug/Kgdrywt	1	5	3.9	0.72	2.0
Carbon Disulfide	J	3.4	ug/Kgdrywt	1	5	3.9	0.61	2.0
Methylene Chloride	U	9.8	ug/Kgdrywt	1	25	20.	6.2	9.8
Acetone		77	ug/Kgdrywt	1	25	20.	4.0	9.8
trans-1,2-Dichloroethene	U	2.0	ug/Kgdrywt	1	5	3.9	0.55	2.0
Methyl tert-butyl Ether	U	2.0	ug/Kgdrywt	1	5	3.9	0.86	2.0
1,1-Dichloroethane	U	2.0	ug/Kgdrywt	1	5	3.9	1.3	2.0
cis-1,2-Dichloroethene	U	2.0	ug/Kgdrywt	1	5	3.9	0.71	2.0
Chloroform		4.9	ug/Kgdrywt	1	5	3.9	0.27	2.0
Carbon Tetrachloride	U	2.0	ug/Kgdrywt	1	5	3.9	1.0	2.0
1,1,1-Trichloroethane	U	2.0	ug/Kgdrywt	1	5	3.9	0.33	2.0
2-Butanone		31	ug/Kgdrywt	1	25	20.	4.6	9.8
Benzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.72	2.0
1,2-Dichloroethane	U	2.0	ug/Kgdrywt	1	5	3.9	0.78	2.0
Trichloroethene	U	2.0	ug/Kgdrywt	1	5	3.9	0.46	2.0
1,2-Dichloropropane	U	2.0	ug/Kgdrywt	1	5	3.9	1.1	2.0
Bromodichloromethane	U	2.0	ug/Kgdrywt	1	5	3.9	0.47	2.0
cis-1,3-Dichloropropene	U	2.0	ug/Kgdrywt	1	5	3.9	0.56	2.0
Toluene	J	1.4	ug/Kgdrywt	1	5	3.9	1.1	2.0
4-Methyl-2-Pentanone	U	9.8	ug/Kgdrywt	1	25	20.	4.6	9.8
Tetrachloroethene		4.5	ug/Kgdrywt	1	5	3.9	0.94	2.0
trans-1,3-Dichloropropene	U	2.0	ug/Kgdrywt	1	5	3.9	0.67	2.0
1,1,2-Trichloroethane	U	2.0	ug/Kgdrywt	1	5	3.9	0.76	2.0
Dibromochloromethane	U	2.0	ug/Kgdrywt	1	5	3.9	0.78	2.0
1,2-Dibromoethane	U	2.0	ug/Kgdrywt	1	5	3.9	0.94	2.0
Chlorobenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.40	2.0
Ethylbenzene		4.1	ug/Kgdrywt	1	5	3.9	0.51	2.0
Styrene	U	2.0	ug/Kgdrywt	1	5	3.9	0.40	2.0
Bromoform	U	2.0	ug/Kgdrywt	1	5	3.9	0.55	2.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-8
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3900.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		4.7	ug/Kgdrywt	1	5	3.9	0.72	2.0
1,1,2,2-Tetrachloroethane	U	2.0	ug/Kgdrywt	1	5	3.9	0.66	2.0
1,3-Dichlorobenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.48	2.0
1,4-Dichlorobenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.34	2.0
1,2-Dichlorobenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.61	2.0
1,2-Dibromo-3-Chloropropane	U	2.0	ug/Kgdrywt	1	5	3.9	1.2	2.0
1,2,4-Trichlorobenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.62	2.0
1,2,4-Trimethylbenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.68	2.0
1,3,5-Trimethylbenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.52	2.0
n-Butylbenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.72	2.0
sec-Butylbenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.71	2.0
tert-Butylbenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.70	2.0
m+p-Xylenes	J	4.7	ug/Kgdrywt	1	10	7.8	1.3	2.0
o-Xylene		4.2	ug/Kgdrywt	1	5	3.9	1.0	2.0
Xylenes (Total)	J	8.8	ug/Kgdrywt	1	15	12.	1.0	5.8
Naphthalene	U	2.0	ug/Kgdrywt	1	5	3.9	0.69	2.0
1,1-Dichloropropene	U	2.0	ug/Kgdrywt	1	5	3.9	0.71	2.0
1,2,3-Trichlorobenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.59	2.0
1,2,3-Trichloropropane	U	2.0	ug/Kgdrywt	1	5	3.9	0.94	2.0
2-Chlorotoluene	U	2.0	ug/Kgdrywt	1	5	3.9	0.86	2.0
2,2-Dichloropropane	U	2.0	ug/Kgdrywt	1	5	3.9	0.39	2.0
Bromobenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.58	2.0
Bromochloromethane	U	2.0	ug/Kgdrywt	1	5	3.9	0.71	2.0
Dibromomethane	U	2.0	ug/Kgdrywt	1	5	3.9	0.40	2.0
Hexachlorobutadiene	U	2.0	ug/Kgdrywt	1	5	3.9	0.58	2.0
n-Propylbenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.65	2.0
p-Isopropyltoluene		29	ug/Kgdrywt	1	5	3.9	0.59	2.0
1,3-Dichloropropane	U	2.0	ug/Kgdrywt	1	5	3.9	0.73	2.0
2-Hexanone	U	9.8	ug/Kgdrywt	1	25	20.	3.7	9.8
4-Chlorotoluene	U	2.0	ug/Kgdrywt	1	5	3.9	0.38	2.0
1,2-Dichloroethylene (Total)	U	3.9	ug/Kgdrywt	1	10	7.8	0.55	3.9
Methylcyclohexane		71	ug/Kgdrywt	1	5	3.9	0.75	2.0
Freon-113	U	2.0	ug/Kgdrywt	1	5	3.9	0.70	2.0
1,3,5-Trichlorobenzene	U	2.0	ug/Kgdrywt	1	5	3.9	0.68	2.0
Cyclohexane		20	ug/Kgdrywt	1	5	3.9	1.1	2.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-8
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: T3900.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165286

Analysis Date: 22-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.0	ug/Kgdrywt	1	5	3.9	0.62	2.0
Di-Isopropyl Ether	U	2.0	ug/Kgdrywt	1	5	3.9	1.6	2.0
Methyl Acetate	U	2.3	ug/Kgdrywt	1	5	3.9	2.1	2.3
Tetrahydrofuran	U	20	ug/Kgdrywt	1	50	39.	3.5	20.
Vinyl Acetate	U	2.0	ug/Kgdrywt	1	5	3.9	0.73	2.0
p-Bromofluorobenzene	*	76.8	%					
Toluene-D8	*	21.8	%					
1,2-Dichloroethane-D4		68.9	%					
Dibromofluoromethane	*	54.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-10
Client ID: SITE 4TS-HWF2-L2
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1598.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	J	0.50	ug/L	1	1	1.0	0.25	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone		40	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform		4.2	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone		9.4	ug/L	1	5	5.0	1.3	2.5
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
1,2-Dichloroethane		3.0	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	J	0.30	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-10
Client ID: SITE 4TS-HWF2-L2
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1598.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	J	0.19	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
1,1-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2,3-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.27	0.50
1,2,3-Trichloropropane		9.4	ug/L	1	1	1.0	0.19	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,3-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Chlorotoluene	U	0.50	ug/L	1	1	1.0	0.20	0.50
2,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
Bromochloromethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
Dibromomethane	U	0.50	ug/L	1	1	1.0	0.46	0.50
Hexachlorobutadiene	U	0.75	ug/L	1	1	1.0	0.52	0.75
m+p-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
Naphthalene		6.5	ug/L	1	1	1.0	0.30	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
n-Propylbenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
o-xylene	J	0.26	ug/L	1	1	1.0	0.25	0.50
p-Isopropyltoluene	U	0.50	ug/L	1	1	1.0	0.25	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
4-Chlorotoluene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethylene (Total)	U	1.0	ug/L	1	2	2.0	0.21	1.0
Xylenes (Total)	J	0.26	ug/L	1	3	3.0	0.25	1.5
Ethylbenzene	U	2.5	ug/L	1	5	5.0	0.65	2.5
Benzene	U	2.5	ug/L	1	5	5.0	0.93	2.5
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
1,3,5-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Diethyl Ether	U	0.50	ug/L	1	1	1.0	0.40	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-10
Client ID: SITE 4TS-HWF2-L2
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1598.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 24-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165388

Analysis Date: 24-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 25-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
Tetrahydrofuran	U	5.0	ug/L	1	10	10.	1.7	5.0
Vinyl Acetate	U	0.50	ug/L	1	1	1.0	0.40	0.50
P-Bromofluorobenzene		106.	%					
Toluene-d8		107.	%					
1,2-Dichloroethane-d4		108.	%					
Dibromofluoromethane		103.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1536.D P1535.D P1534.D P1533.D P1538.D P1537.D **Column ID:**
Calibration Date(s): 22-JUN-15 10:02 22-JUN-15 12:13

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Crv					Max	
	1.0000	5.0000	20.0000	50.0000	100.0000	200.0000	New	b	m1	m2	%RSD	%RSD	
Dichlorodifluoromethane	0.71991	0.64793	0.65273	0.68867	0.71376	0.67358	AVG		0.68276		4.43040	15.00000	O
Chloromethane	1.05365	0.91418	0.91249	0.96518	0.96130	1.04364	AVG		0.97507		6.28640	15.00000	O
Vinyl chloride	0.67640	0.69866	0.69303	0.72668	0.76449	0.73236	AVG		0.71527		4.47691	15.00000	O
Bromomethane	2161	12281	50033	141413	345778	617776	LNR	0.02370	0.38031		0.99741	0.99000	O
Chloroethane	4765	22347	93465	235608	315080	500563	QUA	0.01805	1.01089	1.91194	0.99228	0.99000	O
Trichlorofluoromethane	1.05539	0.88132	0.89902	0.95662	0.88002	1.03352	AVG		0.95098		8.19060	15.00000	O
Diethyl Ether	0.50501	0.55237	0.59944	0.62441	0.62755	0.59815	AVG		0.58449		8.09963	15.00000	O
1,1-Dichloroethene	0.48383	0.49724	0.50562	0.51835	0.52337	0.55233	AVG		0.51346		4.63801	15.00000	O
Carbon Disulfide	1.91590	1.70298	1.81864	1.96791	1.96121	1.92880	AVG		1.88257		5.47164	15.00000	O
Freon-113	0.33779	0.31231	0.31048	0.31669	0.35641	0.33078	AVG		0.32741		5.44557	15.00000	O
Methylene Chloride	10315	31973	122218	287284	603269	1149174	LNR	-0.01408	0.69234		0.99993	0.99000	O
Acetone	0.22360	0.22286	0.22696	0.23345	0.24087	0.22396	AVG		0.22862		3.13073	15.00000	O
trans-1,2-Dichloroethene	0.54343	0.52928	0.53499	0.56174	0.56553	0.54736	AVG		0.54706		2.62564	15.00000	O
Methyl tert-butyl ether	1.49918	1.68350	1.79965	1.82931	1.89366	1.57188	AVG		1.71286		9.05113	15.00000	O
Di-isopropyl ether	1.79798	2.04152	2.24673	2.23295	2.34503	2.12462	AVG		2.13147		9.11060	15.00000	O
1,1-Dichloroethane	1.06962	1.05046	1.06445	1.05825	1.08594	1.04684	AVG		1.06259		1.33895	15.00000	O
Vinyl Acetate	0.70639	0.79117	0.87920	0.87000	0.90583	0.82831	AVG		0.83015		8.77994	15.00000	O
cis-1,2-Dichloroethene	0.67154	0.64001	0.67597	0.66289	0.69061	0.67474	AVG		0.66929		2.52869	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
2,2-Dichloropropane	0.76099	0.76453	0.75202	0.79423	0.81339	0.71634	AVG		0.76692		4.41287	15.00000	O
Bromochloromethane	0.24614	0.25963	0.26684	0.26946	0.26022	0.25866	AVG		0.26016		3.12325	15.00000	O
Chloroform	1.13466	1.05314	1.08559	1.08617	1.09400	1.06096	AVG		1.08575		2.64962	15.00000	O
Carbon Tetrachloride	0.32974	0.34745	0.34149	0.36054	0.37367	0.35926	AVG		0.35203		4.44040	15.00000	O
Tetrahydrofuran	0.16937	0.17501	0.18169	0.18026	0.19191	0.17184	AVG		0.17835		4.57449	15.00000	O
1,1,1-Trichloroethane	0.87532	0.86723	0.90337	0.92499	0.94220	0.89080	AVG		0.90065		3.21088	15.00000	O
1,1-Dichloropropene	0.43834	0.42636	0.43741	0.43363	0.43213	0.41466	AVG		0.43042		2.05097	15.00000	O
2-Butanone	0.25440	0.29325	0.29957	0.28998	0.30535	0.26034	AVG		0.28381		7.48252	15.00000	O
Benzene	1.29935	1.27451	1.29079	1.26836	1.27648	1.14955	AVG		1.25984		4.38327	15.00000	O
Cyclohexane	0.98260	0.94842	0.95244	0.96567	1.05404	0.95588	AVG		0.97651		4.08590	15.00000	O
1,2-Dichloroethane	0.49124	0.46409	0.48123	0.47081	0.45223	0.42609	AVG		0.46428		4.96877	15.00000	O
Trichloroethene	0.34335	0.32343	0.31989	0.31552	0.31620	0.30400	AVG		0.32040		4.06165	15.00000	O
Dibromomethane	0.19367	0.18669	0.18150	0.19012	0.19183	0.18774	AVG		0.18859		2.29067	15.00000	O
1,2-Dichloropropane	0.32962	0.30581	0.31078	0.32033	0.32915	0.31738	AVG		0.31885		3.01328	15.00000	O
Bromodichloromethane	0.44768	0.42917	0.45277	0.46246	0.47078	0.45642	AVG		0.45321		3.14144	15.00000	O
cis-1,3-dichloropropene	0.46154	0.46912	0.51024	0.52965	0.55257	0.54056	AVG		0.51061		7.40581	15.00000	O
Toluene	0.84808	0.84328	0.83629	0.82510	0.84155	0.77551	AVG		0.82830		3.26300	15.00000	O
4-methyl-2-pentanone	0.25780	0.31011	0.33323	0.32280	0.32342	0.26174	AVG		0.30152		11.00487	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1536.D P1535.D P1534.D **Column ID:**
P1533.D P1538.D P1537.D **Calibration Date(s):** 22-JUN-15 10:02
22-JUN-15 12:13

Tetrachloroethene	0.25186	0.24707	0.24160	0.24821	0.25657	0.24433	AVG		0.24827		2.15612	15.00000	O
trans-1,3-Dichloropropene	0.35641	0.40434	0.44234	0.46434	0.48052	0.46569	AVG		0.43561		10.7885	15.00000	O
1,1,2-Trichloroethane	0.24237	0.24575	0.25185	0.25225	0.25727	0.24739	AVG		0.24948		2.14196	15.00000	O
Dibromochloromethane	0.33125	0.33355	0.34399	0.35992	0.37268	0.36521	AVG		0.35110		4.92462	15.00000	O
1,3-Dichloropropane	0.64668	0.60886	0.62292	0.61569	0.62369	0.58266	AVG		0.61675		3.40693	15.00000	O
1,2-Dibromoethane	0.25951	0.27529	0.29079	0.29902	0.30821	0.29705	AVG		0.28831		6.18963	15.00000	O
2-Hexanone	0.19410	0.23510	0.24878	0.24944	0.25714	0.21350	AVG		0.23301		10.5120	15.00000	O
Chlorobenzene	1.02910	0.98113	0.99287	0.97261	0.97917	0.89287	AVG		0.97462		4.60027	15.00000	O
Ethylbenzene	0.53946	0.53046	0.54708	0.52878	0.54353	0.50523	AVG		0.53242		2.84106	15.00000	O
Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+	15.00000	M
m+p-Xylenes	0.67642	0.64943	0.68430	0.65681	0.63621	0.53007	AVG		0.63887		8.78523	15.00000	O
o-Xylene	0.60544	0.60584	0.68090	0.66227	0.66588	0.61354	AVG		0.63898		5.37314	15.00000	O
Styrene	1.01790	1.06902	1.18056	1.16717	1.14636	0.97868	AVG		1.09328		7.68530	15.00000	O
Bromoform	0.17783	0.19657	0.21366	0.22317	0.23477	0.22730	AVG		0.21222		10.0738	15.00000	O
Isopropylbenzene	3.03478	3.08062	3.25483	3.14588	3.04527	2.48623	AVG		3.00793		8.91525	15.00000	O
Bromobenzene	0.77306	0.70939	0.77080	0.77108	0.79069	0.75826	AVG		0.76221		3.65805	15.00000	O
N-Propylbenzene	3.73934	3.78506	3.95245	3.82420	3.50380	2.66724	AVG		3.57868		13.1346	15.00000	O
1,1,2,2-Tetrachloroethane	0.87382	0.86251	0.94110	0.90988	0.94434	0.83213	AVG		0.89396		5.06015	15.00000	O
1,3,5-Trimethylbenzene	2.54601	2.70740	2.94231	2.83166	2.69897	2.16997	AVG		2.64939		10.2033	15.00000	O
2-Chlorotoluene	2.36360	2.37713	2.45338	2.37911	2.31213	1.94149	AVG		2.30447		7.96208	15.00000	O
1,2,3-Trichloropropane	0.66498	0.68672	0.73087	0.68952	0.71189	0.62763	AVG		0.68527		5.27863	15.00000	O
4-Chlorotoluene	2.47081	2.50975	2.64061	2.51125	2.41584	1.97369	AVG		2.42033		9.54480	15.00000	O
tert-Butylbenzene	2.42527	2.64568	2.80611	2.51255	2.48825	2.33746	AVG		2.53589		6.58665	15.00000	O
1,2,4-Trimethylbenzene	2.52553	2.73635	2.93091	2.83078	2.68511	2.14255	AVG		2.64187		10.6105	15.00000	O
P-Isopropyltoluene	2.90313	2.96738	3.14773	3.00265	2.85488	2.27854	AVG		2.85905		10.5470	15.00000	O
1,3-Dichlorobenzene	1.66015	1.52884	1.60105	1.55868	1.55689	1.36006	AVG		1.54428		6.55229	15.00000	O
1,4-Dichlorobenzene	1.74242	1.57152	1.62025	1.57991	1.58478	1.36191	AVG		1.57680		7.79816	15.00000	O
N-Butylbenzene	2.75199	2.82260	2.99244	2.85744	2.67935	2.08042	AVG		2.69737		11.8670	15.00000	O
sec-Butylbenzene	3.49080	3.51835	3.57029	3.38986	3.17317	2.47647	AVG		3.26982		12.6395	15.00000	O
1,2-Dichlorobenzene	1.50839	1.47291	1.56665	1.50778	1.51909	1.31309	AVG		1.48132		5.92465	15.00000	O
1,2-Dibromo-3-Chloropropane	0.13637	0.15390	0.16536	0.16795	0.18308	0.16183	AVG		0.16142		9.64315	15.00000	O
1,3,5-Trichlorobenzene	0.90906	0.97267	1.07448	1.06054	1.09640	1.01291	AVG		1.02101		6.93130	15.00000	O
Hexachlorobutadiene	0.26840	0.31434	0.32928	0.33845	0.36585	0.35206	AVG		0.32806		10.4367	15.00000	O
1,2,4-Trichlorobenzene	0.90323	0.88225	0.96724	0.96720	1.04527	0.94973	AVG		0.95249		6.01475	15.00000	O
Naphthalene	10309	69117	325430	807173	1861637	+++++	LNR	0.02582	2.33622		0.99830	0.99000	O
1,2,3-Trichlorobenzene	0.68434	0.71660	0.74634	0.75112	0.84129	0.69043	AVG		0.73835		7.78280	15.00000	O
Methyl Acetate	0.44194	0.50779	0.50859	0.51636	0.55423	0.50870	AVG		0.50627		7.15095	15.00000	O
Methylcyclohexane	0.99301	0.93852	0.89140	0.89861	1.04239	0.91594	AVG		0.94665		6.28261	15.00000	O
Dibromofluoromethane	0.54146	0.54917	0.54382	0.55211	0.53342	0.52500	AVG		0.54083		1.86986	15.00000	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1536.D P1535.D P1534.D **Column ID:**
P1533.D P1538.D P1537.D **Calibration Date(s):** 22-JUN-15 10:02
22-JUN-15 12:13

1,2-Dichloroethane-D4	0.84986	0.79987	0.78528	0.75705	0.70335	0.66171	AVG		0.75952		8.96510	15.00000	
Toluene-D8	1.12857	1.15803	1.14527	1.12648	1.07876	0.99941	AVG		1.10608		5.31517	15.00000	
P-Bromofluorobenzene	0.54037	0.52383	0.51143	0.50027	0.47926	0.46366	AVG		0.50314		5.63594	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG165276-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-p.i\P062215.b\P826A09.m
Misc Info: WG165276,WG165276-4

Client SDG: WG165276
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	51.4	102.84	80-120
	2 Chloromethane	50.0	57.1	114.19	80-120
	3 Vinyl chloride	50.0	54.7	109.46	80-120
	4 Bromomethane	50.0	53.3	106.52	80-120
	5 Chloroethane	50.0	63.7	127.50*	80-120
	6 Trichlorofluoromet	50.0	52.4	104.85	80-120
	7 Diethyl Ether	50.0	55.1	110.29	80-120
	8 Tertiary-butyl alc	250	225	90.12	80-120
	9 1,1-Dichloroethene	50.0	54.8	109.53	80-120
	10 Carbon Disulfide	50.0	56.4	112.76	80-120
	11 Freon-113	50.0	53.3	106.66	80-120
	12 Iodomethane	50.0	45.6	91.19	80-120
	13 Acrolein	250	280	112.03	80-120
	14 Methylene Chloride	50.0	51.9	103.83	80-120
	15 Acetone	50.0	52.2	104.38	80-120
	16 Isobutyl Alcohol	1000	964	96.36	80-120
	17 trans-1,2-Dichloro	50.0	57.4	114.70	80-120
	18 Allyl Chloride	50.0	56.0	111.99	80-120
	19 Methyl tert-butyl	100	114	114.18	80-120
	20 Acetonitrile	500	513	102.53	80-120
	21 Di-isopropyl ether	50.0	56.2	112.38	80-120
	22 Chloroprene	50.0	55.0	109.99	80-120
	23 Propionitrile	500	555	110.99	80-120
	24 Methacrylonitrile	500	552	110.32	80-120
	25 1,1-Dichloroethane	50.0	55.0	110.01	80-120
	26 Acrylonitrile	250	275	110.14	80-120
	27 Ethyl tertiary-but	50.0	56.9	113.75	80-120
	28 Vinyl Acetate	50.0	55.0	109.90	80-120
	29 cis-1,2-Dichloroet	50.0	48.8	97.63	80-120
M	30 1,2-Dichloroethyle	100	106	106.16	80-120
	31 Methyl Methacrylat	50.0	56.3	112.64	80-120
	32 2,2-Dichloropropan	50.0	53.1	106.25	80-120
	33 Bromochloromethane	50.0	52.1	104.18	80-120
	34 Chloroform	50.0	50.9	101.74	80-120
	35 Carbon Tetrachlori	50.0	51.9	103.77	80-120
	36 Tetrahydrofuran	50.0	52.9	105.89	80-120
	38 1,1,1-Trichloroeth	50.0	52.8	105.64	80-120
	39 1,1-Dichloropropen	50.0	52.8	105.72	80-120
	40 2-Butanone	50.0	50.1	100.15	80-120
	41 Benzene	50.0	51.4	102.80	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

	SPIKE	COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	43	Cyclohexane	50.0	49.0	98.00	80-120
	44	Ethyl Methacrylate	50.0	51.6	103.13	80-120
	46	Tertiary-amyl meth	50.0	56.6	113.21	80-120
	47	1,2-Dichloroethane	50.0	50.8	101.66	80-120
	48	Trichloroethene	50.0	50.5	101.02	80-120
	50	Dibromomethane	50.0	50.8	101.54	80-120
	51	1,2-Dichloropropan	50.0	51.4	102.77	80-120
	52	Bromodichlorometha	50.0	51.0	102.09	80-120
	53	cis-1,3-dichloropr	50.0	54.0	107.92	80-120
	54	1,4-Dioxane	1000	838	83.76	80-120
	56	2-Chloroethylvinyl	50.0	43.8	87.52	80-120
	57	Toluene	50.0	51.5	103.00	80-120
	58	4-methyl-2-pentano	50.0	54.2	108.35	80-120
	59	Tetrachloroethene	50.0	52.0	103.91	80-120
	60	trans-1,3-Dichloro	50.0	57.5	115.09	80-120
	61	1,1,2-Trichloroeth	50.0	50.8	101.67	80-120
	62	Dibromochlorometha	50.0	51.3	102.56	80-120
	63	1,3-Dichloropropan	50.0	49.1	98.19	80-120
	64	1,2-Dibromoethane	50.0	51.5	103.04	80-120
	65	2-Hexanone	50.0	53.5	107.07	80-120
	67	Chlorobenzene	50.0	51.0	101.98	80-120
	152	1-Chlorohexane	50.0	46.8	93.62	80-120
	68	Ethylbenzene	50.0	51.0	102.00	80-120
	69	1,1,1,2-Tetrachlor	50.0	52.8	105.71	80-120
M	70	Xylenes (total)	150	159	106.02	80-120
	71	m+p-Xylenes	100	106	106.27	80-120
	72	o-Xylene	50.0	52.8	105.53	80-120
	73	Styrene	50.0	54.0	107.97	80-120
	74	Bromoform	50.0	52.7	105.45	80-120
	75	Isopropylbenzene	50.0	53.9	107.85	80-120
	77	cis-1,4-Dichloro-2	50.0	49.2	98.43	80-120
	78	trans-1,4-Dichloro	50.0	54.1	108.29	80-120
	79	Bromobenzene	50.0	50.8	101.58	80-120
	80	N-Propylbenzene	50.0	55.7	111.37	80-120
	81	1,1,2,2-Tetrachlor	50.0	50.1	100.23	80-120
	82	1,3,5-Trimethylben	50.0	53.3	106.63	80-120
	83	2-Chlorotoluene	50.0	53.7	107.41	80-120
	84	1,2,3-Trichloropro	50.0	51.7	103.45	80-120
	85	4-Chlorotoluene	50.0	53.1	106.18	80-120
	86	tert-Butylbenzene	50.0	55.4	110.74	80-120
	87	Pentachloroethane	50.0	54.2	108.48	80-120
	88	1,2,4-Trimethylben	50.0	55.3	110.66	80-120
	89	P-Isopropyltoluene	50.0	53.8	107.64	80-120
	90	1,3-Dichlorobenzen	50.0	51.1	102.28	80-120
	92	1,4-Dichlorobenzen	50.0	50.5	101.04	80-120
	93	N-Butylbenzene	50.0	54.4	108.80	80-120
	94	sec-Butylbenzene	50.0	54.3	108.61	80-120
	95	1,2-Dichlorobenzen	50.0	51.7	103.42	80-120
	96	1,2-Dibromo-3-Chlo	50.0	54.6	109.25	80-120
	97	1,3,5-Trichloroben	50.0	53.0	105.99	80-120
	98	Hexachlorobutadien	50.0	52.6	105.26	80-120
	99	1,2,4-Trichloroben	50.0	51.0	101.94	80-120
	100	1,2,3-Trimethylben	50.0	54.4	108.83	80-120
	101	Naphthalene	50.0	51.3	102.70	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	52.5	104.92	80-120
103 Methyl Acetate	50.0	54.5	108.94	80-120
104 Methylcyclohexane	50.0	54.5	108.95	80-120
M 153 Total Alkylbenzene	350	382	109.21	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	48.2	96.44	68-128
$ 45 1,2-Dichloroethane	50.0	45.8	91.66	67-135
$ 55 Toluene-D8	50.0	50.7	101.48	65-128
$ 76 P-Bromofluorobenze	50.0	49.1	98.15	56-133

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-T
Lab File IDs : T3888.D T3887.D T3886.D **Column ID:**
T3885.D T3890.D T3889.D **Calibration Date(s):** 22-JUN-15 10:03
22-JUN-15 13:12

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Crv					Max	
	5.0000	10.0000	20.0000	50.0000	100.0000	200.0000	New	b	m1	m2	%RSD	%RSD	
Dichlorodifluoromethane	0.61683	0.61279	0.57176	0.62357	0.68444	0.57864	AVG		0.61467		6.54594	15.00000	O
Chloromethane	0.98086	0.90269	0.87802	0.96959	0.84662	0.95328	AVG		0.92185		5.88139	15.00000	O
Vinyl chloride	0.80633	0.77839	0.79143	0.86767	0.91333	0.81006	AVG		0.82787		6.26382	15.00000	O
Bromomethane	0.43543	0.46519	0.45164	0.49981	0.58655	0.48150	AVG		0.48669		11.06102	15.00000	O
Chloroethane	0.52576	0.49114	0.47099	0.50551	0.45824	0.28107	AVG		0.45545		19.48559	15.00000	W(
Trichlorofluoromethane	0.94745	0.94647	0.90589	1.00410	1.05315	0.82291	AVG		0.94666		8.40013	15.00000	O
Diethyl Ether	0.52988	0.56818	0.53549	0.61442	0.64820	0.59119	AVG		0.58123		7.91610	15.00000	O
1,1-Dichloroethene	0.57103	0.57600	0.56717	0.63363	0.67172	0.61409	AVG		0.60561		6.91834	15.00000	O
Carbon Disulfide	2.00612	2.06720	2.07583	2.34103	2.33959	2.08770	AVG		2.15291		6.86831	15.00000	O
Freon-113	0.42488	0.45176	0.41649	0.45296	0.51086	0.44701	AVG		0.45066		7.34378	15.00000	O
Methylene Chloride	0.95115	0.83168	0.71754	0.80939	0.83186	0.75173	AVG		0.81556		9.90515	15.00000	O
Acetone	0.19808	0.18771	0.17137	0.20187	0.19430	0.17822	AVG		0.18859		6.29055	15.00000	O
trans-1,2-Dichloroethene	0.62773	0.63362	0.62425	0.69479	0.72527	0.65619	AVG		0.66031		6.24443	15.00000	O
Methyl tert-butyl ether	39738	90598	212078	606525	1329960	3066574	LNR	0.22180	0.97946		0.99879	0.99000	O
Di-isopropyl ether	1.71205	1.86489	1.92834	2.30633	2.53080	2.30836	AVG		2.10846		15.09372	15.00000	W(
1,1-Dichloroethane	1.11305	1.16750	1.16728	1.31179	1.36941	1.24860	AVG		1.22961		7.96722	15.00000	O
Vinyl Acetate	21946	58800	156344	487437	823302	1791990	LNR	0.01309	0.67509		0.99798	0.99000	O
cis-1,2-Dichloroethene	0.75832	0.75939	0.76932	0.87594	0.90480	0.82369	AVG		0.81524		7.80490	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
2,2-Dichloropropane	21553	50756	115606	319043	655058	1329419	LNR	0.02202	0.85054		0.99844	0.99000	O
Bromochloromethane	0.32044	0.32263	0.31165	0.37097	0.37562	0.33393	AVG		0.33921		8.07272	15.00000	O
Chloroform	1.12379	1.12850	1.09786	1.26488	1.31167	1.15178	AVG		1.17975		7.37959	15.00000	O
Carbon Tetrachloride	0.41684	0.44610	0.46457	0.49420	0.54228	0.48344	AVG		0.47457		9.08370	15.00000	O
Tetrahydrofuran	0.19009	0.20681	0.20414	0.25026	0.24610	0.22640	AVG		0.22063		11.01997	15.00000	O
1,1,1-Trichloroethane	0.81430	0.89226	0.91650	1.01585	1.08905	0.99600	AVG		0.95399		10.33029	15.00000	O
1,1-Dichloropropene	0.43574	0.50016	0.53824	0.60084	0.63793	0.57201	AVG		0.54749		13.28219	15.00000	O
2-Butanone	43501	97570	231617	657503	1284546	2524845	LNR	-0.02363	0.32380		0.99630	0.99000	O
Benzene	1.51139	1.54204	1.60137	1.71762	1.88109	1.59210	AVG		1.64093		8.35875	15.00000	O
Cyclohexane	0.86438	1.06533	1.03914	1.19613	1.32000	1.12354	AVG		1.10142		13.98336	15.00000	O
1,2-Dichloroethane	0.51302	0.49872	0.49483	0.50472	0.55262	0.49044	AVG		0.50906		4.46922	15.00000	O
Trichloroethene	0.35028	0.36123	0.39468	0.43362	0.46543	0.41957	AVG		0.40414		10.89642	15.00000	O
Dibromomethane	0.24692	0.22984	0.23624	0.25181	0.26730	0.24012	AVG		0.24537		5.39681	15.00000	O
1,2-Dichloropropane	0.38402	0.39693	0.41034	0.44922	0.50752	0.45149	AVG		0.43325		10.51170	15.00000	O
Bromodichloromethane	0.46944	0.49384	0.50029	0.53251	0.60372	0.53574	AVG		0.52259		8.97587	15.00000	O
cis-1,3-dichloropropene	0.47915	0.53841	0.56620	0.64015	0.73424	0.66360	AVG		0.60362		15.38801	15.00000	W(
Toluene	0.98103	1.01062	1.01525	1.03850	1.13490	0.98788	AVG		1.02803		5.47119	15.00000	O
4-methyl-2-pentanone	0.35874	0.37768	0.38977	0.43089	0.42984	0.36185	AVG		0.39146		8.21239	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-T
Lab File IDs : T3888.D T3887.D T3886.D T3885.D T3890.D T3889.D **Column ID:**
Calibration Date(s): 22-JUN-15 10:03 22-JUN-15 13:12

Tetrachloroethene	0.30655	0.31201	0.33367	0.36677	0.39979	0.37275	AVG		0.34859		10.6284	15.00000	O
trans-1,3-Dichloropropene	0.39537	0.42297	0.45608	0.52308	0.58894	0.54422	AVG		0.48845		15.4314	15.00000	W
1,1,2-Trichloroethane	0.27442	0.29910	0.28892	0.31428	0.35458	0.32262	AVG		0.30899		9.13966	15.00000	O
Dibromochloromethane	20079	42692	98082	265529	568684	1143785	LNR	0.03216	0.47968		0.99722	0.99000	O
1,3-Dichloropropane	0.58375	0.60023	0.66373	0.72933	0.81516	0.72722	AVG		0.68657		12.7912	15.00000	O
1,2-Dibromoethane	0.30173	0.30273	0.30704	0.36054	0.37662	0.35743	AVG		0.33435		10.1993	15.00000	O
2-Hexanone	0.26863	0.28948	0.30410	0.34681	0.34870	0.29374	AVG		0.30857		10.5231	15.00000	O
Chlorobenzene	1.14318	1.15984	1.17708	1.27712	1.37564	1.18922	AVG		1.22035		7.31050	15.00000	O
Ethylbenzene	0.59847	0.61294	0.64818	0.70214	0.76342	0.67717	AVG		0.66705		9.14545	15.00000	O
Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+	15.00000	M
m+p-Xylenes	0.72775	0.75934	0.79408	0.85378	0.89905	0.75530	AVG		0.79822		8.23227	15.00000	O
o-Xylene	0.67773	0.72268	0.76272	0.82506	0.90005	0.79357	AVG		0.78030		10.0370	15.00000	O
Styrene	1.22627	1.28717	1.28455	1.40221	1.51785	1.28588	AVG		1.33399		8.00478	15.00000	O
Bromoform	0.23642	0.25251	0.27115	0.30834	0.34729	0.33102	AVG		0.29112		15.3049	15.00000	W
Isopropylbenzene	3.04653	3.27084	3.52759	3.60955	3.86092	3.23003	AVG		3.42424		8.65949	15.00000	O
Bromobenzene	0.86753	0.89856	0.93799	0.97207	1.09182	1.00646	AVG		0.96240		8.37153	15.00000	O
N-Propylbenzene	3.93166	4.12087	4.29412	4.37480	4.55767	3.65068	AVG		4.15497		7.87413	15.00000	O
1,1,2,2-Tetrachloroethane	0.90339	1.00642	0.98276	1.05128	1.15793	1.06937	AVG		1.02852		8.38351	15.00000	O
1,3,5-Trimethylbenzene	3.04653	3.27084	3.52759	3.60955	3.86092	3.23003	AVG		3.42424		8.65949	15.00000	O
2-Chlorotoluene	2.35277	2.46503	2.53251	2.60065	2.82802	2.39634	AVG		2.52922		6.78643	15.00000	O
1,2,3-Trichloropropane	0.73429	0.76672	0.74684	0.81939	0.89473	0.83083	AVG		0.79880		7.62358	15.00000	O
4-Chlorotoluene	2.47122	2.56176	2.67090	2.77591	2.98928	2.51791	AVG		2.66450		7.26460	15.00000	O
tert-Butylbenzene	2.63625	2.90617	3.05055	3.19761	3.54723	3.02881	AVG		3.06110		9.91532	15.00000	O
1,2,4-Trimethylbenzene	2.67791	2.90624	3.04046	3.21385	3.47366	2.91202	AVG		3.03736		9.11954	15.00000	O
P-Isopropyltoluene	3.08266	3.27265	3.50221	3.58906	3.83758	3.08392	AVG		3.39468		8.87969	15.00000	O
1,3-Dichlorobenzene	1.68659	1.77327	1.78730	1.86075	2.05472	1.80157	AVG		1.82737		6.82706	15.00000	O
1,4-Dichlorobenzene	1.78048	1.84522	1.85298	1.90641	2.08120	1.83985	AVG		1.88436		5.54172	15.00000	O
N-Butylbenzene	2.97402	3.23619	3.33795	3.44786	3.64363	2.89152	AVG		3.25520		8.75969	15.00000	O
sec-Butylbenzene	3.51635	3.79914	3.97605	4.05455	4.36841	3.47267	AVG		3.86453		8.82460	15.00000	O
1,2-Dichlorobenzene	1.70375	1.67583	1.70788	1.76690	1.98500	1.74593	AVG		1.76421		6.39929	15.00000	O
1,2-Dibromo-3-Chloropropane	0.17763	0.17102	0.17945	0.20699	0.22553	0.21088	AVG		0.19525		11.3289	15.00000	O
1,3,5-Trichlorobenzene	1.31914	1.29037	1.18312	1.32908	1.35893	1.14563	AVG		1.27104		6.78968	15.00000	O
Hexachlorobutadiene	0.59750	0.64810	0.67965	0.68576	0.78641	0.66215	AVG		0.67659		9.21338	15.00000	O
1,2,4-Trichlorobenzene	1.28870	1.28425	1.30923	1.35379	1.52502	1.30097	AVG		1.34366		6.86569	15.00000	O
Naphthalene	2.72962	2.95429	2.99597	3.04556	3.36309	2.70293	AVG		2.96524		8.12357	15.00000	O
1,2,3-Trichlorobenzene	1.11739	1.20918	1.20195	1.23137	1.42743	1.20458	AVG		1.23198		8.39664	15.00000	O
Methyl Acetate	0.44979	0.48610	0.44436	0.56123	0.45174	0.43755	AVG		0.47179		9.94860	15.00000	O
Methylcyclohexane	32792	73644	158149	422862	991635	1818993	QUA	0.11472	0.59893	0.05401	0.99659	0.99000	O
Dibromofluoromethane	0.71569	0.68999	0.64805	0.71444	0.71389	0.65635	AVG		0.68974		4.45409	15.00000	

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-T
Lab File IDs : T3888.D T3887.D T3886.D T3885.D T3890.D T3889.D **Column ID:**
Calibration Date(s): 22-JUN-15 10:03
22-JUN-15 13:12

1,2-Dichloroethane-D4	0.77254	0.73673	0.64969	0.75117	0.74668	0.66782	AVG		0.72077		6.90556	15.00000	
Toluene-D8	1.56823	1.57368	1.48989	1.53450	1.54461	1.34347	AVG		1.50906		5.72943	15.00000	
P-Bromofluorobenzene	0.71598	0.65779	0.58428	0.58828	0.59504	0.52821	AVG		0.61160		10.73351	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-t.i\T062215.b\T3891A.D
Report Date: 25-Jun-2015 09:12

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: WG165286-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-t.i\T062215.b\T826SB33.m
Misc Info: WG165286,WG165286-4

Client SDG: WG165286
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	50.3	100.56	80-120
	2 Chloromethane	50.0	59.0	118.02	80-120
	3 Vinyl chloride	50.0	54.1	108.18	80-120
	4 Bromomethane	50.0	55.6	111.18	80-120
	5 Chloroethane	50.0	56.2	112.37	80-120
	6 Trichlorofluoromet	50.0	53.0	106.03	80-120
	7 Diethyl Ether	50.0	55.9	111.75	80-120
	8 Tertiary-butyl alc	250	236	94.44	80-120
	9 1,1-Dichloroethene	50.0	56.6	113.31	80-120
	10 Carbon Disulfide	50.0	55.6	111.31	80-120
	11 Freon-113	50.0	54.1	108.21	80-120
	12 Iodomethane	50.0	48.6	97.14	80-120
	13 Acrolein	250	251	100.32	80-120
	14 Methylene Chloride	50.0	51.2	102.35	80-120
	15 Acetone	50.0	59.7	119.48	80-120
	16 Isobutyl Alcohol	1000	1070	107.49	80-120
	17 trans-1,2-Dichloro	50.0	57.8	115.52	80-120
	18 Allyl Chloride	50.0	53.6	107.22	80-120
	19 Methyl tert-butyl	100	93.5	93.53	80-120
	20 Acetonitrile	500	535	107.09	80-120
	21 Di-isopropyl ether	50.0	56.7	113.35	80-120
	22 Chloroprene	50.0	57.1	114.30	80-120
	23 Propionitrile	500	554	110.88	80-120
	24 Methacrylonitrile	500	600	119.95	80-120
	25 1,1-Dichloroethane	50.0	57.0	114.10	80-120
	26 Acrylonitrile	250	282	112.81	80-120
	27 Ethyl tertiary-but	50.0	43.6	87.28	80-120
	28 Vinyl Acetate	50.0	47.8	95.55	80-120
	29 cis-1,2-Dichloroet	50.0	51.1	102.27	80-120
M	30 1,2-Dichloroethyle	100	109	108.90	80-120
	31 Methyl Methacrylat	50.0	58.8	117.61	80-120
	32 2,2-Dichloropropan	50.0	50.1	100.18	80-120
	33 Bromochloromethane	50.0	55.6	111.24	80-120
	34 Chloroform	50.0	53.9	107.72	80-120
	35 Carbon Tetrachlori	50.0	53.7	107.46	80-120
	36 Tetrahydrofuran	50.0	55.3	110.61	80-120
	38 1,1,1-Trichloroeth	50.0	54.8	109.69	80-120
	39 1,1-Dichloropropen	50.0	56.7	113.46	80-120
	40 2-Butanone	50.0	53.2	106.47	80-120
	41 Benzene	50.0	55.0	110.06	80-120

Data File: \\target_server\gg\chem\gcms-t.i\T062215.b\T3891A.D
Report Date: 25-Jun-2015 09:12

	SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
	43 Cyclohexane	50.0	51.1	102.12	80-120
	44 Ethyl Methacrylate	50.0	56.2	112.35	80-120
	46 Tertiary-amyl meth	50.0	40.7	81.41	80-120
	47 1,2-Dichloroethane	50.0	53.6	107.22	80-120
	48 Trichloroethene	50.0	54.0	107.92	80-120
	50 Dibromomethane	50.0	53.0	106.02	80-120
	51 1,2-Dichloropropan	50.0	55.0	110.00	80-120
	52 Bromodichlorometha	50.0	54.6	109.29	80-120
	53 cis-1,3-dichloropr	50.0	56.9	113.89	80-120
	54 1,4-Dioxane	1000	1090	109.42	80-120
	56 2-Chloroethylviny	50.0	0.00	*	80-120
	57 Toluene	50.0	52.4	104.83	80-120
	58 4-methyl-2-pentano	50.0	58.9	117.75	80-120
	59 Tetrachloroethene	50.0	52.1	104.24	80-120
	60 trans-1,3-Dichloro	50.0	58.6	117.25	80-120
	61 1,1,2-Trichloroeth	50.0	55.1	110.22	80-120
	62 Dibromochlorometha	50.0	51.5	103.09	80-120
	63 1,3-Dichloropropan	50.0	54.6	109.16	80-120
	64 1,2-Dibromoethane	50.0	53.2	106.43	80-120
	65 2-Hexanone	50.0	63.3	126.57*	80-120
	67 Chlorobenzene	50.0	53.2	106.51	80-120
	152 1-Chlorohexane	50.0	48.0	96.11	80-120
	68 Ethylbenzene	50.0	52.0	104.07	80-120
	69 1,1,1,2-Tetrachlor	50.0	49.4	98.74	80-120
M	70 Xylenes (total)	150	161	107.48	80-120
	71 m+p-Xylenes	100	107	107.12	80-120
	72 o-Xylene	50.0	54.1	108.20	80-120
	73 Styrene	50.0	52.9	105.74	80-120
	74 Bromoform	50.0	55.8	111.67	80-120
	75 Isopropylbenzene	50.0	55.6	111.31	80-120
	77 cis-1,4-Dichloro-2	50.0	49.6	99.20	80-120
	78 trans-1,4-Dichloro	50.0	56.6	113.30	80-120
	79 Bromobenzene	50.0	53.3	106.60	80-120
	80 N-Propylbenzene	50.0	55.3	110.53	80-120
	81 1,1,2,2-Tetrachlor	50.0	54.6	109.14	80-120
	82 1,3,5-Trimethylben	50.0	55.6	111.31	80-120
	83 2-Chlorotoluene	50.0	53.9	107.72	80-120
	84 1,2,3-Trichloropro	50.0	55.6	111.31	80-120
	85 4-Chlorotoluene	50.0	53.2	106.40	80-120
	86 tert-Butylbenzene	50.0	54.6	109.17	80-120
	87 Pentachloroethane	50.0	53.8	107.71	80-120
	88 1,2,4-Trimethylben	50.0	52.3	104.57	80-120
	89 P-Isopropyltoluene	50.0	53.4	106.82	80-120
	90 1,3-Dichlorobenzen	50.0	51.8	103.67	80-120
	92 1,4-Dichlorobenzen	50.0	50.8	101.67	80-120
	93 N-Butylbenzene	50.0	52.4	104.72	80-120
	94 sec-Butylbenzene	50.0	55.4	110.79	80-120
	95 1,2-Dichlorobenzen	50.0	52.5	105.00	80-120
	96 1,2-Dibromo-3-Chlo	50.0	58.8	117.65	80-120
	97 1,3,5-Trichloroben	50.0	48.3	96.53	80-120
	98 Hexachlorobutadien	50.0	49.9	99.74	80-120
	99 1,2,4-Trichloroben	50.0	51.6	103.23	80-120
	100 1,2,3-Trimethylben	50.0	52.5	105.09	80-120
	101 Naphthalene	50.0	61.2	122.32*	80-120

Data File: \\target_server\gg\chem\gcms-t.i\T062215.b\T3891A.D
Report Date: 25-Jun-2015 09:12

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	52.6	105.18	80-120
103 Methyl Acetate	50.0	51.2	102.49	80-120
104 Methylcyclohexane	50.0	45.4	90.74	80-120
M 153 Total Alkylbenzene	350	379	108.27	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/kg	AMOUNT RECOVERED ug/kg	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	57.1	114.12	64-130
$ 45 1,2-Dichloroethane	50.0	57.5	115.08	58-134
$ 55 Toluene-D8	50.0	56.7	113.41	67-118
$ 76 P-Bromofluorobenze	50.0	52.2	104.48	47-119

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165388-4
Analytical Date: 06/24/15 09:54
Lab File ID : P1581.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/22/15 10:02 06/22/15 12:13
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1 Dichlorodifluoromethane	0.68276	0.72920	0.72920	0.010	6.80165	20.00000	Averaged	
2 Chloromethane	0.97507	0.98489	0.98489	0.100	1.00711	20.00000	Averaged	
3 Vinyl chloride	0.71527	0.76596	0.76596	0.010	7.08750	20.00000	Averaged	
4 Bromomethane	50.00000	44.50645	0.32951	0.010	-10.98710	20.00000	Linear	
5 Chloroethane	50.00000	65.27004	0.59773	0.010	30.54008	20.00000	Quadratic	*
6 Trichlorofluoromethane	0.95098	1.07888	1.07888	0.010	13.44881	20.00000	Averaged	
7 Diethyl Ether	0.58449	0.59709	0.59709	0.010	2.15614	20.00000	Averaged	
9 1,1-Dichloroethene	0.51346	0.45183	0.45183	0.100	-12.00308	20.00000	Averaged	
10 Carbon Disulfide	1.88257	1.47598	1.47598	0.010	-21.59764	20.00000	Averaged	*
11 Freon-113	0.32741	0.35970	0.35970	0.010	9.86235	20.00000	Averaged	
14 Methylene Chloride	50.00000	49.50279	0.69521	0.010	-0.99441	20.00000	Linear	
15 Acetone	0.22862	0.23305	0.23305	0.010	1.93862	20.00000	Averaged	
17 trans-1,2-Dichloroethene	0.54706	0.52030	0.52030	0.010	-4.88996	20.00000	Averaged	
19 Methyl tert-butyl ether	1.71286	1.50678	1.50678	0.010	-12.03134	20.00000	Averaged	
21 Di-isopropyl ether	2.13147	2.22289	2.22289	0.010	4.28894	20.00000	Averaged	
25 1,1-Dichloroethane	1.06259	1.02346	1.02346	0.100	-3.68235	20.00000	Averaged	
28 Vinyl Acetate	0.83015	0.77392	0.77392	0.010	-6.77352	20.00000	Averaged	
29 cis-1,2-Dichloroethene	0.66929	0.65857	0.65857	0.010	-1.60150	20.00000	Averaged	
30 1,2-Dichloroethylene (total	++++	1.17888	1.17888	0.010	++++	20.00000	Averaged	*
32 2,2-Dichloropropane	0.76692	0.47552	0.47552	0.010	-37.99626	20.00000	Averaged	*
33 Bromochloromethane	0.26016	0.27324	0.27324	0.010	5.02698	20.00000	Averaged	
34 Chloroform	1.08575	1.12374	1.12374	0.010	3.49915	20.00000	Averaged	
35 Carbon Tetrachloride	0.35203	0.36861	0.36861	0.010	4.71049	20.00000	Averaged	
36 Tetrahydrofuran	0.17835	0.15997	0.15997	0.010	-10.30053	20.00000	Averaged	
38 1,1,1-Trichloroethane	0.90065	0.92986	0.92986	0.010	3.24338	20.00000	Averaged	
39 1,1-Dichloropropene	0.43042	0.43325	0.43325	0.010	0.65727	20.00000	Averaged	
40 2-Butanone	0.28381	0.26043	0.26043	0.010	-8.23967	20.00000	Averaged	
41 Benzene	1.25984	1.24998	1.24998	0.010	-0.78223	20.00000	Averaged	
43 Cyclohexane	0.97651	0.95150	0.95150	0.010	-2.56148	20.00000	Averaged	
47 1,2-Dichloroethane	0.46428	0.48911	0.48911	0.010	5.34783	20.00000	Averaged	
48 Trichloroethene	0.32040	0.32092	0.32092	0.010	0.16247	20.00000	Averaged	
50 Dibromomethane	0.18859	0.18858	0.18858	0.010	-0.00724	20.00000	Averaged	
51 1,2-Dichloropropane	0.31885	0.32171	0.32171	0.010	0.89944	20.00000	Averaged	
52 Bromodichloromethane	0.45321	0.48211	0.48211	0.010	6.37561	20.00000	Averaged	
53 cis-1,3-dichloropropene	0.51061	0.51446	0.51446	0.010	0.75461	20.00000	Averaged	
57 Toluene	0.82830	0.85794	0.85794	0.010	3.57752	20.00000	Averaged	
58 4-methyl-2-pentanone	0.30152	0.30637	0.30637	0.010	1.61039	20.00000	Averaged	
59 Tetrachloroethene	0.24827	0.25482	0.25482	0.010	2.63749	20.00000	Averaged	
60 trans-1,3-Dichloropropene	0.43561	0.44356	0.44356	0.010	1.82644	20.00000	Averaged	
61 1,1,2-Trichloroethane	0.24948	0.25259	0.25259	0.010	1.24624	20.00000	Averaged	
62 Dibromochloromethane	0.35110	0.35964	0.35964	0.010	2.43101	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165388-4
Analytical Date: 06/24/15 09:54
Lab File ID : P1581.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/22/15 10:02 06/22/15 12:13
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
63 1,3-Dichloropropane	0.61675	0.59697	0.59697	0.010	-3.20685	20.00000	Averaged	
64 1,2-Dibromoethane	0.28831	0.28566	0.28566	0.010	-0.92050	20.00000	Averaged	
65 2-Hexanone	0.23301	0.22719	0.22719	0.010	-2.49906	20.00000	Averaged	
67 Chlorobenzene	0.97462	1.00537	1.00537	0.300	3.15424	20.00000	Averaged	
68 Ethylbenzene	0.53242	0.55417	0.55417	0.010	4.08474	20.00000	Averaged	
70 Xylenes (total)	++++	0.68435	0.68435	0.010	++++	20.00000	Averaged	*
71 m+p-Xylenes	0.63887	0.68463	0.68463	0.010	7.16274	20.00000	Averaged	
72 o-Xylene	0.63898	0.68379	0.68379	0.010	7.01317	20.00000	Averaged	
73 Styrene	1.09328	1.21698	1.21698	0.010	11.31473	20.00000	Averaged	
74 Bromoform	0.21222	0.22109	0.22109	0.100	4.18319	20.00000	Averaged	
75 Isopropylbenzene	3.00793	3.27539	3.27539	0.010	8.89175	20.00000	Averaged	
79 Bromobenzene	0.76221	0.78896	0.78896	0.010	3.50969	20.00000	Averaged	
80 N-Propylbenzene	3.57868	3.95852	3.95852	0.010	10.61388	20.00000	Averaged	
81 1,1,2,2-Tetrachloroethane	0.89396	0.83353	0.83353	0.300	-6.76076	20.00000	Averaged	
82 1,3,5-Trimethylbenzene	2.64939	2.93691	2.93691	0.010	10.85260	20.00000	Averaged	
83 2-Chlorotoluene	2.30447	2.45259	2.45259	0.010	6.42721	20.00000	Averaged	
84 1,2,3-Trichloropropane	0.68527	0.65630	0.65630	0.010	-4.22744	20.00000	Averaged	
85 4-Chlorotoluene	2.42033	2.59234	2.59234	0.010	7.10696	20.00000	Averaged	
86 tert-Butylbenzene	2.53589	2.83579	2.83579	0.010	11.82617	20.00000	Averaged	
88 1,2,4-Trimethylbenzene	2.64187	2.92951	2.92951	0.010	10.88776	20.00000	Averaged	
89 P-Isopropyltoluene	2.85905	3.11625	3.11625	0.010	8.99609	20.00000	Averaged	
90 1,3-Dichlorobenzene	1.54428	1.57753	1.57753	0.010	2.15318	20.00000	Averaged	
92 1,4-Dichlorobenzene	1.57680	1.63240	1.63240	0.010	3.52637	20.00000	Averaged	
93 N-Butylbenzene	2.69737	2.93511	2.93511	0.010	8.81364	20.00000	Averaged	
94 sec-Butylbenzene	3.26982	3.52687	3.52687	0.010	7.86118	20.00000	Averaged	
95 1,2-Dichlorobenzene	1.48132	1.53748	1.53748	0.010	3.79123	20.00000	Averaged	
96 1,2-Dibromo-3-Chloropropane	0.16142	0.15177	0.15177	0.010	-5.97296	20.00000	Averaged	
97 1,3,5-Trichlorobenzene	1.02101	1.03324	1.03324	0.010	1.19818	20.00000	Averaged	
98 Hexachlorobutadiene	0.32806	0.34265	0.34265	0.010	4.44469	20.00000	Averaged	
99 1,2,4-Trichlorobenzene	0.95249	0.94775	0.94775	0.010	-0.49777	20.00000	Averaged	
101 Naphthalene	50.00000	39.20596	1.77155	0.010	-21.58809	20.00000	Linear	*
102 1,2,3-Trichlorobenzene	0.73835	0.65238	0.65238	0.010	-11.64381	20.00000	Averaged	
103 Methyl Acetate	0.50627	0.39097	0.39097	0.010	-22.77498	20.00000	Averaged	*
104 Methylcyclohexane	0.94665	1.01335	1.01335	0.010	7.04589	20.00000	Averaged	
37 Dibromofluoromethane	0.54083	0.52234	0.52234	0.010	-3.41805	20.00000	Averaged	
45 1,2-Dichloroethane-D4	0.75952	0.71422	0.71422	0.010	-5.96424	20.00000	Averaged	
55 Toluene-D8	1.10608	1.11233	1.11233	0.010	0.56491	20.00000	Averaged	
76 P-Bromofluorobenzene	0.50314	0.50868	0.50868	0.010	1.10161	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab ID : WG165388-4
Lab File ID : P1581.D
Initial Calibration Date(s): 06/22/15 10:02 06/22/15 12:13

SDG: SI4291
Analytical Date: 06/24/15 09:54
Instrument ID: GCMS-P
Column ID:

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

GCMS-P INSTRUMENT RUNLOG

KATAHDIN ANALYTICAL SERVICES

DATE/TIME OF BFB INJECTION: 06-22-15/ 9:27

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ⑩	PB295	1	-1	VOAGFBAQ							Y	EME	—	
VSTD050P22A ④	P1533	1	1	P826A09							Y			
020 ③	34	1	2								Y			
005 ②	35	1	3								Y			
001 ①	36	1	4								Y			
200 ⑥	37	1	5								Y			
100 ⑤	38	1	6								Y			
LCSA[W6165276] ⑧	39	1	7								Y			IND ⑦
VBLK A	40	1	8								N			
B	41	1	9								N			
C ⑨	42	1	10								Y			
SI 4364-2 A	43	1	11		X		X				Y		<2	
SI 4339-2 A	44	1	12					X			Y		<2	
SI 4191-12RA B	45	1	13								Y		<2	
-2RA E	46	1	14								Y		<2	
-3RA D	47	1	15								Y		<2	
-6RA B	48	1	16								Y		<2	
-9RA B	49	1	17								Y		<2	
SI 4336-4 A	50	1	18				X				Y		<2	
SI 4339-1 A	51	1	19					X			Y		<2	
SI 4364-1 A	52	1	20				X				Y		<2	19:12
Rinse	53	1	21								N			
Rinse	54	1	22								N			
Rinse	55	1	23								N			
Rinse	56	1	24								N			

06/23/15 REV

STANDARD	CODE
BFB	V9879
CAL. STD.	V9906, V9907
LCS/MS MIX	V9900
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9901
SS MIX	V9885

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS546

VOA-024 – Revision 1 – 05/16/2014

KATAHDIN ANALYTICAL SERVICES

GCMS-P INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 062415/ 9:29

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50ng BFB ③	PB297	1	-1	VOA8260Q							Y	EME	—	
VSTD050P24A ④	P1581	1	1	P826A09							Y			
LCS A[W6165398] ①	82	1	2								Y			
VBLK A	83	1	3								N			
B	84	1	4								N			
C ②	85	1	5								Y		—	
SI4174-1 A	86	1	6		X			X			Y		<2	
-2 C	87	1	7		X			X			Y		2	
SI4336-9 A	88	1	8		X			X			Y		<2	
-1DL A	89	20	9		X			X			Y		<2	2→40mL
-2DL A	90	20	10		X			X			Y		<2	↓
-3 A	91	1	11		X			X			Y		<2	
-4 B	92	1	12		X			X			Y		<2	
-5 A	93	1	13		X			X			Y		<2	
-6 A	94	1	14		X			X			Y		<2	
-7 A	95	1	15		X			X			Y		<2	
-8 A	96	1	16		X			X			Y		<2	
SI4291-7 A	97	1	17		X			X			Y		<2	
-10 A	98	1	18		X			X			Y		<2	
~~SI4336 1DL2 A~~	~~99~~	~~X1~~	19		X			~~X~~	~~X~~		Y		<2	~~20→40mL~~ SI4460-3
~~2DL2 A~~	~~P1600~~ P1600	~~X1~~	20		X			~~X~~	~~X~~		Y		<2	↓ SI4460-1
~~Rinse~~ SI4460-2	P1601	1	21		X				X		~~N~~ Y		<2	
~~Rinse~~ -4	02	1	22		X				X		~~N~~ Y		<2	
BI4336-1DL2 A	03	2	23		X			X			Y		<2	
-2DL2 A	04	2	24		X			X			Y		<2	20:37
Rinse x2	05-06	1	25								N		Z	

STANDARD	CODE
BFB	V9879
CAL. STD.	V9906, V9907
LCS/MS MIX	V9900
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9901
SS MIX	V9885

Circle Methods:

(SW846 8260)	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS546

VOA-024 – Revision 1 – 05/16/2014

KATAHDIN ANALYTICAL SERVICES

GCMS-T INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06-22-15 / 9:26

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ⑩	TB916	1	-1	VOABFB5L							Y	EME		
VSTD050T22A ④	T3885	1	1	T8265B33							Y			
020 ③	86	1	2								Y			
010 ②	87	1	3								Y			
~~200~~ EME 005 ①	88	1	4								Y			
200 ⑥	89	1	5								Y			
100 ⑤	90	1	6								Y			
LCS A [W6165285] ⑧	91	1	7								Y			IND (7)
VBLK A	92	1	8								N			
B ⑨	93	1	9								Y			1SST (D.O) no hits
ST4291-1 B	94	1	10			X			X		Y			2ISL 2SST 1SSL
-1RA D	95	1	11								Y			2ISL 1SST 1SSL
-3 B	96	1	12								Y			4ISL 1SSL
-3RA C	97	1	13								Y			4ISL 2SSL
-5 B	98	1	14								Y			2ISL 1SST 1SSL
-5RA C	99	1	15								Y			2ISL 2SST 1SSL
-8 B	T3900	1	16								Y			19:45 1ISL 3SSL
Rinse	01	1	17								N			matrix no remaining vials
Rinse	02	1	18								N			
Rinse	03	1	19								N			
Rinse	04	1	20								N			
														06/22/15 KEC

STANDARD	CODE
BFB	V9879
CAL. STD.	V9906, V9907
LCS/MS MIX	V9900
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9893
SS MIX	V9896

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

KATAHDIN ANALYTICAL SERVICES

Organics Vial Prep Log

Methods: SW8260 SW8015 ME DEP 4.2.17 MA DEP VPH

Date	Analyst	Vial Number	Vial + Preservative (g)	Vial + Preservative + Sample (g)	Sample Weight (g)	Preservative		Preservative Volume (mL)		Sample Name	Comments
5/29/15	DEW	88760	34.93	40.44	5.51	DI / MEOH	NaHSO4	5	10	SI4291-1 D	
		88761	35.26			DI / MEOH	NaHSO4	5	10		
		88762	34.66			DI / MEOH	NaHSO4	5	10		
		88763	35.16			DI / MEOH	NaHSO4	5	10		
		88764	34.91			DI / MEOH	NaHSO4	5	10		
		88765	34.92	41.90	6.98	DI / MEOH	NaHSO4	5	10	SI4291-8 B	
		88766	34.58			DI / MEOH	NaHSO4	5	10		
		88767	35.03			DI / MEOH	NaHSO4	5	10		
		88768	35.30			DI / MEOH	NaHSO4	5	10		
		88769	34.83			DI / MEOH	NaHSO4	5	10		
		88770	35.24			DI / MEOH	NaHSO4	5	10		
		88771	35.26			DI / MEOH	NaHSO4	5	10		
		88772	35.28			DI / MEOH	NaHSO4	5	10		
		88773	34.69	38.88	4.19	DI / MEOH	NaHSO4	5	10	SI4291-3 B	
		88774	35.16			DI / MEOH	NaHSO4	5	10		
		88775	35.12	40.57	5.45	DI / MEOH	NaHSO4	5	10	SI4291-3 C	
		88776	35.15	35.33	0.18	DI / MEOH	NaHSO4	5	10	SI4110-3 A	TB
		88777	35.32			DI / MEOH	NaHSO4	5	10		
		88778	35.22			DI / MEOH	NaHSO4	5	10		
		88779	35.25			DI / MEOH	NaHSO4	5	10		

40 mL Vial Lot # 032315-3AVF
MeOH Lot #:
NaSO4 Lot #: BCB H6672

DI Preservative = Deionized Water +Stirbar
NaHSO4 Preservative = 20% NaSO4 Solution + stirbar

Katahdin Analytical Services 0000107

KATAHDIN ANALYTICAL SERVICES

Organics Vial Prep Log

Methods: SW8260 SW8015 ME DEP 4.2.17 MA DEP VPH

Date	Analyst	Vial Number	Vial + Preservative (g)	Vial + Preservative + Sample (g)	Sample Weight (g)	Preservative	Preservative Volume (mL)	Sample Name	Comments
52815	DEW	88740	34.93			DI / MEOH / NaHSO4	5 / 10		
		88741	34.93			DI / MEOH / NaHSO4	5 / 10		
		88742	34.69			DI / MEOH / NaHSO4	5 / 10		
		88743	34.83			DI / MEOH / NaHSO4	5 / 10		
		88744	34.16			DI / MEOH / NaHSO4	5 / 10		
		88745	33.28			DI / MEOH / NaHSO4	5 / 10		
52915	DEW	88746	34.75			DI / MEOH / NaHSO4	5 / 10		
		88747	34.96	41.14	6.18	DI / MEOH / NaHSO4	5 / 10	SI4291-5 B	
		88748	34.89	41.21	6.32	DI / MEOH / NaHSO4	5 / 10	SI4291-5 C	
		88749	34.63			DI / MEOH / NaHSO4	5 / 10		
		88750	35.02			DI / MEOH / NaHSO4	5 / 10		
		88751	35.09			DI / MEOH / NaHSO4	5 / 10		
		88752	34.83			DI / MEOH / NaHSO4	5 / 10		
		88753	35.20			DI / MEOH / NaHSO4	5 / 10		
		88754	35.19			DI / MEOH / NaHSO4	5 / 10		
		88755	36.97			DI / MEOH / NaHSO4	5 / 10		
		88756	34.15	39.34		DI / MEOH / NaHSO4	5 / 10	SI4110-1 B	
		88757	34.92	40.15		DI / MEOH / NaHSO4	5 / 10	SI4110-1 C	
		88758	34.95			DI / MEOH / NaHSO4	5 / 10		
		88759	35.25	41.47	6.22	DI / MEOH / NaHSO4	5 / 10	SI4291-1 B	

40 mL Vial Lot # 121514 3AV5
MeOH Lot #: DM027
NaSO4 Lot #: BCBH6622V

DI Preservative = Deionized Water +Stirbar
NaHSO4 Preservative = 20% NaSO4 Solution + stirbar

SPLP VOLATILE DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4291

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SITE 4TS-HWF1-B	SI4291-2DL		101.		96.7		102.		102.	
SITE 4TS-HWF2-B	SI4291-4DL		101.		95.5		100.		103.	
SITE 4TS-HWF1-PT	SI4291-6DL		92.9		90.2		95.5		95.8	
SITE 4TS-HWF2-PT	SI4291-9DL		94.0		86.8		91.0		95.9	
Laboratory Control S	WG165462-1		93.2		91.8		90.0		94.5	
Method Blank Sample	WG165462-2		95.0		91.9		96.1		96.1	
SPLP Blank	WG165462-5		96.6		92.0		95.6		98.2	

		QC Limits
DCA	1,2-DICHLOROETHANE-D4	70-120
BFB	P-BROMOFLUOROBENZENE	75-120
DBF	DIBROMOFLUOROMETHANE	85-115
TOL	TOLUENE-D8	85-120

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : P1614.D
Instrument ID : GCMS-P
Heated Purge : No

SDG : SI4291
Lab Sample ID : WG165462-2
Date Analyzed : 25-JUN-15
Time Analyzed : 13:03

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165462-1	P1611.D	06/25/15	11:30
SPLP Blank	WG165462-5	P1615.D	06/25/15	13:29
SITE 4TS-HWF1-B	SI4291-2DL	P1616.D	06/25/15	13:55
SITE 4TS-HWF2-B	SI4291-4DL	P1617.D	06/25/15	14:21
SITE 4TS-HWF1-PT	SI4291-6DL	P1618.D	06/25/15	14:48
SITE 4TS-HWF2-PT	SI4291-9DL	P1619.D	06/25/15	15:14

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165462-2
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: P1614.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	J	2.1	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165462-2
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: P1614.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Xylenes (Total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
Bromochloromethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2,3-Trichloropropane	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,2-dibromo-3-chloropropane	U	0.50	ug/L	1	1	1.0	0.50	0.50
P-Bromofluorobenzene		95.0	%					
Toluene-d8		96.1	%					
1,2-Dichloroethane-d4		96.1	%					
Dibromofluoromethane		91.9	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165462-5
Client ID: SPLP Blank
Project:
SDG: SI4291
Lab File ID: P1615.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	J	7.7	ug/L	5	5	25.	5.6	12.
Acetone	U	12.	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12.	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12.	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12.	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165462-5
Client ID: SPLP Blank
Project:
SDG: SI4291
Lab File ID: P1615.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		96.6	%					
Toluene-d8		98.2	%					
1,2-Dichloroethane-d4		95.6	%					
Dibromofluoromethane		92.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165462-1
Client ID: LCS
Project:
SDG: SI4291
LCS File ID: P1611.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	99.6	50.0	49.8	ug/L	30-155
Chloromethane	102.	50.0	51.1	ug/L	40-125
Vinyl Chloride	100.	50.0	50.0	ug/L	50-145
Bromomethane	90.4	50.0	45.2	ug/L	30-145
Chloroethane	111.	50.0	55.6	ug/L	60-135
Trichlorofluoromethane	104.	50.0	52.1	ug/L	60-145
1,1-Dichloroethene	99.0	50.0	49.5	ug/L	70-130
Carbon Disulfide	101.	50.0	50.4	ug/L	35-160
Freon-113	108.	50.0	53.8	ug/L	73-126
Methylene Chloride	96.6	50.0	48.3	ug/L	55-140
Acetone	97.4	50.0	48.7	ug/L	40-140
trans-1,2-Dichloroethene	104.	50.0	51.9	ug/L	60-140
Methyl tert-butyl Ether	100.	100.	100.	ug/L	65-125
1,1-Dichloroethane	101.	50.0	50.6	ug/L	70-135
cis-1,2-Dichloroethene	88.4	50.0	44.2	ug/L	70-125
Chloroform	95.8	50.0	47.9	ug/L	65-135
1,1,1-Trichloroethane	101.	50.0	50.3	ug/L	65-130
2-Butanone	89.6	50.0	44.8	ug/L	30-150
Cyclohexane	95.0	50.0	47.5	ug/L	71-133
Carbon Tetrachloride	108.	50.0	53.8	ug/L	65-140
Benzene	96.2	50.0	48.1	ug/L	80-120
1,2-Dichloroethane	99.2	50.0	49.6	ug/L	70-130
Trichloroethene	96.4	50.0	48.2	ug/L	70-125
1,2-Dichloropropane	95.4	50.0	47.7	ug/L	75-125
Bromodichloromethane	99.2	50.0	49.6	ug/L	75-120
cis-1,3-Dichloropropene	101.	50.0	50.7	ug/L	70-130
Toluene	94.6	50.0	47.3	ug/L	75-120
4-Methyl-2-Pentanone	96.0	50.0	48.0	ug/L	60-135
trans-1,3-Dichloropropene	109.	50.0	54.4	ug/L	55-140
1,1,2-Trichloroethane	93.2	50.0	46.6	ug/L	75-125
Tetrachloroethene	102.	50.0	51.1	ug/L	45-150
Dibromochloromethane	97.0	50.0	48.5	ug/L	60-135
2-Hexanone	94.6	50.0	47.3	ug/L	55-130
Chlorobenzene	94.4	50.0	47.2	ug/L	80-120
Ethylbenzene	92.8	50.0	46.4	ug/L	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165462-1
Client ID: LCS
Project:
SDG: SI4291
LCS File ID: P1611.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
1,2-Dibromoethane	97.2	50.0	48.6	ug/L	80-120
M+P-Xylenes	97.2	100.	97.2	ug/L	75-130
o-Xylene	96.6	50.0	48.3	ug/L	80-120
Xylenes (Total)	97.3	150.	146.	ug/L	89-116
Styrene	98.2	50.0	49.1	ug/L	65-135
Bromoform	99.6	50.0	49.8	ug/L	70-130
Isopropylbenzene	102.	50.0	51.0	ug/L	75-125
1,1,2,2-Tetrachloroethane	91.2	50.0	45.6	ug/L	65-130
1,3-Dichlorobenzene	97.2	50.0	48.6	ug/L	75-125
1,4-Dichlorobenzene	95.4	50.0	47.7	ug/L	75-125
1,2-Dichlorobenzene	97.8	50.0	48.9	ug/L	70-120
1,2,4-Trichlorobenzene	93.2	50.0	46.6	ug/L	65-135
Methyl Acetate	93.4	50.0	46.7	ug/L	70-132
Methylcyclohexane	105.	50.0	52.3	ug/L	73-125
Bromochloromethane	94.8	50.0	47.4	ug/L	65-130
1,2,3-Trichloropropane	94.4	50.0	47.2	ug/L	75-125
1,2-dibromo-3-chloropropane	96.8	50.0	48.4	ug/L	50-130
P-Bromofluorobenzene	93.2				75-120
Toluene-d8	94.5				85-120
1,2-Dichloroethane-d4	90.0				70-120
Dibromofluoromethane	91.8				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB295.D
Instrument ID : GCMS-P

SDG : SI4291
Date Analyzed : 22-JUN-15
Time Analyzed : 09:27
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	22.5		
75	30.0 - 60.0% of mass 95	50.9		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	8.0		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	65.3		
175	5.0 - 9.0% of mass 174	5.6	8.62	1
176	95.0 - 101.0% of mass 174	62.5	95.70	1
177	5.0 - 9.0% of mass 176	4.3	6.90	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165276-4	P1533.D	06/22/15	10:02
Initial Calibration	WG165276-3	P1534.D	06/22/15	10:29
Initial Calibration	WG165276-2	P1535.D	06/22/15	10:55
Initial Calibration	WG165276-1	P1536.D	06/22/15	11:21
Initial Calibration	WG165276-6	P1537.D	06/22/15	11:47
Initial Calibration	WG165276-5	P1538.D	06/22/15	12:13
Independent Source	WG165276-7	P1539A.D	06/22/15	12:59

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB298.D
Instrument ID : GCMS-P

SDG : SI4291
Date Analyzed : 25-JUN-15
Time Analyzed : 09:09
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	24.9		
75	30.0 - 60.0% of mass 95	53.4		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.6		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	61.3		
175	5.0 - 9.0% of mass 174	4.6	7.55	1
176	95.0 - 101.0% of mass 174	59.8	97.63	1
177	5.0 - 9.0% of mass 176	4.2	6.98	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165462-4	P1610.D	06/25/15	10:46
Laboratory Control S	WG165462-1	P1611.D	06/25/15	11:30
Method Blank Sample	WG165462-2	P1614.D	06/25/15	13:03
SPLP Blank	WG165462-5	P1615.D	06/25/15	13:29
SITE 4TS-HWF1-B	SI4291-2DL	P1616.D	06/25/15	13:55
SITE 4TS-HWF2-B	SI4291-4DL	P1617.D	06/25/15	14:21
SITE 4TS-HWF1-PT	SI4291-6DL	P1618.D	06/25/15	14:48
SITE 4TS-HWF2-PT	SI4291-9DL	P1619.D	06/25/15	15:14

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165276-4
Lab File ID : P1533.D

SDG: SI4291
Analytical Date: 06/22/15 10:02
Instrument ID: GCMS-P

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	409293		8.72		766451		9.57		699533		13.93	
	Upper Limit	818586		9.22		1532902		10.07		1399066		14.43	
	Lower Limit	204646.5		8.22		383225.5		9.07		349766.5		13.43	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165462-4	389496		8.72		721140		9.57		672051		13.93	
Laboratory Control S	WG165462-1	405367		8.72		749436		9.57		690352		13.93	
Method Blank Sample	WG165462-2	382704		8.72		703198		9.58		648333		13.94	
SPLP Blank	WG165462-5	385725		8.72		707137		9.58		663146		13.93	
SITE 4TS-HWF1-B	SI4291-2DL	378628		8.72		700245		9.58		651421		13.93	
SITE 4TS-HWF2-B	SI4291-4DL	387643		8.72		716042		9.58		661076		13.93	
SITE 4TS-HWF1-PT	SI4291-6DL	379795		8.72		703640		9.58		650626		13.94	
SITE 4TS-HWF2-PT	SI4291-9DL	390680		8.72		713901		9.58		664809		13.93	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165276-4
Lab File ID : P1533.D

SDG: SI4291
Analytical Date: 06/22/15 10:02
Instrument ID: GCMS-P

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	376902		16.92	
	Upper Limit	753804		17.42	
	Lower Limit	188451		16.42	
Client Sample ID	Lab Sample ID				
Continuing Calibrati	WG165462-4	371689		16.92	
Laboratory Control S	WG165462-1	370514		16.92	
Method Blank Sample	WG165462-2	358000		16.92	
SPLP Blank	WG165462-5	367272		16.92	
SITE 4TS-HWF1-B	SI4291-2DL	362914		16.92	
SITE 4TS-HWF2-B	SI4291-4DL	367654		16.93	
SITE 4TS-HWF1-PT	SI4291-6DL	358935		16.92	
SITE 4TS-HWF2-PT	SI4291-9DL	370062		16.92	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-2DL
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1616.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	J	9.6	ug/L	5	5	25.	5.6	12.
Acetone	U	12	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-2DL
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1616.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		101.	%					
Toluene-d8		102.	%					
1,2-Dichloroethane-d4		102.	%					
Dibromofluoromethane		96.7	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-4DL
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1617.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	J	9.9	ug/L	5	5	25.	5.6	12.
Acetone	U	12	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-4DL
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1617.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		101.	%					
Toluene-d8		103.	%					
1,2-Dichloroethane-d4		100.	%					
Dibromofluoromethane		95.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-6DL
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1618.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	J	9.9	ug/L	5	5	25.	5.6	12.
Acetone	U	12	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-6DL
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1618.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		92.9	%					
Toluene-d8		95.8	%					
1,2-Dichloroethane-d4		95.5	%					
Dibromofluoromethane		90.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-9DL
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1619.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	J	10	ug/L	5	5	25.	5.6	12.
Acetone	U	12	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-9DL
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: P1619.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165462

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		94.0	%					
Toluene-d8		95.9	%					
1,2-Dichloroethane-d4		91.0	%					
Dibromofluoromethane		86.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1536.D P1535.D P1534.D P1533.D P1538.D P1537.D **Column ID:**
Calibration Date(s): 22-JUN-15 10:02 22-JUN-15 12:13

	1.0000 Level 1	5.0000 Level 2	20.0000 Level 3	50.0000 Level 4	100.0000 Level 5	200.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.71991	0.64793	0.65273	0.68867	0.71376	0.67358	AVG		0.68276		4.43040	15.00000	O
Chloromethane	1.05365	0.91418	0.91249	0.96518	0.96130	1.04364	AVG		0.97507		6.28640	15.00000	O
Vinyl chloride	0.67640	0.69866	0.69303	0.72668	0.76449	0.73236	AVG		0.71527		4.47691	15.00000	O
Bromomethane	2161	12281	50033	141413	345778	617776	LNR	0.02370	0.38031		0.99741	0.99000	O
Chloroethane	4765	22347	93465	235608	315080	500563	QUA	0.01805	1.01089	1.91194	0.99228	0.99000	O
Trichlorofluoromethane	1.05539	0.88132	0.89902	0.95662	0.88002	1.03352	AVG		0.95098		8.19060	15.00000	O
1,1-Dichloroethene	0.48383	0.49724	0.50562	0.51835	0.52337	0.55233	AVG		0.51346		4.63801	15.00000	O
Carbon Disulfide	1.91590	1.70298	1.81864	1.96791	1.96121	1.92880	AVG		1.88257		5.47164	15.00000	O
Freon-113	0.33779	0.31231	0.31048	0.31669	0.35641	0.33078	AVG		0.32741		5.44557	15.00000	O
Methylene Chloride	10315	31973	122218	287284	603269	1149174	LNR	-0.01408	0.69234		0.99993	0.99000	O
Acetone	0.22360	0.22286	0.22696	0.23345	0.24087	0.22396	AVG		0.22862		3.13073	15.00000	O
trans-1,2-Dichloroethene	0.54343	0.52928	0.53499	0.56174	0.56553	0.54736	AVG		0.54706		2.62564	15.00000	O
Methyl tert-butyl ether	1.49918	1.68350	1.79965	1.82931	1.89366	1.57188	AVG		1.71286		9.05113	15.00000	O
1,1-Dichloroethane	1.06962	1.05046	1.06445	1.05825	1.08594	1.04684	AVG		1.06259		1.33895	15.00000	O
cis-1,2-Dichloroethene	0.67154	0.64001	0.67597	0.66289	0.69061	0.67474	AVG		0.66929		2.52869	15.00000	O
Bromochloromethane	0.24614	0.25963	0.26684	0.26946	0.26022	0.25866	AVG		0.26016		3.12325	15.00000	O
Chloroform	1.13466	1.05314	1.08559	1.08617	1.09400	1.06096	AVG		1.08575		2.64962	15.00000	O
Carbon Tetrachloride	0.32974	0.34745	0.34149	0.36054	0.37367	0.35926	AVG		0.35203		4.44040	15.00000	O
1,1,1-Trichloroethane	0.87532	0.86723	0.90337	0.92499	0.94220	0.89080	AVG		0.90065		3.21088	15.00000	O
2-Butanone	0.25440	0.29325	0.29957	0.28998	0.30535	0.26034	AVG		0.28381		7.48252	15.00000	O
Benzene	1.29935	1.27451	1.29079	1.26836	1.27648	1.14955	AVG		1.25984		4.38327	15.00000	O
Cyclohexane	0.98260	0.94842	0.95244	0.96567	1.05404	0.95588	AVG		0.97651		4.08590	15.00000	O
1,2-Dichloroethane	0.49124	0.46409	0.48123	0.47081	0.45223	0.42609	AVG		0.46428		4.96877	15.00000	O
Trichloroethene	0.34335	0.32343	0.31989	0.31552	0.31620	0.30400	AVG		0.32040		4.06165	15.00000	O
1,2-Dichloropropane	0.32962	0.30581	0.31078	0.32033	0.32915	0.31738	AVG		0.31885		3.01328	15.00000	O
Bromodichloromethane	0.44768	0.42917	0.45277	0.46246	0.47078	0.45642	AVG		0.45321		3.14144	15.00000	O
cis-1,3-dichloropropene	0.46154	0.46912	0.51024	0.52965	0.55257	0.54056	AVG		0.51061		7.40581	15.00000	O
Toluene	0.84808	0.84328	0.83629	0.82510	0.84155	0.77551	AVG		0.82830		3.26300	15.00000	O
4-methyl-2-pentanone	0.25780	0.31011	0.33323	0.32280	0.32342	0.26174	AVG		0.30152		11.00487	15.00000	O
Tetrachloroethene	0.25186	0.24707	0.24160	0.24821	0.25657	0.24433	AVG		0.24827		2.15612	15.00000	O
trans-1,3-Dichloropropene	0.35641	0.40434	0.44234	0.46434	0.48052	0.46569	AVG		0.43561		10.78859	15.00000	O
1,1,2-Trichloroethane	0.24237	0.24575	0.25185	0.25225	0.25727	0.24739	AVG		0.24948		2.14196	15.00000	O
Dibromochloromethane	0.33125	0.33355	0.34399	0.35992	0.37268	0.36521	AVG		0.35110		4.92462	15.00000	O
1,2-Dibromoethane	0.25951	0.27529	0.29079	0.29902	0.30821	0.29705	AVG		0.28831		6.18963	15.00000	O
2-Hexanone	0.19410	0.23510	0.24878	0.24944	0.25714	0.21350	AVG		0.23301		10.51204	15.00000	O
Chlorobenzene	1.02910	0.98113	0.99287	0.97261	0.97917	0.89287	AVG		0.97462		4.60027	15.00000	O
Ethylbenzene	0.53946	0.53046	0.54708	0.52878	0.54353	0.50523	AVG		0.53242		2.84106	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1536.D P1535.D P1534.D **Column ID:**
P1533.D P1538.D P1537.D **Calibration Date(s):** 22-JUN-15 10:02
22-JUN-15 12:13

Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.67642	0.64943	0.68430	0.65681	0.63621	0.53007	AVG		0.63887		8.78523	15.00000	O
o-Xylene	0.60544	0.60584	0.68090	0.66227	0.66588	0.61354	AVG		0.63898		5.37314	15.00000	O
Styrene	1.01790	1.06902	1.18056	1.16717	1.14636	0.97868	AVG		1.09328		7.68530	15.00000	O
Bromoform	0.17783	0.19657	0.21366	0.22317	0.23477	0.22730	AVG		0.21222		10.07382	15.00000	O
Isopropylbenzene	3.03478	3.08062	3.25483	3.14588	3.04527	2.48623	AVG		3.00793		8.91525	15.00000	O
1,1,2,2-Tetrachloroethane	0.87382	0.86251	0.94110	0.90988	0.94434	0.83213	AVG		0.89396		5.06015	15.00000	O
1,2,3-Trichloropropane	0.66498	0.68672	0.73087	0.68952	0.71189	0.62763	AVG		0.68527		5.27863	15.00000	O
1,3-Dichlorobenzene	1.66015	1.52884	1.60105	1.55868	1.55689	1.36006	AVG		1.54428		6.55229	15.00000	O
1,4-Dichlorobenzene	1.74242	1.57152	1.62025	1.57991	1.58478	1.36191	AVG		1.57680		7.79816	15.00000	O
1,2-Dichlorobenzene	1.50839	1.47291	1.56665	1.50778	1.51909	1.31309	AVG		1.48132		5.92465	15.00000	O
1,2-Dibromo-3-Chloropropane	0.13637	0.15390	0.16536	0.16795	0.18308	0.16183	AVG		0.16142		9.64315	15.00000	O
1,2,4-Trichlorobenzene	0.90323	0.88225	0.96724	0.96720	1.04527	0.94973	AVG		0.95249		6.01475	15.00000	O
Methyl Acetate	0.44194	0.50779	0.50859	0.51636	0.55423	0.50870	AVG		0.50627		7.15095	15.00000	O
Methylcyclohexane	0.99301	0.93852	0.89140	0.89861	1.04239	0.91594	AVG		0.94665		6.28261	15.00000	O
Dibromofluoromethane	0.54146	0.54917	0.54382	0.55211	0.53342	0.52500	AVG		0.54083		1.86986	15.00000	
1,2-Dichloroethane-D4	0.84986	0.79987	0.78528	0.75705	0.70335	0.66171	AVG		0.75952		8.96510	15.00000	
Toluene-D8	1.12857	1.15803	1.14527	1.12648	1.07876	0.99941	AVG		1.10608		5.31517	15.00000	
P-Bromofluorobenzene	0.54037	0.52383	0.51143	0.50027	0.47926	0.46366	AVG		0.50314		5.63594	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG165276-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-p.i\P062215.b\P826A09.m
Misc Info: WG165276,WG165276-4

Client SDG: WG165276
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	51.4	102.84	80-120
	2 Chloromethane	50.0	57.1	114.19	80-120
	3 Vinyl chloride	50.0	54.7	109.46	80-120
	4 Bromomethane	50.0	53.3	106.52	80-120
	5 Chloroethane	50.0	63.7	127.50*	80-120
	6 Trichlorofluoromet	50.0	52.4	104.85	80-120
	7 Diethyl Ether	50.0	55.1	110.29	80-120
	8 Tertiary-butyl alc	250	225	90.12	80-120
	9 1,1-Dichloroethene	50.0	54.8	109.53	80-120
	10 Carbon Disulfide	50.0	56.4	112.76	80-120
	11 Freon-113	50.0	53.3	106.66	80-120
	12 Iodomethane	50.0	45.6	91.19	80-120
	13 Acrolein	250	280	112.03	80-120
	14 Methylene Chloride	50.0	51.9	103.83	80-120
	15 Acetone	50.0	52.2	104.38	80-120
	16 Isobutyl Alcohol	1000	964	96.36	80-120
	17 trans-1,2-Dichloro	50.0	57.4	114.70	80-120
	18 Allyl Chloride	50.0	56.0	111.99	80-120
	19 Methyl tert-butyl	100	114	114.18	80-120
	20 Acetonitrile	500	513	102.53	80-120
	21 Di-isopropyl ether	50.0	56.2	112.38	80-120
	22 Chloroprene	50.0	55.0	109.99	80-120
	23 Propionitrile	500	555	110.99	80-120
	24 Methacrylonitrile	500	552	110.32	80-120
	25 1,1-Dichloroethane	50.0	55.0	110.01	80-120
	26 Acrylonitrile	250	275	110.14	80-120
	27 Ethyl tertiary-but	50.0	56.9	113.75	80-120
	28 Vinyl Acetate	50.0	55.0	109.90	80-120
	29 cis-1,2-Dichloroet	50.0	48.8	97.63	80-120
M	30 1,2-Dichloroethyle	100	106	106.16	80-120
	31 Methyl Methacrylat	50.0	56.3	112.64	80-120
	32 2,2-Dichloropropan	50.0	53.1	106.25	80-120
	33 Bromochloromethane	50.0	52.1	104.18	80-120
	34 Chloroform	50.0	50.9	101.74	80-120
	35 Carbon Tetrachlori	50.0	51.9	103.77	80-120
	36 Tetrahydrofuran	50.0	52.9	105.89	80-120
	38 1,1,1-Trichloroeth	50.0	52.8	105.64	80-120
	39 1,1-Dichloropropen	50.0	52.8	105.72	80-120
	40 2-Butanone	50.0	50.1	100.15	80-120
	41 Benzene	50.0	51.4	102.80	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

	SPIKE	COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	43	Cyclohexane	50.0	49.0	98.00	80-120
	44	Ethyl Methacrylate	50.0	51.6	103.13	80-120
	46	Tertiary-amyl meth	50.0	56.6	113.21	80-120
	47	1,2-Dichloroethane	50.0	50.8	101.66	80-120
	48	Trichloroethene	50.0	50.5	101.02	80-120
	50	Dibromomethane	50.0	50.8	101.54	80-120
	51	1,2-Dichloropropan	50.0	51.4	102.77	80-120
	52	Bromodichlorometha	50.0	51.0	102.09	80-120
	53	cis-1,3-dichloropr	50.0	54.0	107.92	80-120
	54	1,4-Dioxane	1000	838	83.76	80-120
	56	2-Chloroethylvinyl	50.0	43.8	87.52	80-120
	57	Toluene	50.0	51.5	103.00	80-120
	58	4-methyl-2-pentano	50.0	54.2	108.35	80-120
	59	Tetrachloroethene	50.0	52.0	103.91	80-120
	60	trans-1,3-Dichloro	50.0	57.5	115.09	80-120
	61	1,1,2-Trichloroeth	50.0	50.8	101.67	80-120
	62	Dibromochlorometha	50.0	51.3	102.56	80-120
	63	1,3-Dichloropropan	50.0	49.1	98.19	80-120
	64	1,2-Dibromoethane	50.0	51.5	103.04	80-120
	65	2-Hexanone	50.0	53.5	107.07	80-120
	67	Chlorobenzene	50.0	51.0	101.98	80-120
	152	1-Chlorohexane	50.0	46.8	93.62	80-120
	68	Ethylbenzene	50.0	51.0	102.00	80-120
	69	1,1,1,2-Tetrachlor	50.0	52.8	105.71	80-120
M	70	Xylenes (total)	150	159	106.02	80-120
	71	m+p-Xylenes	100	106	106.27	80-120
	72	o-Xylene	50.0	52.8	105.53	80-120
	73	Styrene	50.0	54.0	107.97	80-120
	74	Bromoform	50.0	52.7	105.45	80-120
	75	Isopropylbenzene	50.0	53.9	107.85	80-120
	77	cis-1,4-Dichloro-2	50.0	49.2	98.43	80-120
	78	trans-1,4-Dichloro	50.0	54.1	108.29	80-120
	79	Bromobenzene	50.0	50.8	101.58	80-120
	80	N-Propylbenzene	50.0	55.7	111.37	80-120
	81	1,1,2,2-Tetrachlor	50.0	50.1	100.23	80-120
	82	1,3,5-Trimethylben	50.0	53.3	106.63	80-120
	83	2-Chlorotoluene	50.0	53.7	107.41	80-120
	84	1,2,3-Trichloropro	50.0	51.7	103.45	80-120
	85	4-Chlorotoluene	50.0	53.1	106.18	80-120
	86	tert-Butylbenzene	50.0	55.4	110.74	80-120
	87	Pentachloroethane	50.0	54.2	108.48	80-120
	88	1,2,4-Trimethylben	50.0	55.3	110.66	80-120
	89	P-Isopropyltoluene	50.0	53.8	107.64	80-120
	90	1,3-Dichlorobenzen	50.0	51.1	102.28	80-120
	92	1,4-Dichlorobenzen	50.0	50.5	101.04	80-120
	93	N-Butylbenzene	50.0	54.4	108.80	80-120
	94	sec-Butylbenzene	50.0	54.3	108.61	80-120
	95	1,2-Dichlorobenzen	50.0	51.7	103.42	80-120
	96	1,2-Dibromo-3-Chlo	50.0	54.6	109.25	80-120
	97	1,3,5-Trichloroben	50.0	53.0	105.99	80-120
	98	Hexachlorobutadien	50.0	52.6	105.26	80-120
	99	1,2,4-Trichloroben	50.0	51.0	101.94	80-120
	100	1,2,3-Trimethylben	50.0	54.4	108.83	80-120
	101	Naphthalene	50.0	51.3	102.70	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	52.5	104.92	80-120
103 Methyl Acetate	50.0	54.5	108.94	80-120
104 Methylcyclohexane	50.0	54.5	108.95	80-120
M 153 Total Alkylbenzene	350	382	109.21	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	48.2	96.44	68-128
$ 45 1,2-Dichloroethane	50.0	45.8	91.66	67-135
$ 55 Toluene-D8	50.0	50.7	101.48	65-128
$ 76 P-Bromofluorobenze	50.0	49.1	98.15	56-133

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165462-4
Analytical Date: 06/25/15 10:46
Lab File ID : P1610.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/22/15 10:02 06/22/15 12:13
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1 Dichlorodifluoromethane	0.68276	0.63579	0.63579	0.010	-6.87980	20.00000	Averaged	
2 Chloromethane	0.97507	0.88872	0.88872	0.100	-8.85616	20.00000	Averaged	
3 Vinyl chloride	0.71527	0.69820	0.69820	0.010	-2.38682	20.00000	Averaged	
4 Bromomethane	50.00000	43.80133	0.32414	0.010	-12.39733	20.00000	Linear	
5 Chloroethane	50.00000	56.73699	0.54431	0.010	13.47398	20.00000	Quadratic	
6 Trichlorofluoromethane	0.95098	1.03780	1.03780	0.010	9.12947	20.00000	Averaged	
9 1,1-Dichloroethene	0.51346	0.54020	0.54020	0.100	5.20858	20.00000	Averaged	
10 Carbon Disulfide	1.88257	1.96223	1.96223	0.010	4.23136	20.00000	Averaged	
11 Freon-113	0.32741	0.36282	0.36282	0.010	10.81524	20.00000	Averaged	
14 Methylene Chloride	50.00000	52.58391	0.73787	0.010	5.16782	20.00000	Linear	
15 Acetone	0.22862	0.19913	0.19913	0.010	-12.89686	20.00000	Averaged	
17 trans-1,2-Dichloroethene	0.54706	0.57062	0.57062	0.010	4.30792	20.00000	Averaged	
19 Methyl tert-butyl ether	1.71286	1.70741	1.70741	0.010	-0.31856	20.00000	Averaged	
25 1,1-Dichloroethane	1.06259	1.09513	1.09513	0.100	3.06197	20.00000	Averaged	
29 cis-1,2-Dichloroethene	0.66929	0.68366	0.68366	0.010	2.14579	20.00000	Averaged	
33 Bromochloromethane	0.26016	0.26551	0.26551	0.010	2.05749	20.00000	Averaged	
34 Chloroform	1.08575	1.12798	1.12798	0.010	3.88934	20.00000	Averaged	
35 Carbon Tetrachloride	0.35203	0.40390	0.40390	0.010	14.73676	20.00000	Averaged	
38 1,1,1-Trichloroethane	0.90065	0.99849	0.99849	0.010	10.86278	20.00000	Averaged	
40 2-Butanone	0.28381	0.26262	0.26262	0.010	-7.46832	20.00000	Averaged	
41 Benzene	1.25984	1.29613	1.29613	0.010	2.88053	20.00000	Averaged	
43 Cyclohexane	0.97651	1.09618	1.09618	0.010	12.25462	20.00000	Averaged	
47 1,2-Dichloroethane	0.46428	0.49960	0.49960	0.010	7.60621	20.00000	Averaged	
48 Trichloroethene	0.32040	0.32957	0.32957	0.010	2.86398	20.00000	Averaged	
51 1,2-Dichloropropane	0.31885	0.32608	0.32608	0.010	2.27020	20.00000	Averaged	
52 Bromodichloromethane	0.45321	0.47342	0.47342	0.010	4.45788	20.00000	Averaged	
53 cis-1,3-dichloropropene	0.51061	0.53366	0.53366	0.010	4.51400	20.00000	Averaged	
57 Toluene	0.82830	0.86133	0.86133	0.010	3.98797	20.00000	Averaged	
58 4-methyl-2-pentanone	0.30152	0.31100	0.31100	0.010	3.14335	20.00000	Averaged	
59 Tetrachloroethene	0.24827	0.25911	0.25911	0.010	4.36493	20.00000	Averaged	
60 trans-1,3-Dichloropropene	0.43561	0.46374	0.46374	0.010	6.45794	20.00000	Averaged	
61 1,1,2-Trichloroethane	0.24948	0.24531	0.24531	0.010	-1.67056	20.00000	Averaged	
62 Dibromochloromethane	0.35110	0.35651	0.35651	0.010	1.54080	20.00000	Averaged	
64 1,2-Dibromoethane	0.28831	0.29130	0.29130	0.010	1.03603	20.00000	Averaged	
65 2-Hexanone	0.23301	0.22782	0.22782	0.010	-2.22949	20.00000	Averaged	
67 Chlorobenzene	0.97462	0.96367	0.96367	0.300	-1.12400	20.00000	Averaged	
68 Ethylbenzene	0.53242	0.53564	0.53564	0.010	0.60459	20.00000	Averaged	
70 Xylenes (total)	++++	0.66108	0.66108	0.010	++++	20.00000	Averaged	*
71 m+p-Xylenes	0.63887	0.66103	0.66103	0.010	3.46762	20.00000	Averaged	
72 o-Xylene	0.63898	0.66118	0.66118	0.010	3.47365	20.00000	Averaged	
73 Styrene	1.09328	1.13829	1.13829	0.010	4.11684	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165462-4
Analytical Date: 06/25/15 10:46
Lab File ID : P1610.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/22/15 10:02 06/22/15 12:13
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
74 Bromoform	0.21222	0.21983	0.21983	0.100	3.58692	20.00000	Averaged
75 Isopropylbenzene	3.00793	3.14402	3.14402	0.010	4.52441	20.00000	Averaged
81 1,1,2,2-Tetrachloroethane	0.89396	0.83457	0.83457	0.300	-6.64443	20.00000	Averaged
84 1,2,3-Trichloropropane	0.68527	0.64358	0.64358	0.010	-6.08313	20.00000	Averaged
90 1,3-Dichlorobenzene	1.54428	1.53206	1.53206	0.010	-0.79091	20.00000	Averaged
92 1,4-Dichlorobenzene	1.57680	1.56688	1.56688	0.010	-0.62918	20.00000	Averaged
95 1,2-Dichlorobenzene	1.48132	1.46922	1.46922	0.010	-0.81698	20.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.16142	0.15495	0.15495	0.010	-4.00462	20.00000	Averaged
99 1,2,4-Trichlorobenzene	0.95249	0.92602	0.92602	0.010	-2.77923	20.00000	Averaged
103 Methyl Acetate	0.50627	0.43456	0.43456	0.010	-14.16434	20.00000	Averaged
104 Methylcyclohexane	0.94665	1.03548	1.03548	0.010	9.38451	20.00000	Averaged
37 Dibromofluoromethane	0.54083	0.50216	0.50216	0.010	-7.14939	20.00000	Averaged
45 1,2-Dichloroethane-D4	0.75952	0.68775	0.68775	0.010	-9.44930	20.00000	Averaged
55 Toluene-D8	1.10608	1.05664	1.05664	0.010	-4.47022	20.00000	Averaged
76 P-Bromofluorobenzene	0.50314	0.47916	0.47916	0.010	-4.76481	20.00000	Averaged

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR SPLP - BLK

Dry Weight Determination 100% ✓ <0.5%_____ %Wet Solids_____

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Baked Sand Homogeneous ✓ Non-homogeneous_____

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 06/24/5

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 06/24/5 pH of Fluid Today 7.71 Extraction Fluid Batch # DI H2O

Extract Use Filter Paper Lot #: 102807-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste		_____g
2)	Weight Container 1 + Residue		_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)		_____g
4)	Weight of Pre-extraction Collection Device		_____g
5)	Weight of Device and Filtrate		_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b	
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))		

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1440 Time Stopped 0840 Hours Extracted 18

Room Temp @ Start 20.6 Room Temp @ End 20.6

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 06/24/5 Rev 6/08

(R)

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR 574291-2A

Dry Weight Determination 100%_____ <0.5%_____ %Wet Solids ✓

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Oily Sand Homogeneous_____ Non-homogeneous ✓

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 06/24/5

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 06/24/5 pH of Fluid Today 7.71 Extraction Fluid Batch # DI H2O

Extract Use Filter Paper Lot #: 102807-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste	_____g
2)	Weight Container 1 + Residue	_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)	_____g
4)	Weight of Pre-extraction Collection Device	_____g
5)	Weight of Device and Filtrate	_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))	

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1440 Time Stopped 0840 Hours Extracted 18

Room Temp @ Start 20.6 Room Temp @ End 20.6

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 06/24/5 Rev 6/08

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR 574291 - 4 A

Dry Weight Determination 100%_____ <0.5%_____ %Wet Solids ✓

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Oily Sand Homogeneous_____ Non-homogeneous ✓

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 062415

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 062415 pH of Fluid Today 2.71 Extraction Fluid Batch # DI, H2O

Extract Use Filter Paper Lot #: 102807-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste	_____g
2)	Weight Container 1 + Residue	_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)	_____g
4)	Weight of Pre-extraction Collection Device	_____g
5)	Weight of Device and Filtrate	_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))	

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1440 Time Stopped 0840 Hours Extracted 18

Room Temp @ Start 20.6 Room Temp @ End 20.6

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 062415 Rev 6/08

1B

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR ST4291 - 6 A

Dry Weight Determination 100%_____ <0.5%_____ %Wet Solids ✓

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Oily Sand Homogeneous_____ Non-homogeneous ✓

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 062415

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 062415 pH of Fluid Today 7.71 Extraction Fluid Batch # DI, HO

Extract Use Filter Paper Lot #: 102507-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste		_____g
2)	Weight Container 1 + Residue		_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)		_____g
4)	Weight of Pre-extraction Collection Device		_____g
5)	Weight of Device and Filtrate		_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b	
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))		

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1440 Time Stopped 0840 Hours Extracted 18

Room Temp @ Start 20.6 Room Temp @ End 20.6

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 062415 Rev 6/08

(7

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR 54291 - 9 A

Dry Weight Determination 100%_____ <0.5%_____ %Wet Solids ✓

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Oily Sand Homogeneous_____ Non-homogeneous ✓

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 06/24/15

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 06/24/15 pH of Fluid Today 7.71 Extraction Fluid Batch # DI, HCO

Extract Use Filter Paper Lot #: 102807-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste		_____g
2)	Weight Container 1 + Residue		_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)		_____g
4)	Weight of Pre-extraction Collection Device		_____g
5)	Weight of Device and Filtrate		_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b	
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))		

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1440 Time Stopped 0840 Hours Extracted 18

Room Temp @ Start 20.6 Room Temp @ End 20.6

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 06/24/15 Rev 6/08

GCMS-P INSTRUMENT RUNLOG

KATAHDIN ANALYTICAL SERVICES

DATE/TIME OF BFB INJECTION: 06-22-15/ 9:27

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ⑩	PB295	1	-1	V0ABFBA0							Y	EME	—	
VSTD050P22A ④	P1533	1	1	P826A09							Y			
020 ③	34	1	2								Y			
005 ②	35	1	3								Y			
001 ①	36	1	4								Y			
200 ⑥	37	1	5								Y			
100 ⑤	38	1	6								Y			
LCSA[W61652276] ⑧	39	1	7								Y			IND ⑦
VBLK A	40	1	8								N			
B	41	1	9								N			
C ⑨	42	1	10								Y			
SI4364-2 A	43	1	11		X		X				Y		<2	
SI4339-2 A	44	1	12					X			Y		<2	
SI4191-12RA B	45	1	13								Y		<2	
-2RA E	46	1	14								Y		<2	
-3RA D	47	1	15								Y		<2	
-6RA B	48	1	16								Y		<2	
-9RA B	49	1	17								Y		<2	
SI4336-4 A	50	1	18				X				Y		<2	
SI4339-1 A	51	1	19					X			Y		<2	
SI4364-1 A	52	1	20				X				Y		<2	19:12
Rinse	53	1	21								N		—	
Rinse	54	1	22								N			
Rinse	55	1	23								N			
Rinse	56	1	24								N			

06/23/15 RCL

STANDARD	CODE
BFB	V9879
CAL. STD.	V9906, V9907
LCS/MS MIX	V9900
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9901
SS MIX	V9885

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS546

KATAHDIN ANALYTICAL SERVICES

GCMS-P INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 062515 / 9:09

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50ng BFB ③	PB298	1	-1	V48FBAQ							Y	EME		
VSTD050 R25A	P1609	1	1	P816A09							✓			Bad Cal mix
↓ B ④	10	1	2								Y			New Cal mix
LCS A [VG165462] ①	11	1	3								Y			
VBLK A	12	1	4								N			
↓ B	13	1	5		06/25/15 ~~X~~		1312				N			
↓ C ②	14	1	6								Y			$MeCl_2$ < ½ PQL
SPLP-BLKDL ⑤ A	15	5	7		X		1312		X		Y			8 → 40mL $MeCl_2$ < ½ PQL
SI4281-2DL A	16	5	8								Y			
-4DL A	17	5	9								Y			
-6DL A	18	5	10								Y			
↓ -9DL A	19	5	11								Y			
SI4462-13 A	20	1	12								Y		<2	
SI4459-2 A	21	1	13								Y		<2	
↓ -1 A	22	1	14								Y		<2	
SI4462-1 A	23	1	15								Y		<2	
-2 A	24	1	16								Y		<2	
-3 A	25	1	17								Y		<2	
-4 A	26	1	18								Y		<2	DL 1:10
-5 A	27	1	19								Y		<2	DL 1:10
-6 A	28	1	20								Y		<2	DL 1:10
-7 A	29	1	21								Y		<2	DL 1:10
-11 A	30	1	22								Y		<2	hit not CO, very large
↓ -12 A	31	1	23								Y		<2	20.40 DL 1:20
Rinse	32	1	24								N		Z	
Rinse	33	1	25								N			

STANDARD	CODE
BFB	V9879
CAL. STD. V9910	V9906, V9907
LCS/MS MIX	V9900
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9901
SS MIX	V9885

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS546

VOA-024 – Revision 1 – 05/16/2014

SEMIVOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI4291

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
SITE 4TS-HWF1-B	SI4291-1DL		95.2		50.8		85.0		67.9		52.2		132.	*
SITE 4TS-HWF2-B	SI4291-3DL		84.4		46.8		73.6		61.9		46.5		133.	*
SITE 4TS-HWF1-PT	SI4291-5DL		140.	*	73.3		115.	*	98.2		68.8		173.	*
SITE 4TS-HWF2-PT	SI4291-8DL		114.	*	55.6		91.6		76.0		57.6		165.	*
Method Blank Sample	WG164995-1RA		81.4		48.6		59.1		58.6		41.4		59.6	
Laboratory Control S	WG164995-2		65.9		63.9		65.0		65.9		68.9		76.2	
Laboratory Control S	WG164995-3		72.0		63.1		71.0		70.3		72.4		70.0	

		QC Limits
TPH	TERPHENYL-D14	30-125
NBZ	NITROBENZENE-D5	35-100
PHL	PHENOL-D6	40-100
2FP	2-FLUOROPHENOL	35-105
TBP	2,4,6-TRIBROMOPHENOL	35-125
2FBP	2-FLUOROBIPHENYL	45-105

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4291

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
SITE 4TS-HWF2-L2	SI4291-10		68.3		28.6		60.4		21.4		54.9		76.7	
SITE 4TS-HWF2-L1	SI4291-7		99.1		21.2		89.8		13.8		66.1		97.0	
Method Blank Sample	WG165006-1		74.9		35.6		66.4		26.5		73.4		89.1	
Laboratory Control S	WG165006-2		80.9		23.8		108.		24.9		76.0		89.5	
Laboratory Control S	WG165006-3		76.0		30.6		70.9		20.4		81.4		87.9	

		QC Limits
2FBP	2-FLUOROBIPHENYL	50-110
2FP	2-FLUOROPHENOL	20-110
PHL	PHENOL-D6	10-115
TPH	TERPHENYL-D14	50-135
NBZ	NITROBENZENE-D5	40-110
TBP	2,4,6-TRIBROMOPHENOL	40-125

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0789.D
Instrument ID : GCMS-U
Matrix : SL

SDG : SI4291
Lab Sample ID : WG164995-1RA
Date Extracted : 18-JUN-15
Date Analyzed : 23-JUN-15
Time Analyzed : 11:40

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG164995-2	U0765.D	06/22/15	17:31
Laboratory Control S	WG164995-3	U0766.D	06/22/15	17:59
SITE 4TS-HWF1-B	SI4291-1DL	U0774.D	06/22/15	21:39
SITE 4TS-HWF2-B	SI4291-3DL	U0775.D	06/22/15	22:06
SITE 4TS-HWF2-PT	SI4291-8DL	U0776.D	06/22/15	22:34
SITE 4TS-HWF1-PT	SI4291-5DL	U0777.D	06/22/15	23:01

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0734.D
Instrument ID : GCMS-U
Matrix : AQ

SDG : SI4291
Lab Sample ID : WG165006-1
Date Extracted : 18-JUN-15
Date Analyzed : 19-JUN-15
Time Analyzed : 17:02

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165006-2	U0735.D	06/19/15	17:30
Laboratory Control S	WG165006-3	U0736.D	06/19/15	17:58
SITE 4TS-HWF2-L1	SI4291-7	U0748.D	06/19/15	23:29
SITE 4TS-HWF2-L2	SI4291-10	U0749.D	06/19/15	23:56

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165006-1
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: U0734.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165006

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
Bis(2-Chloroethyl)Ether	U	7.5	ug/L	1	10	10.	2.0	7.5
2-Chlorophenol	U	7.5	ug/L	1	10	10.	3.2	7.5
1,3-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
1,4-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.2	7.5
1,2-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.4	7.5
2,2'-Oxybis(1-Chloropropane)	U	7.5	ug/L	1	10	10.	2.1	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
n-Nitroso-di-n-propylamine	U	7.5	ug/L	1	10	10.	1.9	7.5
3&4-Methylphenol	U	7.5	ug/L	1	10	10.	5.6	7.5
Hexachloroethane	U	7.5	ug/L	1	10	10.	2.3	7.5
Nitrobenzene	U	7.5	ug/L	1	10	10.	3.1	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2-Nitrophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Bis(2-chloroethoxy)methane	U	7.5	ug/L	1	10	10.	2.1	7.5
2,4-Dichlorophenol	U	7.5	ug/L	1	10	10.	3.0	7.5
1,2,4-Trichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Chloroaniline	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobutadiene	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Chloro-3-methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2,4,6-Trichlorophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.9	7.5
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
2,6-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.0	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	1.0	19.
Dibenzofuran	U	7.5	ug/L	1	10	10.	1.6	7.5
2,4-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.2	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
4-Chlorophenyl-phenylether	U	7.5	ug/L	1	10	10.	2.2	7.5
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165006-1
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: U0734.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165006

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4,6-Dinitro-2-methylphenol	U	19	ug/L	1	25	25.	2.0	19.
n-Nitrosodiphenylamine	U	7.5	ug/L	1	10	10.	3.7	7.5
4-Bromophenyl-phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
Di-n-butylphthalate	U	7.5	ug/L	1	10	10.	2.5	7.5
Butylbenzylphthalate	U	7.5	ug/L	1	10	10.	1.9	7.5
3,3'-Dichlorobenzidine	U	7.5	ug/L	1	10	10.	1.1	7.5
Bis(2-ethylhexyl)phthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Di-n-octylphthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.
1,1'-Biphenyl	U	7.5	ug/L	1	10	10.	2.7	7.5
1,2-Diphenylhydrazine	U	15	ug/L	1	20	20.	2.0	15.
2,6-Dichlorophenol	U	7.5	ug/L	1	10	10.	4.0	7.5
Benzidine	U	38	ug/L	1	50	50.	16.	38.
Benzoic Acid	U	19	ug/L	1	25	25.	3.0	19.
Benzyl Alcohol	U	15	ug/L	1	20	20.	1.2	15.
Caprolactam	U	7.5	ug/L	1	10	10.	0.40	7.5
2-Fluorophenol		35.6	%					
Phenol-d6		26.5	%					
Nitrobenzene-d5		66.4	%					
2-Fluorobiphenyl		74.9	%					
2,4,6-Tribromophenol		73.4	%					
Terphenyl-d14		89.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164995-1RA
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: U0789.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	250	ug/Kgdrywt	1	330	330	160	250
Bis(2-Chloroethyl)Ether	U	250	ug/Kgdrywt	1	330	330	81.	250
2-Chlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
1,3-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	78.	250
1,4-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	86.	250
1,2-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	88.	250
Benzyl Alcohol	U	500	ug/Kgdrywt	1	660	660	57.	500
2-Methylphenol	U	250	ug/Kgdrywt	1	330	330	200	250
2,2'-Oxybis(1-Chloropropane)	U	250	ug/Kgdrywt	1	330	330	89.	250
3&4-Methylphenol	U	250	ug/Kgdrywt	1	330	330	190	250
N-Nitroso-Di-N-Propylamine	U	250	ug/Kgdrywt	1	330	330	83.	250
Hexachloroethane	U	250	ug/Kgdrywt	1	330	330	96.	250
Nitrobenzene	U	250	ug/Kgdrywt	1	330	330	91.	250
Isophorone	U	250	ug/Kgdrywt	1	330	330	75.	250
2-Nitrophenol	U	250	ug/Kgdrywt	1	330	330	170	250
2,4-Dimethylphenol	U	250	ug/Kgdrywt	1	330	330	160	250
Bis(2-Chloroethoxy)Methane	U	250	ug/Kgdrywt	1	330	330	96.	250
2,4-Dichlorophenol	U	250	ug/Kgdrywt	1	330	330	150	250
1,2,4-Trichlorobenzene	U	250	ug/Kgdrywt	1	330	330	81.	250
Benzoic Acid	U	620	ug/Kgdrywt	1	820	820	340	620
4-Chloroaniline	U	250	ug/Kgdrywt	1	330	330	120	250
Hexachlorobutadiene	U	250	ug/Kgdrywt	1	330	330	83.	250
4-Chloro-3-Methylphenol	U	250	ug/Kgdrywt	1	330	330	170	250
2,4,6-Trichlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
2,4,5-Trichlorophenol	U	620	ug/Kgdrywt	1	820	820	160	620
2-Chloronaphthalene	U	250	ug/Kgdrywt	1	330	330	87.	250
2-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	75.	620
Dimethyl Phthalate	U	250	ug/Kgdrywt	1	330	330	78.	250
2,6-Dinitrotoluene	U	250	ug/Kgdrywt	1	330	330	79.	250
3-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	94.	620
2,4-Dinitrophenol	U	620	ug/Kgdrywt	1	820	820	380	620
4-Nitrophenol	U	620	ug/Kgdrywt	1	820	820	310	620
Dibenzofuran	U	250	ug/Kgdrywt	1	330	330	79.	250
2,4-Dinitrotoluene	U	250	ug/Kgdrywt	1	330	330	85.	250

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164995-1RA
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: U0789.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethylphthalate	U	250	ug/Kgdrywt	1	330	330	80.	250
4-Chlorophenyl-Phenylether	U	250	ug/Kgdrywt	1	330	330	78.	250
4-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	130	620
4,6-Dinitro-2-Methylphenol	U	620	ug/Kgdrywt	1	820	820	340	620
N-Nitrosodiphenylamine	U	250	ug/Kgdrywt	1	330	330	220	250
1,2-Diphenylhydrazine	U	500	ug/Kgdrywt	1	660	660	140	500
4-Bromophenyl-Phenylether	U	250	ug/Kgdrywt	1	330	330	85.	250
Hexachlorobenzene	U	250	ug/Kgdrywt	1	330	330	82.	250
Pentachlorophenol	U	620	ug/Kgdrywt	1	820	820	240	620
Carbazole	U	250	ug/Kgdrywt	1	330	330	110	250
Di-N-Butylphthalate	U	250	ug/Kgdrywt	1	330	330	100	250
Benzidine	U	1100	ug/Kgdrywt	1	1500	1500	100	1100
Butylbenzylphthalate	U	250	ug/Kgdrywt	1	330	330	93.	250
3,3'-Dichlorobenzidine	U	250	ug/Kgdrywt	1	330	330	110	250
Bis(2-Ethylhexyl)Phthalate	U	250	ug/Kgdrywt	1	330	330	98.	250
Di-N-Octylphthalate	U	250	ug/Kgdrywt	1	330	330	210	250
1,1'-biphenyl	U	250	ug/Kgdrywt	1	330	330	73.	250
2,6-Dichlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
Caprolactam	U	250	ug/Kgdrywt	1	330	330	140	250
2-Fluorophenol		48.6	%					
Phenol-D6		58.6	%					
Nitrobenzene-d5		59.1	%					
2-Fluorobiphenyl		81.4	%					
2,4,6-Tribromophenol		41.4	%					
Terphenyl-d14		59.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165006-2
LCSD ID: WG165006-3
Project:
SDG: SI4291
Report Date: 30-JUN-15
LCS File ID: U0735.D

Received Date:
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165006
LCSD File ID: U0736.D

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Phenol	100.	25.0	25.0	21.9	21.9	ug/L	13	30	0-115
Bis(2-Chloroethyl)Ether	50.0	40.2	80.4	37.3	74.6	ug/L	7	30	35-110
2-Chlorophenol	100.	64.1	64.1	66.1	66.1	ug/L	3	30	35-105
1,3-Dichlorobenzene	50.0	36.4	72.8	34.5	69.0	ug/L	5	30	30-100
1,4-Dichlorobenzene	50.0	37.1	74.2	36.4	72.8	ug/L	2	30	30-100
1,2-Dichlorobenzene	50.0	39.5	79.0	38.2	76.4	ug/L	3	30	35-100
2,2'-Oxybis(1-Chloropropane)	50.0	35.0	70.0	34.0	68.0	ug/L	3	30	25-130
2-Methylphenol	100.	61.3	61.3	54.5	54.5	ug/L	12	30	40-110
n-Nitroso-di-n-propylamine	50.0	40.6	81.2	37.2	74.4	ug/L	9	30	35-130
3&4-Methylphenol	100.	60.7	60.7	53.2	53.2	ug/L	13	30	30-110
Hexachloroethane	50.0	42.3	84.6	38.4	76.8	ug/L	10	30	30-100
Nitrobenzene	50.0	8.87	17.7*	6.02	12.0*	ug/L	38*	30	45-110
Isophorone	50.0	44.4	88.8	29.0	58.0	ug/L	42*	30	50-110
2-Nitrophenol	100.	88.2	88.2	70.5	70.5	ug/L	22	30	40-115
2,4-Dimethylphenol	100.	94.0	94.0	68.4	68.4	ug/L	32*	30	30-110
Bis(2-chloroethoxy)methane	50.0	45.3	90.6	32.7	65.4	ug/L	32*	30	45-105
2,4-Dichlorophenol	100.	85.6	85.6	75.2	75.2	ug/L	13	30	50-105
1,2,4-Trichlorobenzene	50.0	44.9	89.8	36.6	73.2	ug/L	20	30	35-105
4-Chloroaniline	50.0	34.5	69.0	33.3	66.6	ug/L	4	30	15-110
Hexachlorobutadiene	50.0	39.7	79.4	38.9	77.8	ug/L	2	30	25-105
4-Chloro-3-methylphenol	100.	82.5	82.5	78.8	78.8	ug/L	4	30	45-110
2,4,6-Trichlorophenol	100.	68.0	68.0	78.3	78.3	ug/L	14	30	50-115
2,4,5-Trichlorophenol	100.	77.2	77.2	82.6	82.6	ug/L	7	30	50-110
2-Chloronaphthalene	50.0	32.8	65.6	31.9	63.8	ug/L	3	30	50-105
2-Nitroaniline	50.0	41.9	83.8	40.9	81.8	ug/L	2	30	56-108
Dimethyl phthalate	50.0	43.9	87.8	41.7	83.4	ug/L	5	30	25-125
2,6-Dinitrotoluene	50.0	43.0	86.0	41.7	83.4	ug/L	3	30	50-115
3-Nitroaniline	50.0	34.0	68.0	32.5	65.0	ug/L	4	30	20-125
2,4-Dinitrophenol	100.	57.0	57.0	76.1	76.1	ug/L	29	30	15-140
Dibenzofuran	50.0	41.5	83.0	39.5	79.0	ug/L	5	30	55-105
2,4-Dinitrotoluene	50.0	43.3	86.6	40.3	80.6	ug/L	7	30	50-120
Diethylphthalate	50.0	47.1	94.2	43.8	87.6	ug/L	7	30	40-120
4-Chlorophenyl-phenylether	50.0	45.4	90.8	44.1	88.2	ug/L	3	30	50-110
4-Nitroaniline	50.0	41.7	83.4	39.3	78.6	ug/L	6	30	35-120

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165006-2
LCSD ID: WG165006-3
Project:
SDG: SI4291
Report Date: 30-JUN-15
LCS File ID: U0735.D

Received Date:
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165006
LCSD File ID: U0736.D

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
4,6-Dinitro-2-methylphenol	100.	70.0	70.0	89.6	89.6	ug/L	24	30	40-130
n-Nitrosodiphenylamine	50.0	31.8	63.6	32.1	64.2	ug/L	1	30	50-110
4-Bromophenyl-phenylether	50.0	44.6	89.2	45.1	90.2	ug/L	1	30	50-115
Hexachlorobenzene	50.0	42.8	85.6	42.4	84.8	ug/L	1	30	50-110
Pentachlorophenol	100.	81.1	81.1	104.	104.	ug/L	25	30	40-115
Carbazole	50.0	45.6	91.2	44.7	89.4	ug/L	2	30	50-115
Di-n-butylphthalate	50.0	45.7	91.4	45.0	90.0	ug/L	2	30	55-115
Butylbenzylphthalate	50.0	44.1	88.2	44.5	89.0	ug/L	1	30	45-115
3,3'-Dichlorobenzidine	100.	85.1	85.1	84.9	84.9	ug/L	0	30	20-110
Bis(2-ethylhexyl)phthalate	50.0	47.2	94.4	43.7	87.4	ug/L	8	30	40-125
Di-n-octylphthalate	50.0	44.0	88.0	44.5	89.0	ug/L	1	30	35-135
4-Nitrophenol	100.	9.05	9.05	28.8	28.8	ug/L	104*	30	0-125
1,1'-Biphenyl	50.0	41.7	83.4	40.8	81.6	ug/L	2	30	51-105
1,2-Diphenylhydrazine	50.0	44.3	88.6	43.9	87.8	ug/L	1	30	55-115
2,6-Dichlorophenol	100.	74.4	74.4	82.8	82.8	ug/L	11	30	45-109
Benzidine	50.0	114.	228.*	82.6	165.*	ug/L	32*	30	10-100
Benzoic Acid	100.	35.2	35.2	22.0	22.0	ug/L	46*	30	0-125
Benzyl Alcohol	50.0	29.8	59.6	24.6	49.2	ug/L	19	30	30-110
Caprolactam	50.0	6.54	13.1	4.35	8.70*	ug/L	40*	30	10-86
2-Fluorophenol			23.8		30.6				20-110
Phenol-d6			24.9		20.4				10-115
Nitrobenzene-d5			108.		70.9				40-110
2-Fluorobiphenyl			80.9		76.0				50-110
2,4,6-Tribromophenol			76.0		81.4				40-125
Terphenyl-d14			89.5		87.9				50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG164995-2
LCSD ID: WG164995-3
Project:
SDG: SI4291
Report Date: 30-JUN-15
LCS File ID: U0765.D

Received Date:
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995
LCSD File ID: U0766.D

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Phenol	3330	2120	63.7	2240	67.3	ug/Kgdrywt	6	20	40-100
Bis(2-Chloroethyl)Ether	1670	971.	58.1	1050	62.9	ug/Kgdrywt	8	20	40-105
2-Chlorophenol	3330	2080	62.5	2130	64.0	ug/Kgdrywt	2	20	45-105
1,3-Dichlorobenzene	1670	990.	59.3	1040	62.3	ug/Kgdrywt	5	20	40-100
1,4-Dichlorobenzene	1670	1030	61.7	1080	64.7	ug/Kgdrywt	5	20	35-105
1,2-Dichlorobenzene	1670	1080	64.7	1100	65.9	ug/Kgdrywt	2	20	45-100
Benzyl Alcohol	1670	1020	61.1	1100	65.9	ug/Kgdrywt	8	20	20-125
2-Methylphenol	3330	2010	60.4	2100	63.1	ug/Kgdrywt	4	20	40-105
2,2'-Oxybis(1-Chloropropane)	1670	979.	58.6	1010	60.5	ug/Kgdrywt	3	20	20-115
3&4-Methylphenol	3330	2230	67.0	2280	68.5	ug/Kgdrywt	2	20	40-105
N-Nitroso-Di-N-Propylamine	1670	1060	63.5	1100	65.9	ug/Kgdrywt	4	20	40-115
Hexachloroethane	1670	1020	61.1	1070	64.1	ug/Kgdrywt	5	20	35-110
Nitrobenzene	1670	1130	67.7	1220	73.0	ug/Kgdrywt	8	20	40-115
Isophorone	1670	855.	51.2	936.	56.0	ug/Kgdrywt	9	20	45-110
2-Nitrophenol	3330	1960	58.8	2320	69.7	ug/Kgdrywt	17	20	40-110
2,4-Dimethylphenol	3330	2020	60.7	1960	58.8	ug/Kgdrywt	3	20	30-105
Bis(2-Chloroethoxy)Methane	1670	990.	59.3	1120	67.1	ug/Kgdrywt	12	20	45-110
2,4-Dichlorophenol	3330	2170	65.2	2320	69.7	ug/Kgdrywt	7	20	45-110
1,2,4-Trichlorobenzene	1670	1090	65.3	1190	71.2	ug/Kgdrywt	9	20	45-110
Benzoic Acid	3330	457.	13.7	U820	0.00*	ug/Kgdrywt	200*	20	0-110
4-Chloroaniline	1670	778.	46.6	767.	45.9	ug/Kgdrywt	1	20	10-100
Hexachlorobutadiene	1670	1110	66.5	1220	73.0	ug/Kgdrywt	9	20	40-115
4-Chloro-3-Methylphenol	3330	2440	73.3	2530	76.0	ug/Kgdrywt	4	20	45-115
2,4,6-Trichlorophenol	3330	2290	68.8	2280	68.5	ug/Kgdrywt	0	20	45-110
2,4,5-Trichlorophenol	3330	2230	67.0	2290	68.8	ug/Kgdrywt	3	20	50-110
2-Chloronaphthalene	1670	944.	56.5	1020	61.1	ug/Kgdrywt	8	20	45-105
2-Nitroaniline	1670	1130	67.7	1180	70.6	ug/Kgdrywt	4	20	45-120
Dimethyl Phthalate	1670	1170	70.0	1240	74.2	ug/Kgdrywt	6	20	50-110
2,6-Dinitrotoluene	1670	1190	71.2	1150	68.9	ug/Kgdrywt	3	20	50-110
3-Nitroaniline	1670	907.	54.3	880.	52.7	ug/Kgdrywt	3	20	25-110
2,4-Dinitrophenol	3330	1100	33.0	847.	25.4	ug/Kgdrywt	26*	20	15-130
4-Nitrophenol	3330	2520	75.7	2590	77.8	ug/Kgdrywt	3	20	15-140
Dibenzofuran	1670	1180	70.6	1130	67.7	ug/Kgdrywt	4	20	50-105
2,4-Dinitrotoluene	1670	1200	71.8	1100	65.9	ug/Kgdrywt	9	20	50-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG164995-2
LCSD ID: WG164995-3
Project:
SDG: SI4291
Report Date: 30-JUN-15
LCS File ID: U0765.D

Received Date:
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995
LCSD File ID: U0766.D

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Diethylphthalate	1670	1260	75.4	1380	82.6	ug/Kgdrywt	9	20	50-115
4-Chlorophenyl-Phenylether	1670	1420	85.0	1360	81.4	ug/Kgdrywt	4	20	45-110
4-Nitroaniline	1670	1160	69.5	1150	68.9	ug/Kgdrywt	1	20	35-115
4,6-Dinitro-2-Methylphenol	3330	1950	58.6	1730	52.0	ug/Kgdrywt	12	20	30-135
N-Nitrosodiphenylamine	1670	983.	58.9	911.	54.6	ug/Kgdrywt	8	20	50-115
1,2-Diphenylhydrazine	1670	1260	75.4	1200	71.8	ug/Kgdrywt	5	20	50-110
4-Bromophenyl-Phenylether	1670	1220	73.0	1130	67.7	ug/Kgdrywt	8	20	45-115
Hexachlorobenzene	1670	1190	71.2	1160	69.5	ug/Kgdrywt	2	20	45-120
Pentachlorophenol	3330	2420	72.7	2130	64.0	ug/Kgdrywt	13	20	25-120
Carbazole	1670	1300	77.8	1300	77.8	ug/Kgdrywt	0	20	45-115
Di-N-Butylphthalate	1670	1360	81.4	1190	71.2	ug/Kgdrywt	13	20	55-110
Benzidine	3330	1050	31.5	927.	27.8	ug/Kgdrywt	12	20	10-150
Butylbenzylphthalate	1670	1300	77.8	1230	73.6	ug/Kgdrywt	6	20	50-125
3,3'-Dichlorobenzidine	3330	2540	76.3	2330	70.0	ug/Kgdrywt	9	20	10-130
Bis(2-Ethylhexyl)Phthalate	1670	1340	80.2	1220	73.0	ug/Kgdrywt	9	20	45-125
Di-N-Octylphthalate	1670	1290	77.2	1250	74.8	ug/Kgdrywt	3	20	40-130
1,1'-biphenyl	1670	1160	69.5	1300	77.8	ug/Kgdrywt	11	20	31-99
2,6-Dichlorophenol	3330	2980	89.5	3210	96.4	ug/Kgdrywt	7	20	38-98
Caprolactam	1670	633.	37.9	649.	38.9	ug/Kgdrywt	2	20	10-81
2-Fluorophenol			63.9		63.1				35-105
Phenol-D6			65.9		70.3				40-100
Nitrobenzene-d5			65.0		71.0				35-100
2-Fluorobiphenyl			65.9		72.0				45-105
2,4,6-Tribromophenol			68.9		72.4				35-125
Terphenyl-d14			76.2		70.0				30-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD389.D
Instrument ID : GCMS-U

SDG : SI4291
Date Analyzed : 19-JUN-15
Time Analyzed : 12:54

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	45.2		
68	Less than 2.0% of mass 69	0.6	1.31	1
69	Less than 100.0% of mass 198	42.9		
70	Less than 2.0% of mass 69	0.2	0.37	1
127	40.0 - 60.0% of mass 198	53.3		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.9		
275	10.0 - 30.0% of mass 198	19.6		
365	1.0 - 100.0% of mass 198	2.0		
441	0.0 - 100.0% of mass 443	11.4	78.83	2
442	40.0 - 100.0% of mass 198	71.7		
443	17.0 - 23.0% of mass 442	14.4	20.08	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165116-4	U0727.D	06/19/15	13:13
Initial Calibration	WG165116-2	U0728.D	06/19/15	13:46
Initial Calibration	WG165116-3	U0729.D	06/19/15	14:14
Initial Calibration	WG165116-5	U0730.D	06/19/15	14:42
Initial Calibration	WG165116-6	U0731.D	06/19/15	15:38
Initial Calibration	WG165116-7	U0732.D	06/19/15	16:06
Independent Source	WG165116-8	U0733.D	06/19/15	16:34
Method Blank Sample	WG165006-1	U0734.D	06/19/15	17:02
Laboratory Control S	WG165006-2	U0735.D	06/19/15	17:30
Laboratory Control S	WG165006-3	U0736.D	06/19/15	17:58
SITE 4TS-HWF2-L1	SI4291-7	U0748.D	06/19/15	23:29
SITE 4TS-HWF2-L2	SI4291-10	U0749.D	06/19/15	23:56

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD391.D
Instrument ID : GCMS-U

SDG : SI4291
Date Analyzed : 22-JUN-15
Time Analyzed : 13:30

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	34.9		
68	Less than 2.0% of mass 69	0.2	0.71	1
69	Less than 100.0% of mass 198	25.9		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	44.0		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.3		
275	10.0 - 30.0% of mass 198	17.2		
365	1.0 - 100.0% of mass 198	1.6		
441	0.0 - 100.0% of mass 443	13.2	82.85	2
442	40.0 - 100.0% of mass 198	83.4		
443	17.0 - 23.0% of mass 442	15.9	19.06	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165272-4	U0757.D	06/22/15	13:48
Initial Calibration	WG165272-2	U0758.D	06/22/15	14:16
Initial Calibration	WG165272-3	U0759.D	06/22/15	14:44
Initial Calibration	WG165272-5	U0760.D	06/22/15	15:12
Initial Calibration	WG165272-6	U0761.D	06/22/15	15:40
Initial Calibration	WG165272-7	U0762.D	06/22/15	16:08
Independent Source	WG165272-8	U0763.D	06/22/15	16:36
Laboratory Control S	WG164995-2	U0765.D	06/22/15	17:31
Laboratory Control S	WG164995-3	U0766.D	06/22/15	17:59
SITE 4TS-HWF1-B	SI4291-1DL	U0774.D	06/22/15	21:39
SITE 4TS-HWF2-B	SI4291-3DL	U0775.D	06/22/15	22:06
SITE 4TS-HWF2-PT	SI4291-8DL	U0776.D	06/22/15	22:34
SITE 4TS-HWF1-PT	SI4291-5DL	U0777.D	06/22/15	23:01

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD392.D
Instrument ID : GCMS-U

SDG : SI4291
Date Analyzed : 23-JUN-15
Time Analyzed : 10:54

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	33.1		
68	Less than 2.0% of mass 69	0.1	0.57	1
69	Less than 100.0% of mass 198	26.3		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	44.4		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	17.1		
365	1.0 - 100.0% of mass 198	1.7		
441	0.0 - 100.0% of mass 443	12.6	82.55	2
442	40.0 - 100.0% of mass 198	79.9		
443	17.0 - 23.0% of mass 442	15.2	19.05	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165301-2	U0788.D	06/23/15	11:12
Method Blank Sample	WG164995-1RA	U0789.D	06/23/15	11:40

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165272-4
Lab File ID : U0757.D

SDG: SI4291
Analytical Date: 06/22/15 13:48
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	319771		4.53		1162914		5.92		598316		8.01	
	Upper Limit	639542		5.03		2325828		6.42		1196632		8.51	
	Lower Limit	159885.5		4.03		581457		5.42		299158		7.51	
Client Sample ID	Lab Sample ID												
Laboratory Control S	WG164995-2	392922		4.54		1405902		5.92		759846		8.01	
Laboratory Control S	WG164995-3	409143		4.53		1396070		5.92		769220		8.01	
SITE 4TS-HWF1-B	SI4291-1DL	509546		4.53		1702845		5.93		740525		8.02	
SITE 4TS-HWF2-B	SI4291-3DL	490578		4.53		1700430		5.93		744488		8.02	
SITE 4TS-HWF2-PT	SI4291-8DL	500834		4.53		1672818		5.93		673286		8.02	
SITE 4TS-HWF1-PT	SI4291-5DL	502758		4.54		1637607		5.93		613559		8.02	
Continuing Calibrati	WG165301-2	253482		4.52		1009168		5.92		510564		8.01	
Method Blank Sample	WG164995-1RA	385952		4.52		1511263		5.92		533149		8.01	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165272-4
Lab File ID : U0757.D

SDG: SI4291
Analytical Date: 06/22/15 13:48
Instrument ID: GCMS-U

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	Area	#	RT	Area	#	RT
	Std .	926799		9.82	468408		13.38	194522		16.34
	Upper Limit	1853598		10.32	936816		13.88	389044		16.84
	Lower Limit	463399.5		9.32	234204		12.88	97261		15.84
Client Sample ID	Lab Sample ID									
Laboratory Control S	WG164995-2	1135397		9.81	606791		13.37	238449		16.35
Laboratory Control S	WG164995-3	1232749		9.82	662179		13.37	248030		16.34
SITE 4TS-HWF1-B	SI4291-1DL	679939		9.84	75972	*	13.38	27320	*	16.35
SITE 4TS-HWF2-B	SI4291-3DL	666613		9.83	72771	*	13.38	21586	*	16.35
SITE 4TS-HWF2-PT	SI4291-8DL	586511		9.83	59128	*	13.38	20689	*	16.35
SITE 4TS-HWF1-PT	SI4291-5DL	481394		9.83	64961	*	13.38	21869	*	16.36
Continuing Calibrati	WG165301-2	581733		9.81	316215		13.37	165443		16.33
Method Blank Sample	WG164995-1RA	746322		9.81	489170		13.36	257621		16.33

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165116-4
Lab File ID : U0727.D

SDG: SI4291
Analytical Date: 06/19/15 13:13
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	251740		4.53		1005302		5.93		486305		8.02	
	Upper Limit	503480		5.03		2010604		6.43		972610		8.52	
	Lower Limit	125870		4.03		502651		5.43		243152.5		7.52	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165006-1	286185		4.53		1193752		5.93		591207		8.02	
Laboratory Control S	WG165006-2	340719		4.54		1021673		5.93		534081		8.02	
Laboratory Control S	WG165006-3	265401		4.54		1023626		5.93		526010		8.02	
SITE 4TS-HWF2-L1	SI4291-7	254743		4.53		924853		5.93		457217		8.02	
SITE 4TS-HWF2-L2	SI4291-10	284854		4.54		1148796		5.93		562998		8.03	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165116-4
Lab File ID : U0727.D

SDG: SI4291
Analytical Date: 06/19/15 13:13
Instrument ID: GCMS-U

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	864311		9.83		642492		13.39		379642		16.36	
	Upper Limit	1728622		10.33		1284984		13.89		759284		16.86	
	Lower Limit	432155.5		9.33		321246		12.89		189821		15.86	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165006-1	980234		9.83		740500		13.39		457026		16.36	
Laboratory Control S	WG165006-2	920207		9.83		690134		13.39		429246		16.36	
Laboratory Control S	WG165006-3	874748		9.83		649976		13.39		381497		16.36	
SITE 4TS-HWF2-L1	SI4291-7	658196		9.83		479510		13.39		228347		16.36	
SITE 4TS-HWF2-L2	SI4291-10	946187		9.83		679975		13.39		359552		16.36	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-1DL
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0774.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 93.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	1500	ug/Kgdrywt	3	330	2000	970	1500
Bis(2-Chloroethyl)Ether	U	1500	ug/Kgdrywt	3	330	2000	500	1500
2-Chlorophenol	U	1500	ug/Kgdrywt	3	330	2000	1000	1500
1,3-Dichlorobenzene	U	1500	ug/Kgdrywt	3	330	2000	490	1500
1,4-Dichlorobenzene	U	1500	ug/Kgdrywt	3	330	2000	540	1500
1,2-Dichlorobenzene	U	1500	ug/Kgdrywt	3	330	2000	550	1500
Benzyl Alcohol	U	3100	ug/Kgdrywt	3	660	4100	360	3100
2-Methylphenol	U	1500	ug/Kgdrywt	3	330	2000	1200	1500
2,2'-Oxybis(1-Chloropropane)	U	1500	ug/Kgdrywt	3	330	2000	560	1500
3&4-Methylphenol	U	1500	ug/Kgdrywt	3	330	2000	1200	1500
N-Nitroso-Di-N-Propylamine	U	1500	ug/Kgdrywt	3	330	2000	520	1500
Hexachloroethane	U	1500	ug/Kgdrywt	3	330	2000	600	1500
Nitrobenzene	U	1500	ug/Kgdrywt	3	330	2000	570	1500
Isophorone	U	1500	ug/Kgdrywt	3	330	2000	470	1500
2-Nitrophenol	U	1500	ug/Kgdrywt	3	330	2000	1000	1500
2,4-Dimethylphenol	U	1500	ug/Kgdrywt	3	330	2000	1000	1500
Bis(2-Chloroethoxy)Methane	U	1500	ug/Kgdrywt	3	330	2000	600	1500
2,4-Dichlorophenol	U	1500	ug/Kgdrywt	3	330	2000	940	1500
1,2,4-Trichlorobenzene	U	1500	ug/Kgdrywt	3	330	2000	500	1500
Benzoic Acid	U	3800	ug/Kgdrywt	3	820	5100	2100	3800
4-Chloroaniline	U	1500	ug/Kgdrywt	3	330	2000	740	1500
Hexachlorobutadiene	U	1500	ug/Kgdrywt	3	330	2000	520	1500
4-Chloro-3-Methylphenol	U	1500	ug/Kgdrywt	3	330	2000	1000	1500
2,4,6-Trichlorophenol	U	1500	ug/Kgdrywt	3	330	2000	970	1500
2,4,5-Trichlorophenol	U	3800	ug/Kgdrywt	3	820	5100	970	3800
2-Chloronaphthalene	U	1500	ug/Kgdrywt	3	330	2000	540	1500
2-Nitroaniline	U	3800	ug/Kgdrywt	3	820	5100	470	3800
Dimethyl Phthalate	U	1500	ug/Kgdrywt	3	330	2000	490	1500
2,6-Dinitrotoluene	U	1500	ug/Kgdrywt	3	330	2000	490	1500
3-Nitroaniline	U	3800	ug/Kgdrywt	3	820	5100	590	3800
2,4-Dinitrophenol	U	3800	ug/Kgdrywt	3	820	5100	2400	3800
4-Nitrophenol	U	3800	ug/Kgdrywt	3	820	5100	1900	3800
Dibenzofuran	U	1500	ug/Kgdrywt	3	330	2000	490	1500
2,4-Dinitrotoluene	U	1500	ug/Kgdrywt	3	330	2000	530	1500
Diethylphthalate	U	1500	ug/Kgdrywt	3	330	2000	500	1500

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-1DL
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0774.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 93.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Chlorophenyl-Phenylether	U	1500	ug/Kgdrywt	3	330	2000	490	1500
4-Nitroaniline	U	3800	ug/Kgdrywt	3	820	5100	840	3800
4,6-Dinitro-2-Methylphenol	U	3800	ug/Kgdrywt	3	820	5100	2100	3800
N-Nitrosodiphenylamine	U	1500	ug/Kgdrywt	3	330	2000	1400	1500
1,2-Diphenylhydrazine	U	3100	ug/Kgdrywt	3	660	4100	890	3100
4-Bromophenyl-Phenylether	U	1500	ug/Kgdrywt	3	330	2000	530	1500
Hexachlorobenzene	U	1500	ug/Kgdrywt	3	330	2000	510	1500
Pentachlorophenol	U	3800	ug/Kgdrywt	3	820	5100	1500	3800
Carbazole	U	1500	ug/Kgdrywt	3	330	2000	690	1500
Di-N-Butylphthalate	U	1500	ug/Kgdrywt	3	330	2000	630	1500
Benzidine	U	7000	ug/Kgdrywt	3	1500	9400	620	7000
Butylbenzylphthalate	U	1500	ug/Kgdrywt	3	330	2000	580	1500
3,3'-Dichlorobenzidine	U	1500	ug/Kgdrywt	3	330	2000	710	1500
Bis(2-Ethylhexyl)Phthalate	U	1500	ug/Kgdrywt	3	330	2000	610	1500
Di-N-Octylphthalate	U	1500	ug/Kgdrywt	3	330	2000	1300	1500
1,1'-biphenyl	U	1500	ug/Kgdrywt	3	330	2000	460	1500
2,6-Dichlorophenol	U	1500	ug/Kgdrywt	3	330	2000	1000	1500
Caprolactam	U	1500	ug/Kgdrywt	3	330	2000	900	1500
2-Fluorophenol		50.8	%					
Phenol-D6		67.9	%					
Nitrobenzene-d5		85.0	%					
2-Fluorobiphenyl		95.2	%					
2,4,6-Tribromophenol		52.2	%					
Terphenyl-d14	*	132.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-3DL
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0775.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 94.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	1500	ug/Kgdrywt	3	330	2000	920	1500
Bis(2-Chloroethyl)Ether	U	1500	ug/Kgdrywt	3	330	2000	480	1500
2-Chlorophenol	U	1500	ug/Kgdrywt	3	330	2000	970	1500
1,3-Dichlorobenzene	U	1500	ug/Kgdrywt	3	330	2000	460	1500
1,4-Dichlorobenzene	U	1500	ug/Kgdrywt	3	330	2000	510	1500
1,2-Dichlorobenzene	U	1500	ug/Kgdrywt	3	330	2000	520	1500
Benzyl Alcohol	U	2900	ug/Kgdrywt	3	660	3900	340	2900
2-Methylphenol	U	1500	ug/Kgdrywt	3	330	2000	1200	1500
2,2'-Oxybis(1-Chloropropane)	U	1500	ug/Kgdrywt	3	330	2000	530	1500
3&4-Methylphenol	U	1500	ug/Kgdrywt	3	330	2000	1100	1500
N-Nitroso-Di-N-Propylamine	U	1500	ug/Kgdrywt	3	330	2000	490	1500
Hexachloroethane	U	1500	ug/Kgdrywt	3	330	2000	570	1500
Nitrobenzene	U	1500	ug/Kgdrywt	3	330	2000	540	1500
Isophorone	U	1500	ug/Kgdrywt	3	330	2000	440	1500
2-Nitrophenol	U	1500	ug/Kgdrywt	3	330	2000	990	1500
2,4-Dimethylphenol	U	1500	ug/Kgdrywt	3	330	2000	980	1500
Bis(2-Chloroethoxy)Methane	U	1500	ug/Kgdrywt	3	330	2000	570	1500
2,4-Dichlorophenol	U	1500	ug/Kgdrywt	3	330	2000	890	1500
1,2,4-Trichlorobenzene	U	1500	ug/Kgdrywt	3	330	2000	480	1500
Benzoic Acid	U	3600	ug/Kgdrywt	3	820	4800	2000	3600
4-Chloroaniline	U	1500	ug/Kgdrywt	3	330	2000	700	1500
Hexachlorobutadiene	U	1500	ug/Kgdrywt	3	330	2000	490	1500
4-Chloro-3-Methylphenol	U	1500	ug/Kgdrywt	3	330	2000	980	1500
2,4,6-Trichlorophenol	U	1500	ug/Kgdrywt	3	330	2000	920	1500
2,4,5-Trichlorophenol	U	3600	ug/Kgdrywt	3	820	4800	920	3600
2-Chloronaphthalene	U	1500	ug/Kgdrywt	3	330	2000	520	1500
2-Nitroaniline	U	3600	ug/Kgdrywt	3	820	4800	440	3600
Dimethyl Phthalate	U	1500	ug/Kgdrywt	3	330	2000	460	1500
2,6-Dinitrotoluene	U	1500	ug/Kgdrywt	3	330	2000	470	1500
3-Nitroaniline	U	3600	ug/Kgdrywt	3	820	4800	560	3600
2,4-Dinitrophenol	U	3600	ug/Kgdrywt	3	820	4800	2200	3600
4-Nitrophenol	U	3600	ug/Kgdrywt	3	820	4800	1800	3600
Dibenzofuran	U	1500	ug/Kgdrywt	3	330	2000	470	1500
2,4-Dinitrotoluene	U	1500	ug/Kgdrywt	3	330	2000	500	1500
Diethylphthalate	U	1500	ug/Kgdrywt	3	330	2000	470	1500

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-3DL
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0775.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 94.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Chlorophenyl-Phenylether	U	1500	ug/Kgdrywt	3	330	2000	460	1500
4-Nitroaniline	U	3600	ug/Kgdrywt	3	820	4800	790	3600
4,6-Dinitro-2-Methylphenol	U	3600	ug/Kgdrywt	3	820	4800	2000	3600
N-Nitrosodiphenylamine	U	1500	ug/Kgdrywt	3	330	2000	1300	1500
1,2-Diphenylhydrazine	U	2900	ug/Kgdrywt	3	660	3900	840	2900
4-Bromophenyl-Phenylether	U	1500	ug/Kgdrywt	3	330	2000	500	1500
Hexachlorobenzene	U	1500	ug/Kgdrywt	3	330	2000	480	1500
Pentachlorophenol	U	3600	ug/Kgdrywt	3	820	4800	1400	3600
Carbazole	U	1500	ug/Kgdrywt	3	330	2000	660	1500
Di-N-Butylphthalate	U	1500	ug/Kgdrywt	3	330	2000	600	1500
Benzidine	U	6700	ug/Kgdrywt	3	1500	8900	590	6700
Butylbenzylphthalate	U	1500	ug/Kgdrywt	3	330	2000	550	1500
3,3'-Dichlorobenzidine	U	1500	ug/Kgdrywt	3	330	2000	670	1500
Bis(2-Ethylhexyl)Phthalate	U	1500	ug/Kgdrywt	3	330	2000	580	1500
Di-N-Octylphthalate	U	1500	ug/Kgdrywt	3	330	2000	1200	1500
1,1'-biphenyl	U	1500	ug/Kgdrywt	3	330	2000	430	1500
2,6-Dichlorophenol	U	1500	ug/Kgdrywt	3	330	2000	980	1500
Caprolactam	U	1500	ug/Kgdrywt	3	330	2000	850	1500
2-Fluorophenol		46.8	%					
Phenol-D6		61.9	%					
Nitrobenzene-d5		73.6	%					
2-Fluorobiphenyl		84.4	%					
2,4,6-Tribromophenol		46.5	%					
Terphenyl-d14	*	133.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-5DL
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0777.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 93.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	1600	ug/Kgdrywt	3	330	2100	990	1600
Bis(2-Chloroethyl)Ether	U	1600	ug/Kgdrywt	3	330	2100	510	1600
2-Chlorophenol	U	1600	ug/Kgdrywt	3	330	2100	1000	1600
1,3-Dichlorobenzene	U	1600	ug/Kgdrywt	3	330	2100	490	1600
1,4-Dichlorobenzene	U	1600	ug/Kgdrywt	3	330	2100	540	1600
1,2-Dichlorobenzene	U	1600	ug/Kgdrywt	3	330	2100	560	1600
Benzyl Alcohol	U	3100	ug/Kgdrywt	3	660	4200	360	3100
2-Methylphenol	U	1600	ug/Kgdrywt	3	330	2100	1300	1600
2,2'-Oxybis(1-Chloropropane)	U	1600	ug/Kgdrywt	3	330	2100	560	1600
3&4-Methylphenol	U	1600	ug/Kgdrywt	3	330	2100	1200	1600
N-Nitroso-Di-N-Propylamine	U	1600	ug/Kgdrywt	3	330	2100	520	1600
Hexachloroethane	U	1600	ug/Kgdrywt	3	330	2100	610	1600
Nitrobenzene	U	1600	ug/Kgdrywt	3	330	2100	580	1600
Isophorone	U	1600	ug/Kgdrywt	3	330	2100	470	1600
2-Nitrophenol	U	1600	ug/Kgdrywt	3	330	2100	1000	1600
2,4-Dimethylphenol	U	1600	ug/Kgdrywt	3	330	2100	1000	1600
Bis(2-Chloroethoxy)Methane	U	1600	ug/Kgdrywt	3	330	2100	610	1600
2,4-Dichlorophenol	U	1600	ug/Kgdrywt	3	330	2100	950	1600
1,2,4-Trichlorobenzene	U	1600	ug/Kgdrywt	3	330	2100	510	1600
Benzoic Acid	U	3900	ug/Kgdrywt	3	820	5200	2200	3900
4-Chloroaniline	U	1600	ug/Kgdrywt	3	330	2100	750	1600
Hexachlorobutadiene	U	1600	ug/Kgdrywt	3	330	2100	520	1600
4-Chloro-3-Methylphenol	U	1600	ug/Kgdrywt	3	330	2100	1000	1600
2,4,6-Trichlorophenol	U	1600	ug/Kgdrywt	3	330	2100	980	1600
2,4,5-Trichlorophenol	U	3900	ug/Kgdrywt	3	820	5200	980	3900
2-Chloronaphthalene	U	1600	ug/Kgdrywt	3	330	2100	550	1600
2-Nitroaniline	U	3900	ug/Kgdrywt	3	820	5200	470	3900
Dimethyl Phthalate	U	1600	ug/Kgdrywt	3	330	2100	490	1600
2,6-Dinitrotoluene	U	1600	ug/Kgdrywt	3	330	2100	500	1600
3-Nitroaniline	U	3900	ug/Kgdrywt	3	820	5200	600	3900
2,4-Dinitrophenol	U	3900	ug/Kgdrywt	3	820	5200	2400	3900
4-Nitrophenol	U	3900	ug/Kgdrywt	3	820	5200	2000	3900
Dibenzofuran	U	1600	ug/Kgdrywt	3	330	2100	500	1600
2,4-Dinitrotoluene	U	1600	ug/Kgdrywt	3	330	2100	540	1600
Diethylphthalate	U	1600	ug/Kgdrywt	3	330	2100	510	1600

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-5DL
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0777.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 93.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Chlorophenyl-Phenylether	U	1600	ug/Kgdrywt	3	330	2100	490	1600
4-Nitroaniline	U	3900	ug/Kgdrywt	3	820	5200	850	3900
4,6-Dinitro-2-Methylphenol	U	3900	ug/Kgdrywt	3	820	5200	2100	3900
N-Nitrosodiphenylamine	U	1600	ug/Kgdrywt	3	330	2100	1400	1600
1,2-Diphenylhydrazine	U	3100	ug/Kgdrywt	3	660	4200	900	3100
4-Bromophenyl-Phenylether	U	1600	ug/Kgdrywt	3	330	2100	540	1600
Hexachlorobenzene	U	1600	ug/Kgdrywt	3	330	2100	520	1600
Pentachlorophenol	U	3900	ug/Kgdrywt	3	820	5200	1500	3900
Carbazole	U	1600	ug/Kgdrywt	3	330	2100	700	1600
Di-N-Butylphthalate	U	1600	ug/Kgdrywt	3	330	2100	640	1600
Benzidine	U	7100	ug/Kgdrywt	3	1500	9500	630	7100
Butylbenzylphthalate	U	1600	ug/Kgdrywt	3	330	2100	590	1600
3,3'-Dichlorobenzidine	U	1600	ug/Kgdrywt	3	330	2100	720	1600
Bis(2-Ethylhexyl)Phthalate	U	1600	ug/Kgdrywt	3	330	2100	620	1600
Di-N-Octylphthalate	U	1600	ug/Kgdrywt	3	330	2100	1300	1600
1,1'-biphenyl	U	1600	ug/Kgdrywt	3	330	2100	460	1600
2,6-Dichlorophenol	U	1600	ug/Kgdrywt	3	330	2100	1000	1600
Caprolactam	U	1600	ug/Kgdrywt	3	330	2100	910	1600
2-Fluorophenol		73.3	%					
Phenol-D6		98.2	%					
Nitrobenzene-d5	*	115.	%					
2-Fluorobiphenyl	*	140.	%					
2,4,6-Tribromophenol		68.8	%					
Terphenyl-d14	*	173.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-7
Client ID: SITE 4TS-HWF2-L1
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0748.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165006

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
Bis(2-Chloroethyl)Ether		14	ug/L	1	10	10.	2.0	7.5
2-Chlorophenol	U	7.5	ug/L	1	10	10.	3.2	7.5
1,3-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
1,4-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.2	7.5
1,2-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.4	7.5
2,2'-Oxybis(1-Chloropropane)	U	7.5	ug/L	1	10	10.	2.1	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
n-Nitroso-di-n-propylamine	U	7.5	ug/L	1	10	10.	1.9	7.5
3&4-Methylphenol	U	7.5	ug/L	1	10	10.	5.6	7.5
Hexachloroethane	U	7.5	ug/L	1	10	10.	2.3	7.5
Nitrobenzene	ULL	7.5	ug/L	1	10	10.	3.1	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2-Nitrophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Bis(2-chloroethoxy)methane	J	5.6	ug/L	1	10	10.	2.1	7.5
2,4-Dichlorophenol	U	7.5	ug/L	1	10	10.	3.0	7.5
1,2,4-Trichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Chloroaniline	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobutadiene	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Chloro-3-methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2,4,6-Trichlorophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.9	7.5
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
2,6-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.0	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	1.0	19.
Dibenzofuran	U	7.5	ug/L	1	10	10.	1.6	7.5
2,4-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.2	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
4-Chlorophenyl-phenylether	U	7.5	ug/L	1	10	10.	2.2	7.5
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.
4,6-Dinitro-2-methylphenol	U	19	ug/L	1	25	25.	2.0	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-7
Client ID: SITE 4TS-HWF2-L1
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0748.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165006

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
n-Nitrosodiphenylamine	U	7.5	ug/L	1	10	10.	3.7	7.5
4-Bromophenyl-phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
Di-n-butylphthalate	U	7.5	ug/L	1	10	10.	2.5	7.5
Butylbenzylphthalate	U	7.5	ug/L	1	10	10.	1.9	7.5
3,3'-Dichlorobenzidine	U	7.5	ug/L	1	10	10.	1.1	7.5
Bis(2-ethylhexyl)phthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Di-n-octylphthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.
1,1'-Biphenyl	U	7.5	ug/L	1	10	10.	2.7	7.5
1,2-Diphenylhydrazine	U	15	ug/L	1	20	20.	2.0	15.
2,6-Dichlorophenol	U	7.5	ug/L	1	10	10.	4.0	7.5
Benzidine	ULL	38	ug/L	1	50	50.	16.	38.
Benzoic Acid	U	19	ug/L	1	25	25.	3.0	19.
Benzyl Alcohol	U	15	ug/L	1	20	20.	1.2	15.
Caprolactam	UL	7.5	ug/L	1	10	10.	0.40	7.5
2-Fluorophenol		21.2	%					
Phenol-d6		13.8	%					
Nitrobenzene-d5		89.8	%					
2-Fluorobiphenyl		99.1	%					
2,4,6-Tribromophenol		66.1	%					
Terphenyl-d14		97.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-8DL
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0776.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 92.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	1600	ug/Kgdrywt	3	330	2100	980	1600
Bis(2-Chloroethyl)Ether	U	1600	ug/Kgdrywt	3	330	2100	510	1600
2-Chlorophenol	U	1600	ug/Kgdrywt	3	330	2100	1000	1600
1,3-Dichlorobenzene	U	1600	ug/Kgdrywt	3	330	2100	490	1600
1,4-Dichlorobenzene	U	1600	ug/Kgdrywt	3	330	2100	540	1600
1,2-Dichlorobenzene	U	1600	ug/Kgdrywt	3	330	2100	560	1600
Benzyl Alcohol	U	3100	ug/Kgdrywt	3	660	4200	360	3100
2-Methylphenol	U	1600	ug/Kgdrywt	3	330	2100	1300	1600
2,2'-Oxybis(1-Chloropropane)	U	1600	ug/Kgdrywt	3	330	2100	560	1600
3&4-Methylphenol	U	1600	ug/Kgdrywt	3	330	2100	1200	1600
N-Nitroso-Di-N-Propylamine	U	1600	ug/Kgdrywt	3	330	2100	520	1600
Hexachloroethane	U	1600	ug/Kgdrywt	3	330	2100	610	1600
Nitrobenzene	U	1600	ug/Kgdrywt	3	330	2100	580	1600
Isophorone	U	1600	ug/Kgdrywt	3	330	2100	470	1600
2-Nitrophenol	U	1600	ug/Kgdrywt	3	330	2100	1000	1600
2,4-Dimethylphenol	U	1600	ug/Kgdrywt	3	330	2100	1000	1600
Bis(2-Chloroethoxy)Methane	U	1600	ug/Kgdrywt	3	330	2100	610	1600
2,4-Dichlorophenol	U	1600	ug/Kgdrywt	3	330	2100	950	1600
1,2,4-Trichlorobenzene	U	1600	ug/Kgdrywt	3	330	2100	510	1600
Benzoic Acid	U	3900	ug/Kgdrywt	3	820	5200	2200	3900
4-Chloroaniline	U	1600	ug/Kgdrywt	3	330	2100	750	1600
Hexachlorobutadiene	U	1600	ug/Kgdrywt	3	330	2100	520	1600
4-Chloro-3-Methylphenol	U	1600	ug/Kgdrywt	3	330	2100	1000	1600
2,4,6-Trichlorophenol	U	1600	ug/Kgdrywt	3	330	2100	980	1600
2,4,5-Trichlorophenol	U	3900	ug/Kgdrywt	3	820	5200	980	3900
2-Chloronaphthalene	U	1600	ug/Kgdrywt	3	330	2100	550	1600
2-Nitroaniline	U	3900	ug/Kgdrywt	3	820	5200	470	3900
Dimethyl Phthalate	U	1600	ug/Kgdrywt	3	330	2100	490	1600
2,6-Dinitrotoluene	U	1600	ug/Kgdrywt	3	330	2100	500	1600
3-Nitroaniline	U	3900	ug/Kgdrywt	3	820	5200	590	3900
2,4-Dinitrophenol	U	3900	ug/Kgdrywt	3	820	5200	2400	3900
4-Nitrophenol	U	3900	ug/Kgdrywt	3	820	5200	2000	3900
Dibenzofuran	U	1600	ug/Kgdrywt	3	330	2100	500	1600
2,4-Dinitrotoluene	U	1600	ug/Kgdrywt	3	330	2100	540	1600
Diethylphthalate	U	1600	ug/Kgdrywt	3	330	2100	500	1600

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-8DL
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0776.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164995

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 92.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Chlorophenyl-Phenylether	U	1600	ug/Kgdrywt	3	330	2100	490	1600
4-Nitroaniline	U	3900	ug/Kgdrywt	3	820	5200	850	3900
4,6-Dinitro-2-Methylphenol	U	3900	ug/Kgdrywt	3	820	5200	2100	3900
N-Nitrosodiphenylamine	U	1600	ug/Kgdrywt	3	330	2100	1400	1600
1,2-Diphenylhydrazine	U	3100	ug/Kgdrywt	3	660	4200	900	3100
4-Bromophenyl-Phenylether	U	1600	ug/Kgdrywt	3	330	2100	540	1600
Hexachlorobenzene	U	1600	ug/Kgdrywt	3	330	2100	520	1600
Pentachlorophenol	U	3900	ug/Kgdrywt	3	820	5200	1500	3900
Carbazole	U	1600	ug/Kgdrywt	3	330	2100	700	1600
Di-N-Butylphthalate	U	1600	ug/Kgdrywt	3	330	2100	640	1600
Benzidine	U	7100	ug/Kgdrywt	3	1500	9500	630	7100
Butylbenzylphthalate	U	1600	ug/Kgdrywt	3	330	2100	590	1600
3,3'-Dichlorobenzidine	U	1600	ug/Kgdrywt	3	330	2100	720	1600
Bis(2-Ethylhexyl)Phthalate	U	1600	ug/Kgdrywt	3	330	2100	620	1600
Di-N-Octylphthalate	U	1600	ug/Kgdrywt	3	330	2100	1300	1600
1,1'-biphenyl	U	1600	ug/Kgdrywt	3	330	2100	460	1600
2,6-Dichlorophenol	U	1600	ug/Kgdrywt	3	330	2100	1000	1600
Caprolactam	U	1600	ug/Kgdrywt	3	330	2100	910	1600
2-Fluorophenol		55.6	%					
Phenol-D6		76.0	%					
Nitrobenzene-d5		91.6	%					
2-Fluorobiphenyl	*	114.	%					
2,4,6-Tribromophenol		57.6	%					
Terphenyl-d14	*	165.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-10
Client ID: SITE 4TS-HWF2-L2
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0749.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165006

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
Bis(2-Chloroethyl)Ether	U	7.5	ug/L	1	10	10.	2.0	7.5
2-Chlorophenol	U	7.5	ug/L	1	10	10.	3.2	7.5
1,3-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
1,4-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.2	7.5
1,2-Dichlorobenzene	U	7.5	ug/L	1	10	10.	2.4	7.5
2,2'-Oxybis(1-Chloropropane)	U	7.5	ug/L	1	10	10.	2.1	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
n-Nitroso-di-n-propylamine	U	7.5	ug/L	1	10	10.	1.9	7.5
3&4-Methylphenol	U	7.5	ug/L	1	10	10.	5.6	7.5
Hexachloroethane	U	7.5	ug/L	1	10	10.	2.3	7.5
Nitrobenzene	ULL	7.5	ug/L	1	10	10.	3.1	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2-Nitrophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Bis(2-chloroethoxy)methane	U	7.5	ug/L	1	10	10.	2.1	7.5
2,4-Dichlorophenol	U	7.5	ug/L	1	10	10.	3.0	7.5
1,2,4-Trichlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Chloroaniline	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobutadiene	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Chloro-3-methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2,4,6-Trichlorophenol	U	7.5	ug/L	1	10	10.	2.7	7.5
2,4,5-Trichlorophenol	U	19	ug/L	1	25	25.	3.6	19.
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.9	7.5
2-Nitroaniline	U	19	ug/L	1	25	25.	1.8	19.
Dimethyl phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
2,6-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.0	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
2,4-Dinitrophenol	U	19	ug/L	1	25	25.	1.0	19.
Dibenzofuran	U	7.5	ug/L	1	10	10.	1.6	7.5
2,4-Dinitrotoluene	U	7.5	ug/L	1	10	10.	2.2	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
4-Chlorophenyl-phenylether	U	7.5	ug/L	1	10	10.	2.2	7.5
4-Nitroaniline	U	19	ug/L	1	25	25.	1.6	19.
4,6-Dinitro-2-methylphenol	U	19	ug/L	1	25	25.	2.0	19.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-10
Client ID: SITE 4TS-HWF2-L2
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0749.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165006

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
n-Nitrosodiphenylamine	U	7.5	ug/L	1	10	10.	3.7	7.5
4-Bromophenyl-phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Hexachlorobenzene	U	7.5	ug/L	1	10	10.	2.1	7.5
Pentachlorophenol	U	19	ug/L	1	25	25.	2.3	19.
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
Di-n-butylphthalate	U	7.5	ug/L	1	10	10.	2.5	7.5
Butylbenzylphthalate	U	7.5	ug/L	1	10	10.	1.9	7.5
3,3'-Dichlorobenzidine	U	7.5	ug/L	1	10	10.	1.1	7.5
Bis(2-ethylhexyl)phthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
Di-n-octylphthalate	U	7.5	ug/L	1	10	10.	1.8	7.5
4-Nitrophenol	U	19	ug/L	1	25	25.	1.8	19.
1,1'-Biphenyl	U	7.5	ug/L	1	10	10.	2.7	7.5
1,2-Diphenylhydrazine	U	15	ug/L	1	20	20.	2.0	15.
2,6-Dichlorophenol	U	7.5	ug/L	1	10	10.	4.0	7.5
Benzidine	ULL	38	ug/L	1	50	50.	16.	38.
Benzoic Acid	U	19	ug/L	1	25	25.	3.0	19.
Benzyl Alcohol	U	15	ug/L	1	20	20.	1.2	15.
Caprolactam	JL	1.6	ug/L	1	10	10.	0.40	7.5
2-Fluorophenol		28.6	%					
Phenol-d6		21.4	%					
Nitrobenzene-d5		60.4	%					
2-Fluorobiphenyl		68.3	%					
2,4,6-Tribromophenol		54.9	%					
Terphenyl-d14		76.7	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0728.D U0729.D U0727.D U0730.D U0731.D U0732.D **Column ID:**
Calibration Date(s): 19-JUN-15 13:13 19-JUN-15 16:06

	10.0000 Level 1	25.0000 Level 2	50.0000 Level 3	75.0000 Level 4	100.0000 Level 5	125.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Phenol	1.66669	1.61067	2.02663	1.69591	1.57802	1.47795	AVG		1.67598		11.21091	30.00000	O
Bis(2-Chloroethyl)ether	1.47185	1.24516	1.44356	1.12681	1.02958	0.90316	AVG		1.20335		18.86624	15.00000	W(
2-Chlorophenol	1.34919	1.32018	1.34159	1.33761	1.27285	1.17617	AVG		1.29960		5.10900	15.00000	O
1,3-Dichlorobenzene	1.51198	1.36288	1.35731	1.30648	1.29519	1.16527	AVG		1.33318		8.47177	15.00000	O
1,4-Dichlorobenzene	1.30890	1.33128	1.32705	1.26763	1.24544	1.08357	AVG		1.26065		7.38715	30.00000	O
1,2-Dichlorobenzene	1.03710	1.28878	1.24556	1.15328	1.16147	0.98413	AVG		1.14505		10.23301	15.00000	O
Benzyl alcohol	0.65720	0.84633	0.85382	0.84879	0.78801	0.76469	AVG		0.79314		9.58948	15.00000	O
2-Methylphenol	0.93966	1.20590	1.20614	1.25403	1.21385	1.21489	AVG		1.17241		9.84494	15.00000	O
2,2'-Oxybis(1-chloropropane	1.83304	2.32381	2.26813	2.11713	2.07692	1.82076	AVG		2.07330		10.21221	15.00000	O
N-Nitroso-di-n-propylamine	0.68366	0.80891	0.83869	0.74640	0.74205	0.70200	AVG		0.75362		7.97043	15.00000	O
3&4-Methylphenol	0.96723	1.24062	1.24705	1.19212	1.16511	1.09228	AVG		1.15074		9.22688	15.00000	O
Hexachloroethane	0.48133	0.58231	0.57091	0.49935	0.50368	0.42522	AVG		0.51047		11.45671	15.00000	O
Nitrobenzene	0.31533	0.31755	0.30430	0.28008	0.28352	0.35814	AVG		0.30982		9.16518	15.00000	O
Isophorone	0.62098	0.61614	0.58964	0.58410	0.58648	0.64030	AVG		0.60627		3.78379	15.00000	O
2-Nitrophenol	0.16852	0.17514	0.17251	0.16740	0.16478	0.15128	AVG		0.16660		5.02192	30.00000	O
2,4-Dimethylphenol	0.32933	0.32690	0.32377	0.32430	0.30836	0.26573	AVG		0.31307		7.77095	15.00000	O
Bis(2-Chloroethoxy)methane	0.49250	0.40697	0.33520	0.35571	0.35729	0.40056	AVG		0.39137		14.51859	15.00000	O
Benzoic acid	0.01453	0.03974	0.09725	0.11875	0.12814	0.13081	AVG		0.08820		56.00482	15.00000	W(
2,4-Dichlorophenol	0.23964	0.25119	0.25054	0.24457	0.24016	0.22512	AVG		0.24187		3.95505	30.00000	O
2,6-Dichlorophenol	0.22115	0.21895	0.19486	0.18584	0.18501	0.17025	AVG		0.19601		10.32449	15.00000	O
1,2,4-Trichlorobenzene	0.27585	0.26458	0.24919	0.23528	0.22762	0.20714	AVG		0.24328		10.34204	15.00000	O
4-Chloroaniline	0.39500	0.40127	0.38530	0.35266	0.33139	0.29997	AVG		0.36093		11.10979	15.00000	O
Hexachlorobutadiene	0.14345	0.14668	0.13202	0.12305	0.12076	0.10926	AVG		0.12920		11.07038	30.00000	O
Caprolactam	0.10242	0.09927	0.10216	0.10487	0.10654	0.09944	AVG		0.10245		2.82417	15.00000	O
4-Chloro-3-Methylphenol	0.27275	0.28283	0.27112	0.27810	0.27731	0.25165	AVG		0.27229		4.01497	30.00000	O
2,4,6-Trichlorophenol	0.32158	0.33291	0.34552	0.30667	0.31536	0.28082	AVG		0.31714		7.05802	30.00000	O
2,4,5-Trichlorophenol	0.32547	0.34197	0.37092	0.34588	0.34743	0.31837	AVG		0.34167		5.41547	15.00000	O
1,1'-Biphenyl	1.31084	1.27212	1.28513	1.10679	1.06463	0.85366	AVG		1.14886		15.37513	15.00000	W(
2-Chloronaphthalene	1.01122	0.97678	1.12771	0.96178	1.18390	1.13376	AVG		1.06586		8.81350	15.00000	O
2-Nitroaniline	0.33499	0.34532	0.38240	0.33384	0.35914	0.32614	AVG		0.34697		5.98424	15.00000	O
Dimethyl Phthalate	1.14947	1.15506	1.20824	1.12555	1.13711	0.99820	AVG		1.12894		6.20839	15.00000	O
2,6-Dinitrotoluene	0.25296	0.27254	0.28835	0.23243	0.24113	0.20797	AVG		0.24923		11.54229	15.00000	O
3-Nitroaniline	0.28089	0.29825	0.31066	0.31109	0.31968	0.28098	AVG		0.30026		5.47927	15.00000	O
2,4-Dinitrophenol	14710	43502	110868	155123	206210	268542	QUA	0.08550	4.61175	2.97364	0.99110	0.99000	O
4-Nitrophenol	0.20541	0.21988	0.22950	0.21272	0.23751	0.18430	AVG		0.21489		8.78114	15.00000	O
Dibenzofuran	1.43733	1.38286	1.38334	1.29646	1.14988	1.00140	AVG		1.27521		13.15444	15.00000	O
2,4-Dinitrotoluene	0.34924	0.34820	0.36054	0.33191	0.32554	0.31142	AVG		0.33781		5.35617	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0728.D U0729.D U0727.D U0730.D U0731.D U0732.D **Column ID:**
Calibration Date(s): 19-JUN-15 13:13
19-JUN-15 16:06

Diethylphthalate	1.23367	1.21758	1.24032	1.01870	1.05282	0.87014	AVG		1.10554		13.59027	15.00000	O
4-Chlorophenyl-phenylether	0.52237	0.49204	0.44400	0.39080	0.36928	0.30911	AVG		0.42127		18.97770	15.00000	W(
4-Nitroaniline	0.26917	0.28708	0.30205	0.28210	0.27172	0.24301	AVG		0.27586		7.23592	15.00000	O
4,6-Dinitro-2-Methylphenol	0.10331	0.11324	0.12415	0.11610	0.11380	0.10794	AVG		0.11309		6.30358	15.00000	O
N-Nitrosodiphenylamine	0.54975	0.53008	0.54430	0.49142	0.48849	0.48036	AVG		0.51407		5.99379	30.00000	O
1,2-Diphenylhydrazine	0.72008	0.67410	0.67343	0.62561	0.64984	0.69988	AVG		0.67382		5.01885	15.00000	O
4-Bromophenyl-phenylether	0.17383	0.15886	0.16231	0.15478	0.14932	0.14755	AVG		0.15778		6.10857	15.00000	O
Hexachlorobenzene	0.21335	0.19108	0.19506	0.18707	0.16511	0.16442	AVG		0.18602		10.08385	15.00000	O
Pentachlorophenol	0.08269	0.09268	0.09849	0.08537	0.08624	0.08093	AVG		0.08773		7.55759	30.00000	O
Carbazole	0.87289	0.84083	0.79628	0.73753	0.69206	0.69822	AVG		0.77297		9.77126	15.00000	O
Di-n-butylphthalate	1.28575	1.20104	1.12249	1.01338	0.93009	0.88608	AVG		1.07314		14.61667	15.00000	O
Benzidine	0.16880	0.24464	0.25051	0.23590	0.19999	0.20075	AVG		0.21676		14.76354	15.00000	O
Butylbenzylphthalate	0.63745	0.60785	0.59899	0.56193	0.54064	0.58334	AVG		0.58837		5.84039	15.00000	O
3,3'-Dichlorobenzidine	0.24327	0.25314	0.23408	0.23004	0.21830	0.19949	AVG		0.22972		8.24976	15.00000	O
bis(2-Ethylhexyl)phthalate	0.85002	0.82486	0.81719	0.78010	0.74813	0.78973	AVG		0.80167		4.52885	15.00000	O
Di-n-octylphthalate	1.93756	1.96325	2.17267	2.12066	1.96564	2.28869	AVG		2.07474		6.83767	30.00000	O
2-Fluorophenol	1.24679	1.76607	1.80022	1.35030	1.68772	1.25294	AVG		1.51734		17.23455	15.00000	
Phenol-D6	1.60563	1.49449	1.78687	1.46726	1.40861	1.29774	AVG		1.51010		11.20684	15.00000	
Nitrobenzene-D5	0.31787	0.32957	0.31722	0.33771	0.31328	0.38298	AVG		0.33311		7.82748	15.00000	
2-Fluorobiphenyl	1.10233	1.08998	1.04686	0.95871	0.99209	0.83333	AVG		1.00388		9.98311	15.00000	
2,4,6-Tribromophenol	0.15907	0.16150	0.16738	0.14687	0.14683	0.12045	AVG		0.15035		11.16458	15.00000	
Terphenyl-D14	0.81636	0.73026	0.70110	0.65096	0.60445	0.70001	AVG		0.70052		10.29202	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-u.i\U061915B.b\U0733.D
Report Date: 22-Jun-2015 07:58

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: WG165116-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: INDcheck8270.spk
Quant Type: ISTD
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U061915B.b\U8270C78.m
Misc Info: WG165116,WG165116,WG165116-4

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	51.6	103.24	80-120
3 Pyridine	50.0	66.9	133.73*	80-120
2 N-Nitrosodimethyla	50.0	58.4	116.91	80-120
5 2-Picoline	50.0	63.8	127.59*	80-120
6 N-Nitrosomethyleth	50.0	63.1	126.21*	80-120
7 Methyl Methanesulf	50.0	48.5	97.08	80-120
9 N-Nitrosodiethylam	50.0	69.0	138.10*	80-120
10 Ethyl Methanesulfo	50.0	55.7	111.45	80-120
11 Benzaldehyde	50.0	15.8	31.63*	80-120
14 Aniline	50.0	49.2	98.43	80-120
13 Phenol	50.0	51.6	103.28	80-120
16 Bis(2-Chloroethyl)	50.0	57.5	115.03	80-120
17 2-Chlorophenol	50.0	54.4	108.75	80-120
18 1,3-Dichlorobenzen	50.0	54.6	109.13	80-120
20 1,4-Dichlorobenzen	50.0	56.3	112.68	80-120
22 Benzyl alcohol	50.0	53.0	106.01	80-120
21 1,2-Dichlorobenzen	50.0	57.6	115.10	80-120
25 2,2'-Oxybis(1-chlo	50.0	53.1	106.28	80-120
23 2-Methylphenol	50.0	55.2	110.47	80-120
26 Acetophenone	100	91.6	91.55	80-120
27 N-Nitrosopyrrolidi	50.0	60.6	121.16*	80-120
30 N-Nitrosomorpholin	50.0	61.2	122.51*	80-120
28 N-Nitroso-di-n-pro	50.0	54.4	108.75	80-120
29 3&4-Methylphenol	50.0	56.4	112.81	80-120
32 Hexachloroethane	50.0	59.3	118.61	80-120
31 o-Toluidine	50.0	61.4	122.79*	80-120
34 Nitrobenzene	50.0	53.9	107.85	80-120
35 N-Nitrosopiperidin	50.0	55.5	110.97	80-120
36 Isophorone	50.0	53.4	106.92	80-120
37 2-Nitrophenol	50.0	53.3	106.57	80-120
38 2,4-Dimethylphenol	50.0	54.8	109.67	80-120
40 Bis(2-Chloroethoxy	50.0	45.4	90.76	80-120
39 O,O,O-Triethylphos	50.0	52.1	104.24	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	156	312.84*	80-120
42 2,4-Dichlorophenol	50.0	52.5	105.10	80-120
44 1,2,4-Trichloroben	50.0	53.7	107.37	80-120
46 Naphthalene	50.0	55.0	109.93	80-120
43 2,6-Dichlorophenol	50.0	54.6	109.19	80-120
47 4-Chloroaniline	50.0	55.2	110.46	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U061915B.b\U0733.D
Report Date: 22-Jun-2015 07:58

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	51.5	103.00	80-120
49 Hexachlorobutadien	50.0	54.8	109.71	80-120
51 N-Nitroso-Di-N-But	50.0	53.6	107.18	80-120
53 Caprolactam	50.0	51.5	103.07	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	48.9	97.88	80-120
55 4-Chloro-3-Methylp	50.0	56.5	113.07	80-120
57 2-Methylnaphthalen	50.0	53.2	106.35	80-120
58 1-Methylnaphthalen	50.0	52.4	104.90	80-120
60 1,2,4,5-Tetrachlor	100	95.9	95.92	80-120
59 Hexachlorocyclopen	50.0	43.6	87.17	80-120
61 2,4,6-Trichlorophe	50.0	54.4	108.78	80-120
62 2,4,5-Trichlorophe	50.0	57.3	114.65	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	51.4	102.90	80-120
65 1,1'-Biphenyl	50.0	56.3	112.68	80-120
66 2-Chloronaphthalen	50.0	57.6	115.23	80-120
67 1-Chloronaphthalen	50.0	42.9	85.89	80-120
69 2-Nitroaniline	50.0	55.6	111.31	80-120
70 1,4-Naphthoquinone	50.0	65.2	130.49*	80-120
72 Dimethyl Phthalate	50.0	53.8	107.58	80-120
73 1,3-Dinitrobenzene	50.0	51.1	102.23	80-120
75 Acenaphthylene	50.0	47.3	94.59	80-120
74 2,6-Dinitrotoluene	50.0	58.7	117.44	80-120
77 3-Nitroaniline	50.0	52.0	104.12	80-120
79 Acenaphthene	50.0	56.1	112.27	80-120
80 2,4-Dinitrophenol	50.0	47.1	94.23	80-120
83 Dibenzofuran	50.0	54.1	108.27	80-120
81 Pentachlorobenzene	50.0	53.6	107.12	80-120
82 4-Nitrophenol	50.0	52.6	105.14	80-120
84 2,4-Dinitrotoluene	50.0	52.1	104.25	80-120
85 1-Naphthylamine	50.0	53.2	106.44	80-120
88 2-Naphthylamine	50.0	54.8	109.65	80-120
87 2,3,4,6-Tetrachlor	50.0	55.0	109.91	80-120
89 Diethylphthalate	50.0	57.7	115.36	80-120
91 Fluorene	50.0	55.1	110.20	80-120
92 4-Chlorophenyl-phe	50.0	54.0	108.00	80-120
90 O,O-diethyl-o-2-py	50.0	53.5	107.02	80-120
93 5-Nitro-O-Toluidin	50.0	55.3	110.62	80-120
94 4-Nitroaniline	50.0	55.6	111.10	80-120
96 N-Nitrosodiphenyla	100	85.4	85.45	80-120
95 4,6-Dinitro-2-Meth	50.0	57.0	114.06	80-120
98 1,2-Diphenylhydraz	50.0	51.4	102.90	80-120
101 Sulfotepp	50.0	54.8	109.59	80-120
102 Diallate	50.0	53.4	106.81	80-120
103 Phorate	50.0	29.0	57.98*	80-120
105 4-Bromophenyl-phen	50.0	52.6	105.20	80-120
106 Phenacetin	50.0	54.9	109.87	80-120
104 1,3,5-Trinitrobenz	50.0	49.8	99.55	80-120
107 Hexachlorobenzene	50.0	51.3	102.52	80-120
108 Dimethoate	50.0	55.1	110.23	80-120
109 Atrazine	50.0	23.4	46.77*	80-120
110 4-Aminobiphenyl	50.0	42.1	84.29	80-120
111 Pentachlorophenol	50.0	62.9	125.72*	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U061915B.b\U0733.D
Report Date: 22-Jun-2015 07:58

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
113 Pronamide	50.0	49.9	99.81	80-120
112 Pentachloronitrobe	50.0	51.8	103.60	80-120
116 Phenanthrene	50.0	52.5	104.93	80-120
115 Disulfoton	50.0	50.1	100.30	80-120
118 Anthracene	50.0	54.0	107.93	80-120
117 Dinoseb	50.0	51.6	103.26	80-120
119 Carbazole	50.0	52.0	104.01	80-120
120 Methyl Parathion	50.0	51.7	103.39	80-120
121 Di-n-butylphthalat	50.0	56.6	113.16	80-120
122 Ethyl Parathion	50.0	49.3	98.67	80-120
123 4-Nitroquinoline-1	50.0	53.0	106.00	80-120
124 Methapyrilene	50.0	45.3	90.66	80-120
125 Isodrin	50.0	51.0	102.03	80-120
126 Fluoranthene	50.0	52.4	104.89	80-120
127 Benzidine	50.0	55.5	110.93	80-120
128 Pyrene	50.0	53.4	106.74	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	58.9	117.73	80-120
133 Chlorobenzilate	50.0	52.9	105.73	80-120
134 Famphur	50.0	24.9	49.85*	80-120
135 3,3'-Dimethylbenzi	50.0	102	204.75*	80-120
136 Butylbenzylphthala	50.0	55.7	111.43	80-120
137 Bis(2-ethylhexyl)a	50.0	51.2	102.40	80-120
138 2-Acetylaminofluor	50.0	54.7	109.33	80-120
140 Benzo(a)anthracene	50.0	52.4	104.78	80-120
139 3,3'-Dichlorobenzi	50.0	54.3	108.58	80-120
141 Chrysene	50.0	54.9	109.77	80-120
143 bis(2-Ethylhexyl)p	50.0	55.5	111.01	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	59.7	119.50	80-120
147 Benzo(b)fluoranthe	50.0	55.1	110.23	80-120
146 7,12-Dimethylbenz(	50.0	54.5	109.03	80-120
148 Benzo(k)fluoranthe	50.0	57.8	115.54	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	50.8	101.69	80-120
151 3-Methylcholanthre	50.0	58.1	116.14	80-120
152 Dibenz(a,j)acridin	50.0	47.9	95.72	80-120
153 Indeno(1,2,3-cd)py	50.0	53.2	106.43	80-120
155 Dibenzo(a,h)anthra	50.0	52.7	105.48	80-120
156 Benzo(g,h,i)peryle	50.0	52.2	104.51	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	20-110
$ 12 Phenol-D6	100	0.000	*	10-115
$ 33 Nitrobenzene-D5	50.0	0.000	*	40-110
$ 63 2-Fluorobiphenyl	50.0	0.000	*	50-110
$ 100 2,4,6-Tribromophe	100	0.000	*	40-125
$ 129 Terphenyl-D14	50.0	0.000	*	50-135

Data File: \\target_server\gg\chem\gcms-u.i\U061915B.b\U0733.D
Report Date: 22-Jun-2015 07:58

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0758.D U0759.D U0757.D U0760.D U0761.D U0762.D **Column ID:**
Calibration Date(s): 22-JUN-15 13:48 22-JUN-15 16:08

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Crv					Max	
	10.0000	25.0000	50.0000	75.0000	100.0000	125.0000	New	b	m1	m2	%RSD	%RSD	
Phenol	1.55176	1.49106	1.54595	1.45120	1.36000	1.29535	AVG		1.44922		7.12175	30.00000	O
Bis(2-Chloroethyl)ether	126246	272485	465496	680429	780864	908088	QUA	0.03679	0.42126	0.30329	0.99524	0.99000	O
2-Chlorophenol	1.33316	1.28701	1.37314	1.33406	1.28825	1.27065	AVG		1.31438		2.95380	15.00000	O
1,3-Dichlorobenzene	1.42890	1.39802	1.39834	1.39448	1.32125	1.24340	AVG		1.36406		5.06306	15.00000	O
1,4-Dichlorobenzene	1.44845	1.38872	1.39906	1.32569	1.26492	1.16602	AVG		1.33214		7.75519	30.00000	O
1,2-Dichlorobenzene	1.41052	1.33183	1.34175	1.25871	1.10633	1.03464	AVG		1.24730		11.77933	15.00000	O
Benzyl alcohol	0.78283	0.82654	0.84633	0.80384	0.71470	0.75693	AVG		0.78853		6.08271	15.00000	O
2-Methylphenol	1.23970	1.16464	1.22111	1.23711	1.23117	1.21538	AVG		1.21819		2.28474	15.00000	O
2,2'-Oxybis(1-chloropropane	2.17915	2.04345	2.04618	1.97350	1.85226	1.77765	AVG		1.97870		7.33621	15.00000	O
N-Nitroso-di-n-propylamine	0.72331	0.64474	0.62319	0.62257	0.54284	0.50357	AVG		0.61004		12.74291	15.00000	O
3&4-Methylphenol	1.26957	1.20201	1.24113	1.23096	1.12099	1.03552	AVG		1.18336		7.47559	15.00000	O
Hexachloroethane	0.53280	0.51367	0.51605	0.48694	0.42351	0.38817	AVG		0.47686		12.16781	15.00000	O
Nitrobenzene	0.26019	0.24388	0.24486	0.23771	0.21237	0.21190	AVG		0.23515		8.20976	15.00000	O
Isophorone	0.56285	0.54220	0.54812	0.52863	0.49633	0.46796	AVG		0.52435		6.79615	15.00000	O
2-Nitrophenol	0.18452	0.18900	0.20231	0.19577	0.17750	0.18369	AVG		0.18880		4.75618	30.00000	O
2,4-Dimethylphenol	0.27722	0.28385	0.28869	0.27891	0.25667	0.22409	AVG		0.26824		9.03971	15.00000	O
Bis(2-Chloroethoxy)methane	0.49261	0.37962	0.38984	0.37418	0.34074	0.35136	AVG		0.38806		14.01229	15.00000	O
Benzoic acid	0.01756	0.05121	0.11801	0.14764	0.16114	0.14928	AVG		0.10747		55.20627	15.00000	W(
2,4-Dichlorophenol	0.26044	0.26958	0.28852	0.27237	0.26549	0.25880	AVG		0.26920		4.00743	30.00000	O
2,6-Dichlorophenol	77989	187997	336165	497891	583465	714913	QUA	0.04094	2.33318	7.25030	0.99188	0.99000	O
1,2,4-Trichlorobenzene	0.28345	0.27908	0.27269	0.24439	0.21182	0.20334	AVG		0.24913		14.06793	15.00000	O
4-Chloroaniline	138150	328733	598262	901378	1062359	1252101	QUA	0.06593	1.03140	2.59919	0.99294	0.99000	O
Hexachlorobutadiene	0.11372	0.11280	0.12391	0.11400	0.10338	0.08762	AVG		0.10924		11.37838	30.00000	O
Caprolactam	0.10576	0.10957	0.11382	0.11591	0.11315	0.10940	AVG		0.11127		3.32112	15.00000	O
4-Chloro-3-Methylphenol	0.22570	0.22899	0.24689	0.24024	0.23409	0.22204	AVG		0.23299		4.00869	30.00000	O
2,4,6-Trichlorophenol	0.31584	0.31606	0.35173	0.34201	0.27951	0.28786	AVG		0.31550		9.04899	30.00000	O
2,4,5-Trichlorophenol	0.33364	0.32951	0.35906	0.37151	0.32929	0.32488	AVG		0.34131		5.61916	15.00000	O
1,1'-Biphenyl	1.44435	1.43503	1.26412	1.24851	0.91953	0.79599	AVG		1.18459		22.71036	15.00000	W(
2-Chloronaphthalene	1.22423	1.21542	1.09093	1.04117	0.96641	1.13060	AVG		1.11146		9.02343	15.00000	O
2-Nitroaniline	0.24772	0.24691	0.24808	0.25366	0.22522	0.23065	AVG		0.24204		4.67423	15.00000	O
Dimethyl Phthalate	1.19539	1.16366	1.19378	1.25572	1.08266	1.06409	AVG		1.15922		6.30927	15.00000	O
2,6-Dinitrotoluene	0.28988	0.27550	0.29675	0.30604	0.28725	0.23613	AVG		0.28193		8.73427	15.00000	O
3-Nitroaniline	0.33271	0.32248	0.31877	0.33674	0.30862	0.30541	AVG		0.32079		3.91393	15.00000	O
2,4-Dinitrophenol	0.11194	0.13994	0.16460	0.17148	0.15832	0.15486	AVG		0.15019		14.33212	15.00000	O
4-Nitrophenol	0.20310	0.22625	0.24157	0.21373	0.20200	0.18567	AVG		0.21205		9.32075	15.00000	O
Dibenzofuran	1.49959	1.45760	1.52948	1.40745	1.20084	0.97839	AVG		1.34556		15.92896	15.00000	W(
2,4-Dinitrotoluene	0.36167	0.36770	0.36060	0.35401	0.34793	0.34289	AVG		0.35580		2.60876	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0758.D U0759.D U0757.D U0760.D U0761.D U0762.D **Column ID:**
Calibration Date(s): 22-JUN-15 13:48
22-JUN-15 16:08

Diethylphthalate	1.20247	1.17334	1.14190	1.10982	0.96163	0.82800	AVG		1.06953		13.56814	15.00000	O
4-Chlorophenyl-phenylether	0.50253	0.47273	0.43072	0.38739	0.24466	0.24212	AVG		0.38002		29.67063	15.00000	W(
4-Nitroaniline	0.29357	0.29578	0.31482	0.30449	0.29345	0.28191	AVG		0.29734		3.76510	15.00000	O
4,6-Dinitro-2-Methylphenol	0.10664	0.11323	0.12865	0.12890	0.12110	0.12375	AVG		0.12038		7.36167	15.00000	O
N-Nitrosodiphenylamine	0.63806	0.61779	0.65425	0.57796	0.51128	0.54362	AVG		0.59049		9.48971	30.00000	O
1,2-Diphenylhydrazine	0.64087	0.62986	0.60636	0.59854	0.52547	0.61405	AVG		0.60252		6.76919	15.00000	O
4-Bromophenyl-phenylether	0.18069	0.18132	0.19695	0.19113	0.18682	0.17117	AVG		0.18468		4.88257	15.00000	O
Hexachlorobenzene	0.22017	0.21561	0.24041	0.24092	0.20874	0.19872	AVG		0.22076		7.71374	15.00000	O
Pentachlorophenol	0.08792	0.09296	0.11842	0.10300	0.09765	0.09674	AVG		0.09945		10.62265	30.00000	O
Carbazole	0.94970	0.94227	0.89938	0.79383	0.73662	0.79704	AVG		0.85314		10.43762	15.00000	O
Di-n-butylphthalate	368938	859223	1457477	1967679	2451111	2902867	QUA	0.00768	0.58699	0.17544	0.99551	0.99000	O
Benzidine	0.17918	0.18293	0.23810	0.21157	0.19701	0.18181	AVG		0.19843		11.56958	15.00000	O
Butylbenzylphthalate	0.70179	0.68834	0.77403	0.72155	0.71698	0.73568	AVG		0.72306		4.12802	15.00000	O
3,3'-Dichlorobenzidine	0.21928	0.21437	0.24489	0.25473	0.24284	0.23449	AVG		0.23510		6.64752	15.00000	O
bis(2-Ethylhexyl)phthalate	0.86642	0.89519	0.99472	0.95211	0.95345	0.99267	AVG		0.94243		5.50994	15.00000	O
Di-n-octylphthalate	2.91317	3.21619	3.48075	3.50885	4.00977	4.18587	AVG		3.55243		13.43635	30.00000	O
2-Fluorophenol	1.23079	1.18588	1.30868	1.24658	1.30576	1.24411	AVG		1.25363		3.74148	15.00000	
Phenol-D6	1.49098	1.41535	1.41242	1.30591	1.19054	1.16838	AVG		1.33060		9.86440	15.00000	
Nitrobenzene-D5	0.25354	0.25124	0.25857	0.25791	0.23837	0.22803	AVG		0.24794		4.91553	15.00000	
2-Fluorobiphenyl	1.18754	1.13682	1.20507	1.13801	0.86528	0.87967	AVG		1.06873		14.45195	15.00000	
2,4,6-Tribromophenol	0.15766	0.16284	0.18248	0.18292	0.16880	0.14577	AVG		0.16674		8.69547	15.00000	
Terphenyl-D14	0.82974	0.93391	1.03382	0.97858	1.00736	0.94814	AVG		0.95526		7.50400	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U0763.D
Report Date: 24-Jun-2015 15:15

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: WG165272-8
Level: LOW
Data Type: MS DATA
SpikeList File: INDcheck8270.spk
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U8270C79.m
Misc Info: WG165272,WG165272,WG165272-4,SI4291-1

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	49.4	98.87	80-120
3 Pyridine	50.0	55.4	110.88	80-120
2 N-Nitrosodimethyla	50.0	44.2	88.49	80-120
5 2-Picoline	50.0	61.7	123.45*	80-120
6 N-Nitrosomethyleth	50.0	54.1	108.19	80-120
7 Methyl Methanesulf	50.0	43.3	86.57	80-120
9 N-Nitrosodiethylam	50.0	57.2	114.43	80-120
10 Ethyl Methanesulfo	50.0	49.9	99.80	80-120
11 Benzaldehyde	50.0	18.8	37.57*	80-120
14 Aniline	50.0	51.9	103.72	80-120
13 Phenol	50.0	54.9	109.87	80-120
16 Bis(2-Chloroethyl)	50.0	65.8	131.52*	80-120
17 2-Chlorophenol	50.0	53.8	107.56	80-120
18 1,3-Dichlorobenzen	50.0	54.7	109.33	80-120
20 1,4-Dichlorobenzen	50.0	53.9	107.77	80-120
22 Benzyl alcohol	50.0	48.8	97.50	80-120
21 1,2-Dichlorobenzen	50.0	54.5	109.01	80-120
25 2,2'-Oxybis(1-chlo	50.0	48.2	96.46	80-120
23 2-Methylphenol	50.0	52.1	104.24	80-120
26 Acetophenone	100	93.3	93.27	80-120
27 N-Nitrosopyrrolidi	50.0	54.8	109.62	80-120
30 N-Nitrosomorpholin	50.0	52.1	104.20	80-120
28 N-Nitroso-di-n-pro	50.0	45.8	91.72	80-120
29 3&4-Methylphenol	50.0	53.8	107.62	80-120
32 Hexachloroethane	50.0	53.6	107.25	80-120
31 o-Toluidine	50.0	56.6	113.20	80-120
34 Nitrobenzene	50.0	55.8	111.62	80-120
35 N-Nitrosopiperidin	50.0	57.0	114.09	80-120
36 Isophorone	50.0	54.4	108.86	80-120
37 2-Nitrophenol	50.0	51.8	103.50	80-120
38 2,4-Dimethylphenol	50.0	54.3	108.61	80-120
40 Bis(2-Chloroethoxy	50.0	52.3	104.56	80-120
39 O,O,O-Triethylphos	50.0	53.0	106.04	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	145	289.32*	80-120
42 2,4-Dichlorophenol	50.0	53.3	106.57	80-120
44 1,2,4-Trichloroben	50.0	55.2	110.37	80-120
46 Naphthalene	50.0	58.0	116.07	80-120
43 2,6-Dichlorophenol	50.0	57.2	114.39	80-120
47 4-Chloroaniline	50.0	49.6	99.17	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U0763.D
Report Date: 24-Jun-2015 15:15

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	57.3	114.61	80-120
49 Hexachlorobutadien	50.0	58.5	116.95	80-120
51 N-Nitroso-Di-N-But	50.0	59.6	119.21	80-120
53 Caprolactam	50.0	50.7	101.40	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	48.1	96.30	80-120
55 4-Chloro-3-Methylp	50.0	55.1	110.14	80-120
57 2-Methylnaphthalen	50.0	55.9	111.82	80-120
58 1-Methylnaphthalen	50.0	56.5	112.97	80-120
60 1,2,4,5-Tetrachlor	100	95.4	95.42	80-120
59 Hexachlorocyclopen	50.0	47.4	94.80	80-120
61 2,4,6-Trichlorophe	50.0	57.0	114.09	80-120
62 2,4,5-Trichlorophe	50.0	60.7	121.38*	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	56.9	113.82	80-120
65 1,1'-Biphenyl	50.0	54.9	109.83	80-120
66 2-Chloronaphthalen	50.0	57.4	114.73	80-120
67 1-Chloronaphthalen	50.0	49.4	98.90	80-120
69 2-Nitroaniline	50.0	57.1	114.21	80-120
70 1,4-Naphthoquinone	50.0	69.8	139.69*	80-120
72 Dimethyl Phthalate	50.0	56.4	112.79	80-120
73 1,3-Dinitrobenzene	50.0	53.7	107.44	80-120
75 Acenaphthylene	50.0	52.8	105.59	80-120
74 2,6-Dinitrotoluene	50.0	59.9	119.77	80-120
77 3-Nitroaniline	50.0	51.7	103.33	80-120
79 Acenaphthene	50.0	55.6	111.17	80-120
80 2,4-Dinitrophenol	50.0	56.0	111.95	80-120
83 Dibenzofuran	50.0	61.0	122.10*	80-120
81 Pentachlorobenzene	50.0	55.4	110.92	80-120
82 4-Nitrophenol	50.0	55.7	111.35	80-120
84 2,4-Dinitrotoluene	50.0	55.3	110.56	80-120
85 1-Naphthylamine	50.0	53.0	106.00	80-120
88 2-Naphthylamine	50.0	56.6	113.29	80-120
87 2,3,4,6-Tetrachlor	50.0	55.6	111.28	80-120
89 Diethylphthalate	50.0	55.5	111.04	80-120
91 Fluorene	50.0	55.3	110.65	80-120
92 4-Chlorophenyl-phe	50.0	54.2	108.36	80-120
90 O,O-diethyl-o-2-py	50.0	57.8	115.55	80-120
93 5-Nitro-O-Toluidin	50.0	56.0	112.05	80-120
94 4-Nitroaniline	50.0	53.4	106.78	80-120
96 N-Nitrosodiphenyla	100	82.8	82.81	80-120
95 4,6-Dinitro-2-Meth	50.0	54.3	108.58	80-120
98 1,2-Diphenylhydraz	50.0	54.4	108.86	80-120
101 Sulfotepp	50.0	52.5	104.95	80-120
102 Diallate	50.0	55.8	111.52	80-120
103 Phorate	50.0	24.4	48.82*	80-120
105 4-Bromophenyl-phen	50.0	56.2	112.35	80-120
106 Phenacetin	50.0	53.1	106.25	80-120
104 1,3,5-Trinitrobenz	50.0	49.1	98.14	80-120
107 Hexachlorobenzene	50.0	56.8	113.65	80-120
108 Dimethoate	50.0	45.9	91.90	80-120
109 Atrazine	50.0	20.8	41.59*	80-120
110 4-Aminobiphenyl	50.0	45.9	91.86	80-120
111 Pentachlorophenol	50.0	66.6	133.25*	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U0763.D
Report Date: 24-Jun-2015 15:15

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
113 Pronamide	50.0	50.5	101.09	80-120
112 Pentachloronitrobe	50.0	52.7	105.33	80-120
116 Phenanthrene	50.0	52.0	103.96	80-120
115 Disulfoton	50.0	47.1	94.22	80-120
118 Anthracene	50.0	52.9	105.87	80-120
117 Dinoseb	50.0	51.4	102.75	80-120
119 Carbazole	50.0	52.0	104.03	80-120
120 Methyl Parathion	50.0	55.0	110.01	80-120
121 Di-n-butylphthalat	50.0	54.9	109.82	80-120
122 Ethyl Parathion	50.0	48.2	96.38	80-120
123 4-Nitroquinoline-1	50.0	49.4	98.71	80-120
124 Methapyrilene	50.0	42.3	84.66	80-120
125 Isodrin	50.0	51.8	103.63	80-120
126 Fluoranthene	50.0	50.5	101.01	80-120
127 Benzidine	50.0	51.0	101.96	80-120
128 Pyrene	50.0	48.6	97.30	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	55.1	110.15	80-120
133 Chlorobenzilate	50.0	47.7	95.38	80-120
134 Famphur	50.0	28.1	56.27*	80-120
135 3,3'-Dimethylbenzi	50.0	97.2	194.51*	80-120
136 Butylbenzylphthala	50.0	52.5	105.00	80-120
137 Bis(2-ethylhexyl)a	50.0	47.4	94.85	80-120
138 2-Acetylaminofluor	50.0	55.0	110.10	80-120
140 Benzo(a)anthracene	50.0	52.1	104.28	80-120
139 3,3'-Dichlorobenzi	50.0	54.6	109.15	80-120
141 Chrysene	50.0	53.0	106.00	80-120
143 bis(2-Ethylhexyl)p	50.0	51.2	102.47	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	55.8	111.65	80-120
147 Benzo(b)fluoranthe	50.0	52.8	105.59	80-120
146 7,12-Dimethylbenz(	50.0	50.2	100.50	80-120
148 Benzo(k)fluoranthe	50.0	52.8	105.52	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	48.0	96.05	80-120
151 3-Methylcholanthre	50.0	56.7	113.32	80-120
152 Dibenz(a,j)acridin	50.0	50.0	99.93	80-120
153 Indeno(1,2,3-cd)py	50.0	55.1	110.17	80-120
155 Dibenzo(a,h)anthra	50.0	54.2	108.36	80-120
156 Benzo(g,h,i)peryle	50.0	51.9	103.76	80-120

SURROGATE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	35-105
$ 12 Phenol-D6	100	0.000	*	40-100
$ 33 Nitrobenzene-D5	50.0	0.000	*	35-100
$ 63 2-Fluorobiphenyl	50.0	0.000	*	45-105
$ 100 2,4,6-Tribromophe	100	0.000	*	35-125
$ 129 Terphenyl-D14	50.0	0.000	*	30-125

Data File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U0763.D
Report Date: 24-Jun-2015 15:15

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY **SDG:** SI4291
Lab ID : WG165301-2 **Analytical Date:** 06/23/15 11:12
Lab File ID : U0788.D **Instrument ID:** GCMS-U
Initial Calibration Date(s): 06/22/15 13:48 06/22/15 16:08 **Column ID:**

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
13 Phenol	1.44922	1.66004	1.66004	0.010	14.54696	20.01000	Averaged	
16 Bis(2-Chloroethyl)ether	50.00000	58.56307	1.26664	0.010	17.12614	20.00000	Quadratic	
17 2-Chlorophenol	1.31438	1.40157	1.40157	0.010	6.63388	20.00000	Averaged	
18 1,3-Dichlorobenzene	1.36406	1.44314	1.44314	0.010	5.79709	20.00000	Averaged	
20 1,4-Dichlorobenzene	1.33214	1.45277	1.45277	0.010	9.05529	20.01000	Averaged	
21 1,2-Dichlorobenzene	1.24730	1.40527	1.40527	0.010	12.66507	20.00000	Averaged	
22 Benzyl alcohol	0.78853	0.91896	0.91896	0.010	16.54129	20.00000	Averaged	
23 2-Methylphenol	1.21819	1.24381	1.24381	0.010	2.10339	20.00000	Averaged	
25 2,2'-Oxybis(1-chloropropane	1.97870	2.02774	2.02774	0.010	2.47861	20.00000	Averaged	
28 N-Nitroso-di-n-propylamine	0.61004	0.71619	0.71619	0.050	17.40134	20.00000	Averaged	
29 3&4-Methylphenol	1.18336	1.28376	1.28376	0.010	8.48440	20.00000	Averaged	
32 Hexachloroethane	0.47686	0.55178	0.55178	0.010	15.71159	20.00000	Averaged	
34 Nitrobenzene	0.23515	0.24644	0.24644	0.010	4.79995	20.00000	Averaged	
36 Isophorone	0.52435	0.53506	0.53506	0.010	2.04375	20.00000	Averaged	
37 2-Nitrophenol	0.18880	0.17679	0.17679	0.010	-6.35833	20.01000	Averaged	
38 2,4-Dimethylphenol	0.26824	0.27428	0.27428	0.010	2.25116	20.00000	Averaged	
40 Bis(2-Chloroethoxy)methane	0.38806	0.38420	0.38420	0.010	-0.99505	20.00000	Averaged	
41 Benzoic acid	0.10747	0.11854	0.11854	0.010	10.29980	20.00000	Averaged	
42 2,4-Dichlorophenol	0.26920	0.25205	0.25205	0.010	-6.37141	20.01000	Averaged	
43 2,6-Dichlorophenol	50.00000	47.52266	0.21454	0.010	-4.95468	20.00000	Quadratic	
44 1,2,4-Trichlorobenzene	0.24913	0.24950	0.24950	0.010	0.14875	20.00000	Averaged	
47 4-Chloroaniline	50.00000	50.87626	0.40885	0.010	1.75252	20.00000	Quadratic	
49 Hexachlorobutadiene	0.10924	0.10569	0.10569	0.010	-3.25243	20.01000	Averaged	
53 Caprolactam	0.11127	0.10633	0.10633	0.010	-4.43436	20.00000	Averaged	
55 4-Chloro-3-Methylphenol	0.23299	0.22948	0.22948	0.010	-1.50794	20.01000	Averaged	
61 2,4,6-Trichlorophenol	0.31550	0.31788	0.31788	0.010	0.75308	20.01000	Averaged	
62 2,4,5-Trichlorophenol	0.34131	0.31530	0.31530	0.010	-7.62152	20.00000	Averaged	
65 1,1'-Biphenyl	1.18459	1.25892	1.25892	0.010	6.27519	20.00000	Averaged	
66 2-Chloronaphthalene	1.11146	0.96744	0.96744	0.010	-12.95731	20.00000	Averaged	
69 2-Nitroaniline	0.24204	0.24003	0.24003	0.010	-0.82915	20.00000	Averaged	
72 Dimethyl Phthalate	1.15922	1.00835	1.00835	0.010	-13.01427	20.00000	Averaged	
74 2,6-Dinitrotoluene	0.28193	0.26061	0.26061	0.010	-7.56036	20.00000	Averaged	
77 3-Nitroaniline	0.32079	0.29557	0.29557	0.010	-7.86011	20.00000	Averaged	
80 2,4-Dinitrophenol	0.15019	0.13940	0.13940	0.050	-7.18587	20.00000	Averaged	
82 4-Nitrophenol	0.21205	0.21275	0.21275	0.050	0.32798	20.00000	Averaged	
83 Dibenzofuran	1.34556	1.29459	1.29459	0.010	-3.78808	20.00000	Averaged	
84 2,4-Dinitrotoluene	0.35580	0.34933	0.34933	0.010	-1.82011	20.00000	Averaged	
89 Diethylphthalate	1.06953	1.00832	1.00832	0.010	-5.72240	20.00000	Averaged	
92 4-Chlorophenyl-phenylether	0.38002	0.42478	0.42478	0.010	11.77722	20.00000	Averaged	
94 4-Nitroaniline	0.29734	0.25670	0.25670	0.010	-13.66616	20.00000	Averaged	
95 4,6-Dinitro-2-Methylphenol	0.12038	0.14623	0.14623	0.010	21.47052	20.00000	Averaged	*

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165301-2
Analytical Date: 06/23/15 11:12
Lab File ID : U0788.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 06/22/15 13:48 06/22/15 16:08
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
96 N-Nitrosodiphenylamine	0.59049	0.78603	0.78603	0.010	33.11354	20.01000	Averaged	*
98 1,2-Diphenylhydrazine	0.60252	0.80790	0.80790	0.010	34.08575	20.00000	Averaged	*
105 4-Bromophenyl-phenylether	0.18468	0.22527	0.22527	0.010	21.98053	20.00000	Averaged	*
107 Hexachlorobenzene	0.22076	0.22845	0.22845	0.010	3.48136	20.00000	Averaged	
111 Pentachlorophenol	0.09945	0.11179	0.11179	0.010	12.41049	20.01000	Averaged	
119 Carbazole	0.85314	0.83980	0.83980	0.010	-1.56363	20.00000	Averaged	
121 Di-n-butylphthalate	50.00000	53.75814	1.24351	0.010	7.51627	20.00000	Quadratic	
127 Benzidine	0.19843	0.26811	0.26811	0.010	35.11070	20.00000	Averaged	*
136 Butylbenzylphthalate	0.72306	0.68922	0.68922	0.010	-4.67966	20.00000	Averaged	
139 3,3'-Dichlorobenzidine	0.23510	0.26213	0.26213	0.010	11.49965	20.00000	Averaged	
143 bis(2-Ethylhexyl)phthalate	0.94243	0.90592	0.90592	0.010	-3.87384	20.00000	Averaged	
144 Di-n-octylphthalate	3.55243	2.74231	2.74231	0.010	-22.80472	20.01000	Averaged	*
8 2-Fluorophenol	1.25363	1.29736	1.29736	0.010	3.48801	20.00000	Averaged	
12 Phenol-D6	1.33060	1.53655	1.53655	0.010	15.47811	20.00000	Averaged	
33 Nitrobenzene-D5	0.24794	0.25788	0.25788	0.010	4.00914	20.00000	Averaged	
63 2-Fluorobiphenyl	1.06873	1.05646	1.05646	0.010	-1.14878	20.00000	Averaged	
100 2,4,6-Tribromophenol	0.16674	0.14064	0.14064	0.010	-15.65530	20.00000	Averaged	
129 Terphenyl-D14	0.95526	0.91006	0.91006	0.010	-4.73091	20.00000	Averaged	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Logbooks and Supporting Documents

SVOA | 625
SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625 ✓	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV 3717		Spike ID (1): SV 3715		
	Surrogate ID (2):		Spike ID (2): SIM: SV3716		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM 04		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 37965008		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) 52		pH (2nd Extraction) ≥11
Prep Start Time: 1000	Prep End Time: 1315		CLLE Start Time:		CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV038	Initials	Comments
		WG165103-1 (SIM)										SIM-R 322162
6-18-15	KF	WG165006-1 (SV)	1000	1mL	NR	✓		1mL	6-18-15	B4	JM	SV-R 322054
		WG165007-1 (625)										625-R 322062
		WG165006-2			1mL	✓				B5		
		WG165007-2										
		-3				✓				B6		
		-3										
		LCS Test 1				✓				B7		pH=5 Neutral pH-3 Shakes
		LCSD Test 2				✓				B8		pH=5
		SIM LCS WG165103-2					✓			B9		
		WG165006-4	1050			✓				B10		MS S14191-34
		-5	1050			✓				C1		MSD 11-32

EX-007 – Revision 2 – 12/05/2013 QAEX284 0000086

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	SV038 Tray Location	Initials	Comments
6-18-15	KF	S14191-1J	1050	1mL	NR	✓		1mL	6-18-15	C2	JMS	
		-2J	970							C3		
		-3A1	910							C4		MS/D
		-4J	1040							C5		
		-5J	1020							C6		
		-6J	1050							C7		
		-7J	1050							C8		
		-8J	1050							C9		
		-9J	1050							C10		
		-10J	970							D1		
		-11J	1060							D2		
		S14261-1G	1040			✓				D3		625 em-S.S
		S14291-7	1000			✓	✓			D4		HWF8-L1
		-10	1000			✓	✓			D5		HWF8-L2

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284 Katahdin Analytical Services 0000202
0000087

SIS
SON

KATAHDIN ANALYTICAL SERVICES, INC.

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method:	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)	SW846 3580 (OIL / WIPES)
Analytical Method:	SW846 8270 ✓	OTHER		
Standards	Surrogate ID (1): SV2717	Spike ID (1): SVGA SV2715	Spike ID (3):	
	Surrogate ID (2):	Spike ID (2): SIM SV60716		
Solvents / Chemicals / Consumables	Solvent Lot # (Mecl2): DM584	Solvent Lot # (Acetone): DM724	Sodium Sulfate (granular) Lot # 27465001	
	Filter Paper Lot # (SON) R0096181501	Filter Paper Lot # (KD) 96181511	Sodium Sulfate (powder) Lot # 27975002	
Misc.	Nitrogen Bath Temperature: 36°C	Sonicator Horns Tuned: 40%	Balance ID: LMHHPJ400	
Prep Start Time: 9:30	Prep Stop Time: 10:45	Sox Start Time: —	Sox End Time: —	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SON	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. SV	Comments
6-18-15	HB	W6164995-1 W6104994-1	30.01	1.0	NR	✓	/	6-18-15	WAS	50ml	6-19-15	HB	1.0	D6	R322046 SV
↓	↓	W6104995-2	30.02		1.0	✓		↓	↓	↓	↓	↓	↓	D7	R322047 SM
		-3	30.05			✓	✓							D8	
		W6104996-2	29.99				✓							D9	
		-3	30.04	↓	↓		✓	↓	↓	↓	↓	↓	↓	D10	
		GPC Blank	6-18-15											E10	
										AZ	6-19-15				

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SON	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. SV	Comments
6-18-15	HB	SI4190-1H	30.82	1.0	NR	✓		6-18-15	WAS	50-1	6-19-15	HB	1.0	E1	
↓	↓	SI4226-1D	36.39	↓	↓	↓	✓	↓	↓	↓	↓	↓	↓	E2	Wet
		SI4226-2D	33.95				↓							E3	↓
		-5D	31.13											E4	
		-7D	35.13											E5	
		-8D	32.74											E6	
		-9D	32.07											E7	
		-10D	32.95				✓							E8	↓
↓	↓	SI4270-1F	31.39			✓	↓						↓	E9	
		SI4291 -1F	30.96										2.0ml	E10 D5	HWF1-B
		-3F	32.40											D6	~~HWF2~~ HWF2-B
		-5F	30.58											D6	HWF1-PT
		-8F	30.97	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	D7	HWF2-PT
										6-18-15					

Reviewed By_____ Date_____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 061915B

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WH165116-1	50ng DFTPP	UD389	1	1	DFTPP 3510	2.0	dly	ok
-4	SSTD 050 U0619	U0727		2	U8270C78	1.0		ok ✓
-2	010	28		3				✓
-3	025	29		4				✓
-5	075	30		5				✓
-6	100	31		6				✓
-7	125	32		7				✓
-8	IND	33		8				ok
3510	WH165006-1	34		9				ok
	-2	35		10				ok
	-3	36		11				ok
	SI4191-1	37		12				ok
	-2	38		13				ok
	-3	39		14				ok
	-4	40		15				ok
	-5	41		16				ok
	-6 MA	42		17				ok
	-7 MA	43		18				ok
	-8	44		19				ok
	-9	45		20				ok
	-10	46		21				ok
	-11	47		22				ok
	SI4291-7	48		23				ok
	-10	49		24				ok
	~~LCS~~ WH165006-4	50		25				ok
dly	~~LCS2~~ -5	51		26				ok
	~~SV6721-DE~~ LCS1	52		27				– ok
	LCS2	53		28				–
STANDARD	CODE SV6721	54		29				– Sunr 6/30/2010
DFTPP	52611							
CAL. STD.	52636 STK4917							
IS MIX	STK4944							

REVIEWED AND APPROVED BY:
DATE:

DATE OF DFTPP INJECTION: 062215

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165272-4	50ng DFTPP	U0391	1	1	DFTPP 390	2.0	JCG	ok
-4	SSTD050 U0622	U0757		2	U8270C79	1.0		✓
-2	010	58		3				✓
-3	025	59		4				✓
-5	075	60		5				✓
-6	100	61		6				✓
-7	125	62		7				✓
-8	150	63		8				ok
3550	WG164995-1	64		9				1564
	-2	65		10				ok
	-3	66		11				ok
	SI4190-1	67		12				ok
	SI4270-1RA	68		13				ok
	SI4226-8	69		14				ok
	-1	70		15				1556
	-2	71		16				1556
	-9	72		17				1556
	-10	73		18				1556 SS1-5 DL 1:2
3550	SI4291-1DL	74	3	19				1556 SS6 100/300
	-3DL	75		20				1556 SS6
	-8DL	76		21				1556 SS4,6
	-5DL	77		22				1556 SS 34,6
	SI4226-5	78	1	23				1556
	-7	79		24				1556 SS6
	MeCl2	80-87		25				

STANDARD	CODE
DFTPP	52601
CAL. STD.	52636 STK4917
IS MIX	STK5001

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 062305

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165301-1	50ng DFTPP	U0392	1	1	DFTPPSIM	2.0	JLM	OK
-2	SSTD050U0623	U0788		2	U8270C79	1.0		OK
3550	WG164995-1RA	89		3				OK
3510	WG165248-1	90		4				OK
	-4	91		5				OK PAT1251A
	-5	92		6				OK PAT1250A
	-2	93		7				OK
	-3	94		8				OK
	SI4291-2	95		9				~~SS21~~ SPLP
	-4	96		10				~~SS01~~ JLM
	-6	97		11				SS1~~21~~
	-9	98		12				~~SS21~~
	SI4240-1	99		13				OK
	SI4306-7	U0800		14				OK
	SI4332-11	01		15				SS1
	WG165248-6	02		16				OK
	-7	03		17				OK
3550	SI4226-10DL	04	2	18				1:50 SS45 1:50/200
	MeCl2	05-07	1	19				
								JLM 062305

STANDARD	CODE
DFTPP	52611
CAL. STD.	526310 STK4R17
IS MIX	STK5001

REVIEWED AND APPROVED BY: _____
DATE: _____

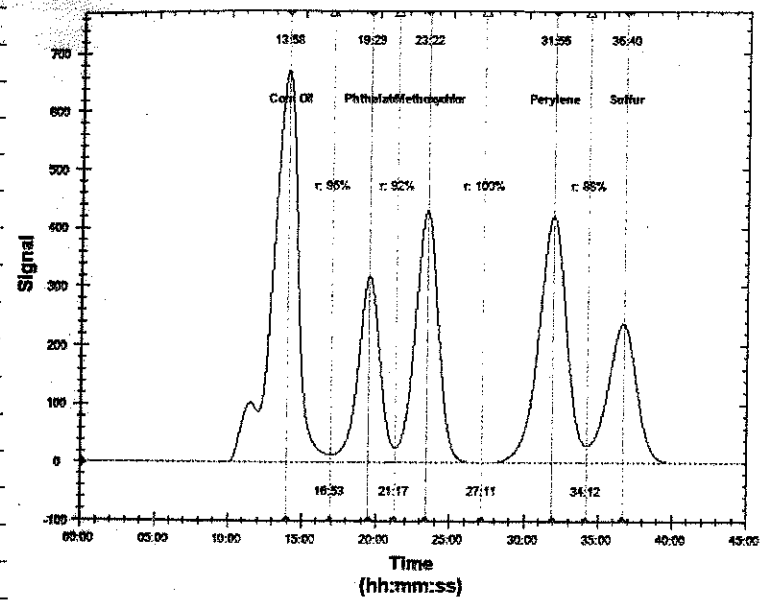
Katahdin Analytical Services
GPC03 Logbook

Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓		SW846 8270 ✓	
MeCl2 Lot #: DM804	Filter Lot #: –	Room Temperature (beginning):	23.4	Room Temperature (ending):	23.8
Flow Rate: 5.0 mL/min	Flow Rate Set at: 5.47 mL/min	GPC Dump Time:	45 min	GPC Collect Time:	–

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	Dry Run	-	–	KF	6/18/15	5m	
2	Dry Run	-	–	↓	↓	↓	
3	GPC Calib STD	-	–	↓	↓	↓	
4							
5	STD 6287 + 6296						
6							
7	lot # AD106490						
8							
9	1mL → 10mL in						
10	Mecl2 lot #						
11	DM804						
12					KF	6/18/15	
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Katahdin Analytical Services
GPC03 Logbook

Tray Pos. No.		Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
25	CALIBRATION REPORT						
26							
27	Sequence: CALIB061815.seq, Sample: [3] - [DT1]						
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							



P/P Dump: 21.17
collect: 12.95

S/S Dump: 16.53
collect: 23.47

Katahdin Analytical Services 0000207

Katahdin Analytical Services
GPC03 Logbook

Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓		SW846 8270 ✓	
MeCl2 Lot #: DM804	Filter Lot #: T041114031D	Room Temperature (beginning):	23.9	Room Temperature (ending):	24.1
Flow Rate: 5.0 mL/min	Flow Rate Set at: 5.47 mL/min	GPC Dump Time:	PP 21.17 SS 19.95	GPC Collect Time:	PP 16.53 SS 23.47

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	GPC Blank P/P	-	-	KF	6-18-15	5mL	P/P
2	GPC Blank S/S	-	-				S/S
3	WG164995-1 WG164996-1	6-18-15	5mL				
4	WG164996-2						
5	-3						
6	WG164995-2						
7	-3						
8	SI 4270-1						
9	SI 4190-1						
10	SI 4291-5						
11	SI 4291-8						
12	SI 4276-10						
13	-8						
14	-2						
15	-7						
16	SI 4291-3						
17	-1						
18	SI 4276-9						
19	-5						
20	-1						
21	Blank	6-17-15					P/P
22	AR1016 LOD						
23	LOQ						
24	AR1221 LOD						

Katahdin Analytical Services
GPC03 Logbook

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
25	AR1221 LOQ	6-17-15	5mL	KF	6-18-15	5mL	P/P
26	AR1233 LOD						
27	LOQ						
28	AR1242 LOD						
29	LOQ						
30	AR1248 LOD						
31	LOQ						
32	AR1262 LOD						
33	LOQ						
34	DM Run	-	-				
35		-	-				
36		-	-				
37		-	-				
38							
39							
40							
41							
42							
43							
44							
45						KF	6-19-15

SIM SEMIVOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4291

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SITE 4TS-HWF2-L2	SI4291-10		63.3		125.	*	66.6	
SITE 4TS-HWF2-L1	SI4291-7		48.4		84.2		72.5	
SITE 4TS-HWF2-L1	SI4291-7DL		80.0		186.	*	80.8	
Method Blank Sample	WG165103-1		65.0		67.0		83.0	
Laboratory Control S	WG165103-2		59.7		67.2		85.3	

		QC Limits
2MN	2-METHYLNAPHTHALENE-D10	43-92
FLO	FLUORENE-D10	29-101
PYR	PYRENE-D10	53-166

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI4291

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SITE 4TS-HWF1-B	SI4291-1DL		0.00	D	0.00	D	0.00	D
SITE 4TS-HWF1-B	SI4291-1DL2		0.00	D	0.00	D	0.00	D
SITE 4TS-HWF2-B	SI4291-3DL		0.00	D	0.00	D	0.00	D
SITE 4TS-HWF2-B	SI4291-3DL2		0.00	D	0.00	D	0.00	D
SITE 4TS-HWF1-PT	SI4291-5DL		0.00	D	0.00	D	0.00	D
SITE 4TS-HWF1-PT	SI4291-5DL2		0.00	D	0.00	D	0.00	D
SITE 4TS-HWF2-PT	SI4291-8DL		0.00	D	0.00	D	0.00	D
SITE 4TS-HWF2-PT	SI4291-8DL2		0.00	D	0.00	D	0.00	D
Method Blank Sample	WG164996-1		53.4		55.0		55.4	
Laboratory Control S	WG164996-2		73.5		62.7		85.5	
Laboratory Control S	WG164996-3		56.0		53.2		63.2	

		QC Limits
PYR	PYRENE-D10	31-128
FLO	FLUORENE-D10	20-96
2MN	2-METHYLNAPHTHALENE-D10	19-94

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : N6721.D
Instrument ID : GCMS-N
Matrix : SL

SDG : SI4291
Lab Sample ID : WG164996-1
Date Extracted : 18-JUN-15
Date Analyzed : 19-JUN-15
Time Analyzed : 15:02

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG164996-2	N6722.D	06/19/15	15:30
Laboratory Control S	WG164996-3	N6723.D	06/19/15	15:58
SITE 4TS-HWF1-B	SI4291-1DL	N6724.D	06/19/15	16:26
SITE 4TS-HWF2-B	SI4291-3DL	N6725.D	06/19/15	16:54
SITE 4TS-HWF1-PT	SI4291-5DL	N6726.D	06/19/15	17:22
SITE 4TS-HWF2-PT	SI4291-8DL	N6727.D	06/19/15	17:50
SITE 4TS-HWF1-PT	SI4291-5DL2	N6754.D	06/22/15	14:06
SITE 4TS-HWF2-PT	SI4291-8DL2	N6755.D	06/22/15	14:34
SITE 4TS-HWF1-B	SI4291-1DL2	N6756.D	06/22/15	15:02
SITE 4TS-HWF2-B	SI4291-3DL2	N6757.D	06/22/15	15:29

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : N6710.D
Instrument ID : GCMS-N
Matrix : AQ

SDG : SI4291
Lab Sample ID : WG165103-1
Date Extracted : 18-JUN-15
Date Analyzed : 18-JUN-15
Time Analyzed : 18:29

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165103-2	N6711.D	06/18/15	18:57
SITE 4TS-HWF2-L1	SI4291-7	N6712.D	06/18/15	19:25
SITE 4TS-HWF2-L2	SI4291-10	N6713.D	06/18/15	19:53
SITE 4TS-HWF2-L1	SI4291-7DL	N6792.D	06/24/15	13:21

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165103-1
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: N6710.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165103

Analysis Date: 18-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
Acenaphthylene	U	0.10	ug/L	1	.2	0.20	0.054	0.10
Acenaphthene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
Fluorene	U	0.10	ug/L	1	.2	0.20	0.061	0.10
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Benzo(a)anthracene	J	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Benzo(b)Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
2-Methylnaphthalene-D10		65.0	%					
Fluorene-D10		67.0	%					
pyrene-d10		83.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG164996-1
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: N6721.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164996

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10	ug/Kgdrywt	1	20	20.	2.6	10.
Acenaphthylene	U	10	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	J	2.9	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	J	2.5	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo(a)anthracene	J	2.2	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo(b)Fluoranthene	U	10	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno(1,2,3-cd)pyrene	U	10	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo(a,h)anthracene	U	10	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene	U	10	ug/Kgdrywt	1	20	20.	2.2	10.
2-Methylnaphthalene-D10		53.4	%					
Fluorene-D10		55.0	%					
Pyrene-D10		55.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165103-2
Client ID: LCS
Project:
SDG: SI4291
LCS File ID: N6711.D

Sample Date:
Received Date:
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165103

Analysis Date: 18-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Naphthalene	62.0	2.00	1.24	ug/L	42-96
Acenaphthylene	62.0	2.00	1.24	ug/L	17-92
Acenaphthene	63.5	2.00	1.27	ug/L	34-92
Fluorene	65.5	2.00	1.31	ug/L	22-112
Phenanthrene	71.0	2.00	1.42	ug/L	60-107
Anthracene	91.0	2.00	1.82	ug/L	59-110
Fluoranthene	* 67.0	2.00	1.34	ug/L	69-119
Pyrene	82.0	2.00	1.64	ug/L	36-118
Benzo(a)anthracene	73.5	2.00	1.47	ug/L	57-107
Chrysene	98.0	2.00	1.96	ug/L	62-119
Benzo(b)Fluoranthene	64.0	2.00	1.28	ug/L	55-111
Benzo(k)fluoranthene	81.5	2.00	1.63	ug/L	47-107
Benzo(a)pyrene	75.0	2.00	1.50	ug/L	53-99
Indeno(1,2,3-cd)pyrene	92.0	2.00	1.84	ug/L	60-110
Dibenzo(a,h)anthracene	109.	2.00	2.18	ug/L	62-115
Benzo(g,h,i)perylene	77.0	2.00	1.54	ug/L	55-103
2-Methylnaphthalene	65.0	2.00	1.30	ug/L	51-114
2-Methylnaphthalene-D10	59.7				43-92
Fluorene-D10	67.2				29-101
pyrene-d10	85.3				53-166

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG164996-2
LCSD ID: WG164996-3
Project:
SDG: SI4291
Report Date: 30-JUN-15
LCS File ID: N6722.D

Received Date:
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164996
LCSD File ID: N6723.D

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	42.8	64.2	32.1	48.1	ug/Kgdrywt	28	30	10-129
Acenaphthylene	66.7	40.1	60.1	32.6	48.9	ug/Kgdrywt	21	30	25-94
Acenaphthene	66.7	41.6	62.4	34.1	51.1	ug/Kgdrywt	20	30	33-98
Fluorene	66.7	42.0	63.0	36.1	54.1	ug/Kgdrywt	15	30	40-92
Phenanthrene	66.7	43.4	65.1	40.1	60.1	ug/Kgdrywt	8	30	46-96
Anthracene	66.7	55.4	83.0	49.8	74.7	ug/Kgdrywt	11	30	34-96
Fluoranthene	66.7	56.0	84.0	53.0	79.5	ug/Kgdrywt	6	30	38-116
Pyrene	66.7	59.3	88.9	49.0	73.5	ug/Kgdrywt	19	30	35-111
Benzo(a)anthracene	66.7	49.5	74.2	44.8	67.2	ug/Kgdrywt	10	30	48-100
Chrysene	66.7	59.7	89.5	48.1	72.1	ug/Kgdrywt	22	30	46-101
Benzo(b)Fluoranthene	66.7	45.8	68.7	35.8	53.7	ug/Kgdrywt	24	30	53-100
Benzo(k)fluoranthene	66.7	58.0	87.0	46.9	70.3	ug/Kgdrywt	21	30	49-96
Benzo(a)pyrene	66.7	48.9	73.3	37.0	55.5*	ug/Kgdrywt	28	30	61-101
Indeno(1,2,3-cd)pyrene	66.7	51.9	77.8	47.7	71.5	ug/Kgdrywt	8	30	50-105
Dibenzo(a,h)anthracene	66.7	59.4	89.0	53.8	80.6	ug/Kgdrywt	10	30	55-105
Benzo(g,h,i)perylene	66.7	44.4	66.6	43.8	65.7	ug/Kgdrywt	1	30	53-103
2-Methylnaphthalene	66.7	43.8	65.7	33.4	50.1	ug/Kgdrywt	27	30	10-152
2-Methylnaphthalene-D10			73.5		56.0				19-94
Fluorene-D10			62.7		53.2				20-96
Pyrene-D10			85.5		63.2				31-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND946.D
Instrument ID : GCMS-N

SDG : SI4291
Date Analyzed : 05-JUN-15
Time Analyzed : 11:11

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	35.3		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	50.5		
70	Less than 2.0% of mass 69	0.3	0.51	1
127	40.0 - 60.0% of mass 198	55.6		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	23.9		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	12.6	81.66	2
442	40.0 - 100.0% of mass 198	78.7		
443	17.0 - 23.0% of mass 442	15.5	19.66	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG164187-4	N6392.D	06/05/15	11:28
Initial Calibration	WG164187-2	N6393.D	06/05/15	11:56
Initial Calibration	WG164187-3	N6394.D	06/05/15	12:23
Initial Calibration	WG164187-5	N6395.D	06/05/15	12:50
Initial Calibration	WG164187-6	N6396.D	06/05/15	13:18
Initial Calibration	WG164187-7	N6397.D	06/05/15	13:54
Independent Source	WG164187-8	N6398.D	06/05/15	14:21

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND955.D
Instrument ID : GCMS-N

SDG : SI4291
Date Analyzed : 18-JUN-15
Time Analyzed : 11:01

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	43.5		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	64.2		
70	Less than 2.0% of mass 69	0.3	0.53	1
127	40.0 - 60.0% of mass 198	58.0		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.5		
275	10.0 - 30.0% of mass 198	24.1		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	13.0	82.90	2
442	40.0 - 100.0% of mass 198	80.5		
443	17.0 - 23.0% of mass 442	15.7	19.50	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165004-2	N6700.D	06/18/15	11:20
Method Blank Sample	WG165103-1	N6710.D	06/18/15	18:29
Laboratory Control S	WG165103-2	N6711.D	06/18/15	18:57
SITE 4TS-HWF2-L1	SI4291-7	N6712.D	06/18/15	19:25
SITE 4TS-HWF2-L2	SI4291-10	N6713.D	06/18/15	19:53

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND956.D
Instrument ID : GCMS-N

SDG : SI4291
Date Analyzed : 19-JUN-15
Time Analyzed : 11:09

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	44.2		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	64.7		
70	Less than 2.0% of mass 69	0.3	0.50	1
127	40.0 - 60.0% of mass 198	59.1		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	22.8		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	12.9	85.71	2
442	40.0 - 100.0% of mass 198	78.3		
443	17.0 - 23.0% of mass 442	15.1	19.28	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165089-2	N6715.D	06/19/15	11:27
Method Blank Sample	WG164996-1	N6721.D	06/19/15	15:02
Laboratory Control S	WG164996-2	N6722.D	06/19/15	15:30
Laboratory Control S	WG164996-3	N6723.D	06/19/15	15:58
SITE 4TS-HWF1-B	SI4291-1DL	N6724.D	06/19/15	16:26
SITE 4TS-HWF2-B	SI4291-3DL	N6725.D	06/19/15	16:54
SITE 4TS-HWF1-PT	SI4291-5DL	N6726.D	06/19/15	17:22
SITE 4TS-HWF2-PT	SI4291-8DL	N6727.D	06/19/15	17:50

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND957.D
Instrument ID : GCMS-N

SDG : SI4291
Date Analyzed : 22-JUN-15
Time Analyzed : 12:45

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	46.5		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	66.8		
70	Less than 2.0% of mass 69	0.4	0.62	1
127	40.0 - 60.0% of mass 198	58.6		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.9		
275	10.0 - 30.0% of mass 198	23.4		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	13.1	84.70	2
442	40.0 - 100.0% of mass 198	80.1		
443	17.0 - 23.0% of mass 442	15.5	19.32	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165238-2	N6752.D	06/22/15	13:09
SITE 4TS-HWF1-PT	SI4291-5DL2	N6754.D	06/22/15	14:06
SITE 4TS-HWF2-PT	SI4291-8DL2	N6755.D	06/22/15	14:34
SITE 4TS-HWF1-B	SI4291-1DL2	N6756.D	06/22/15	15:02
SITE 4TS-HWF2-B	SI4291-3DL2	N6757.D	06/22/15	15:29

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND958.D
Instrument ID : GCMS-N

SDG : SI4291
Date Analyzed : 23-JUN-15
Time Analyzed : 12:11

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.1		
68	Less than 2.0% of mass 69	0.7	1.60	1
69	Less than 100.0% of mass 198	40.7		
70	Less than 2.0% of mass 69	0.2	0.55	1
127	40.0 - 60.0% of mass 198	60.0		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	22.8		
365	1.0 - 100.0% of mass 198	2.3		
441	0.0 - 100.0% of mass 443	11.0	73.31	2
442	40.0 - 100.0% of mass 198	78.5		
443	17.0 - 23.0% of mass 442	15.0	19.11	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165324-4	N6778.D	06/23/15	13:03
Initial Calibration	WG165324-2	N6779.D	06/23/15	13:31
Initial Calibration	WG165324-3	N6780.D	06/23/15	13:59
Initial Calibration	WG165324-5	N6781.D	06/23/15	14:27
Initial Calibration	WG165324-6	N6782.D	06/23/15	14:55
Initial Calibration	WG165324-7	N6783.D	06/23/15	15:23
Independent Source	WG165324-8	N6784.D	06/23/15	15:51

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND959.D
Instrument ID : GCMS-N

SDG : SI4291
Date Analyzed : 24-JUN-15
Time Analyzed : 12:08

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	31.5		
68	Less than 2.0% of mass 69	0.6	1.51	1
69	Less than 100.0% of mass 198	40.0		
70	Less than 2.0% of mass 69	0.2	0.52	1
127	40.0 - 60.0% of mass 198	58.8		
197	Less than 1.0% of mass 198	0.1		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	23.6		
365	1.0 - 100.0% of mass 198	2.3		
441	0.0 - 100.0% of mass 443	12.7	75.21	2
442	40.0 - 100.0% of mass 198	91.5		
443	17.0 - 23.0% of mass 442	16.9	18.46	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165381-2	N6791.D	06/24/15	12:48
SITE 4TS-HWF2-L1	SI4291-7DL	N6792.D	06/24/15	13:21

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164187-4
Lab File ID : N6392.D

SDG: SI4291
Analytical Date: 06/05/15 11:28
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	48698		4.54		146447		5.91		78111		7.97	
	Upper Limit	97396		5.04		292894		6.41		156222		8.47	
	Lower Limit	24349		4.04		73223.5		5.41		39055.5		7.47	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165004-2	34215		4.43		108835		5.81		54633		7.87	
Method Blank Sample	WG165103-1	42276		4.43		123375		5.82		67198		7.88	
Laboratory Control S	WG165103-2	42896		4.43		127384		5.81		67491		7.88	
SITE 4TS-HWF2-L1	SI4291-7	41989		4.43		118507		5.81		107927		7.89	
SITE 4TS-HWF2-L2	SI4291-10	36416		4.43		107898		5.81		65966		7.88	
Continuing Calibrati	WG165089-2	40717		4.42		111057		5.80		55652		7.86	
Method Blank Sample	WG164996-1	43375		4.42		126989		5.80		66775		7.87	
Laboratory Control S	WG164996-2	40768		4.42		116373		5.80		63865		7.86	
Laboratory Control S	WG164996-3	38871		4.42		113851		5.80		61706		7.86	
SITE 4TS-HWF1-B	SI4291-1DL	42252		4.42		126807		5.80		68508		7.87	
SITE 4TS-HWF2-B	SI4291-3DL	44343		4.42		139026		5.80		73337		7.87	
SITE 4TS-HWF1-PT	SI4291-5DL	52075		4.42		159153		5.80		75928		7.87	
SITE 4TS-HWF2-PT	SI4291-8DL	48651		4.42		142494		5.80		69806		7.87	
Continuing Calibrati	WG165238-2	63307		4.40		186044		5.78		95854		7.84	
SITE 4TS-HWF1-PT	SI4291-5DL2	38000		4.41		127987		5.78		64868		7.85	
SITE 4TS-HWF2-PT	SI4291-8DL2	40148		4.41		128037		5.78		71104		7.85	
SITE 4TS-HWF1-B	SI4291-1DL2	43123		4.41		149608		5.78		80478		7.85	
SITE 4TS-HWF2-B	SI4291-3DL2	44118		4.41		150159		5.78		80020		7.85	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164187-4
Lab File ID : N6392.D

SDG: SI4291
Analytical Date: 06/05/15 11:28
Instrument ID: GCMS-N

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	Area	#	RT	Area	#	RT
	Std .	109179		9.76	74082		13.16	47165		15.99
	Upper Limit	218358		10.26	148164		13.66	94330		16.49
	Lower Limit	54589.5		9.26	37041		12.66	23582.5		15.49
Client Sample ID	Lab Sample ID									
Continuing Calibrati	WG165004-2	77596		9.67	38665		13.03	26771		15.81
Method Blank Sample	WG165103-1	102457		9.68	38550		13.05	28380		15.83
Laboratory Control S	WG165103-2	94527		9.66	44426		13.03	32173		15.82
SITE 4TS-HWF2-L1	SI4291-7	103682		9.68	53947		13.03	28562		15.80
SITE 4TS-HWF2-L2	SI4291-10	97611		9.66	46277		13.02	27510		15.79
Continuing Calibrati	WG165089-2	81146		9.65	58204		13.01	32491		15.77
Method Blank Sample	WG164996-1	114601		9.66	72126		13.01	35822		15.78
Laboratory Control S	WG164996-2	94262		9.65	52815		13.01	24626		15.78
Laboratory Control S	WG164996-3	90676		9.65	61779		13.00	37850		15.77
SITE 4TS-HWF1-B	SI4291-1DL	83496		9.66	32351	*	13.02	14144	*	15.78
SITE 4TS-HWF2-B	SI4291-3DL	84024		9.66	33189	*	13.02	15528	*	15.78
SITE 4TS-HWF1-PT	SI4291-5DL	92460		9.66	30171	*	13.03	11752	*	15.78
SITE 4TS-HWF2-PT	SI4291-8DL	83257		9.66	30313	*	13.03	13258	*	15.78
Continuing Calibrati	WG165238-2	137242		9.64	69677		13.00	36769		15.77
SITE 4TS-HWF1-PT	SI4291-5DL2	84084		9.64	41238		13.00	17734	*	15.77
SITE 4TS-HWF2-PT	SI4291-8DL2	88792		9.64	45751		13.00	24001		15.76
SITE 4TS-HWF1-B	SI4291-1DL2	94999		9.64	49174		13.00	21772	*	15.77
SITE 4TS-HWF2-B	SI4291-3DL2	96598		9.64	47883		13.00	21253	*	15.77

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI4291
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	88250		4.40		265068		5.77		116126		7.83	
	Upper Limit	176500		4.90		530136		6.27		232252		8.33	
	Lower Limit	44125		3.90		132534		5.27		58063		7.33	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165381-2	62465		4.37		191323		5.73		79121		7.80	
SITE 4TS-HWF2-L1	SI4291-7DL	55282		4.37		177019		5.73		88136		7.80	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI4291
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	156981		9.62		75747		12.97		36246		15.72	
	Upper Limit	313962		10.12		151494		13.47		72492		16.22	
	Lower Limit	78490.5		9.12		37873.5		12.47		18123		15.22	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165381-2	103815		9.58		50993		12.92		28396		15.64	
SITE 4TS-HWF2-L1	SI4291-7DL	131084		9.59		57995		12.92		32656		15.64	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-1DL
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6724.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164996

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 93.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		450	ug/Kgdrywt	10	20	420	54.	210
Acenaphthylene	U	210	ug/Kgdrywt	10	20	420	25.	210
Acenaphthene		560	ug/Kgdrywt	10	20	420	31.	210
Fluorene		830	ug/Kgdrywt	10	20	420	66.	210
Phenanthrene		2200	ug/Kgdrywt	10	20	420	37.	210
Anthracene		990	ug/Kgdrywt	10	20	420	25.	210
Fluoranthene		580	ug/Kgdrywt	10	20	420	37.	210
Pyrene	E	9000	ug/Kgdrywt	10	20	420	44.	210
Benzo(a)anthracene		1700	ug/Kgdrywt	10	20	420	40.	210
Chrysene		2600	ug/Kgdrywt	10	20	420	35.	210
Benzo(b)Fluoranthene		650	ug/Kgdrywt	10	20	420	50.	210
Benzo(k)fluoranthene	U	210	ug/Kgdrywt	10	20	420	64.	210
Benzo(a)pyrene		1200	ug/Kgdrywt	10	20	420	69.	210
Indeno(1,2,3-cd)pyrene	J	320	ug/Kgdrywt	10	20	420	40.	210
Dibenzo(a,h)anthracene	U	210	ug/Kgdrywt	10	20	420	37.	210
Benzo(g,h,i)perylene		750	ug/Kgdrywt	10	20	420	42.	210
2-Methylnaphthalene		1500	ug/Kgdrywt	10	20	420	46.	210
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-1DL2
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6756.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164996

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 93.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	400	ug/Kgdrywt	20	20	830	110	420
Acenaphthylene	U	420	ug/Kgdrywt	20	20	830	50.	420
Acenaphthene	J	520	ug/Kgdrywt	20	20	830	62.	420
Fluorene	J	800	ug/Kgdrywt	20	20	830	130	420
Phenanthrene		2600	ug/Kgdrywt	20	20	830	75.	420
Anthracene		1700	ug/Kgdrywt	20	20	830	50.	420
Fluoranthene	J	650	ug/Kgdrywt	20	20	830	75.	420
Pyrene		7000	ug/Kgdrywt	20	20	830	87.	420
Benzo(a)anthracene		1300	ug/Kgdrywt	20	20	830	79.	420
Chrysene		2600	ug/Kgdrywt	20	20	830	71.	420
Benzo(b)Fluoranthene	J	680	ug/Kgdrywt	20	20	830	100	420
Benzo(k)fluoranthene	U	420	ug/Kgdrywt	20	20	830	130	420
Benzo(a)pyrene		1200	ug/Kgdrywt	20	20	830	140	420
Indeno(1,2,3-cd)pyrene	J	270	ug/Kgdrywt	20	20	830	79.	420
Dibenzo(a,h)anthracene	J	190	ug/Kgdrywt	20	20	830	75.	420
Benzo(g,h,i)perylene	J	650	ug/Kgdrywt	20	20	830	83.	420
2-Methylnaphthalene		1500	ug/Kgdrywt	20	20	830	92.	420
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-3DL
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6725.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164996

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 94.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		400	ug/Kgdrywt	10	20	390	51.	200
Acenaphthylene	U	200	ug/Kgdrywt	10	20	390	24.	200
Acenaphthene		500	ug/Kgdrywt	10	20	390	30.	200
Fluorene		760	ug/Kgdrywt	10	20	390	63.	200
Phenanthrene		2100	ug/Kgdrywt	10	20	390	36.	200
Anthracene		950	ug/Kgdrywt	10	20	390	24.	200
Fluoranthene		440	ug/Kgdrywt	10	20	390	36.	200
Pyrene	E	8300	ug/Kgdrywt	10	20	390	41.	200
Benzo(a)anthracene		1500	ug/Kgdrywt	10	20	390	37.	200
Chrysene		2600	ug/Kgdrywt	10	20	390	34.	200
Benzo(b)Fluoranthene		560	ug/Kgdrywt	10	20	390	47.	200
Benzo(k)fluoranthene	U	200	ug/Kgdrywt	10	20	390	61.	200
Benzo(a)pyrene		1100	ug/Kgdrywt	10	20	390	65.	200
Indeno(1,2,3-cd)pyrene	J	240	ug/Kgdrywt	10	20	390	37.	200
Dibenzo(a,h)anthracene	J	220	ug/Kgdrywt	10	20	390	36.	200
Benzo(g,h,i)perylene		670	ug/Kgdrywt	10	20	390	39.	200
2-Methylnaphthalene		1300	ug/Kgdrywt	10	20	390	43.	200
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-3DL2
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6757.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164996

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 94.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	360	ug/Kgdrywt	20	20	790	100	390
Acenaphthylene	U	390	ug/Kgdrywt	20	20	790	47.	390
Acenaphthene	J	490	ug/Kgdrywt	20	20	790	59.	390
Fluorene	J	740	ug/Kgdrywt	20	20	790	130	390
Phenanthrene		2000	ug/Kgdrywt	20	20	790	71.	390
Anthracene		910	ug/Kgdrywt	20	20	790	47.	390
Fluoranthene	J	520	ug/Kgdrywt	20	20	790	71.	390
Pyrene		6100	ug/Kgdrywt	20	20	790	83.	390
Benzo(a)anthracene		1200	ug/Kgdrywt	20	20	790	75.	390
Chrysene		2300	ug/Kgdrywt	20	20	790	67.	390
Benzo(b)Fluoranthene	J	640	ug/Kgdrywt	20	20	790	95.	390
Benzo(k)fluoranthene	U	390	ug/Kgdrywt	20	20	790	120	390
Benzo(a)pyrene		1100	ug/Kgdrywt	20	20	790	130	390
Indeno(1,2,3-cd)pyrene	J	230	ug/Kgdrywt	20	20	790	75.	390
Dibenzo(a,h)anthracene	J	180	ug/Kgdrywt	20	20	790	71.	390
Benzo(g,h,i)perylene	J	560	ug/Kgdrywt	20	20	790	79.	390
2-Methylnaphthalene		1400	ug/Kgdrywt	20	20	790	87.	390
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-5DL
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6726.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164996

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 93.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	260	ug/Kgdrywt	10	20	420	55.	210
Acenaphthylene	U	210	ug/Kgdrywt	10	20	420	25.	210
Acenaphthene		740	ug/Kgdrywt	10	20	420	32.	210
Fluorene		810	ug/Kgdrywt	10	20	420	68.	210
Phenanthrene		2100	ug/Kgdrywt	10	20	420	38.	210
Anthracene		1200	ug/Kgdrywt	10	20	420	25.	210
Fluoranthene		570	ug/Kgdrywt	10	20	420	38.	210
Pyrene	E	11000	ug/Kgdrywt	10	20	420	44.	210
Benzo(a)anthracene		1800	ug/Kgdrywt	10	20	420	40.	210
Chrysene		2900	ug/Kgdrywt	10	20	420	36.	210
Benzo(b)Fluoranthene		760	ug/Kgdrywt	10	20	420	51.	210
Benzo(k)fluoranthene	U	210	ug/Kgdrywt	10	20	420	65.	210
Benzo(a)pyrene		1400	ug/Kgdrywt	10	20	420	70.	210
Indeno(1,2,3-cd)pyrene	J	360	ug/Kgdrywt	10	20	420	40.	210
Dibenzo(a,h)anthracene	J	310	ug/Kgdrywt	10	20	420	38.	210
Benzo(g,h,i)perylene		890	ug/Kgdrywt	10	20	420	42.	210
2-Methylnaphthalene		840	ug/Kgdrywt	10	20	420	46.	210
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-5DL2
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6754.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164996

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 93.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	390	ug/Kgdrywt	30	20	1300	160	630
Acenaphthylene	U	630	ug/Kgdrywt	30	20	1300	76.	630
Acenaphthene	J	1100	ug/Kgdrywt	30	20	1300	95.	630
Fluorene	J	1200	ug/Kgdrywt	30	20	1300	200	630
Phenanthrene		3200	ug/Kgdrywt	30	20	1300	110	630
Anthracene		1600	ug/Kgdrywt	30	20	1300	76.	630
Fluoranthene	J	900	ug/Kgdrywt	30	20	1300	110	630
Pyrene		12000	ug/Kgdrywt	30	20	1300	130	630
Benzo(a)anthracene		2200	ug/Kgdrywt	30	20	1300	120	630
Chrysene		4500	ug/Kgdrywt	30	20	1300	110	630
Benzo(b)Fluoranthene	J	1300	ug/Kgdrywt	30	20	1300	150	630
Benzo(k)fluoranthene	U	630	ug/Kgdrywt	30	20	1300	200	630
Benzo(a)pyrene		2100	ug/Kgdrywt	30	20	1300	210	630
Indeno(1,2,3-cd)pyrene	J	440	ug/Kgdrywt	30	20	1300	120	630
Dibenzo(a,h)anthracene	J	400	ug/Kgdrywt	30	20	1300	110	630
Benzo(g,h,i)perylene	J	1200	ug/Kgdrywt	30	20	1300	130	630
2-Methylnaphthalene		1400	ug/Kgdrywt	30	20	1300	140	630
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-7
Client ID: SITE 4TS-HWF2-L1
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6712.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165103

Analysis Date: 18-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	E	16.	ug/L	1	.2	0.20	0.064	0.10
Acenaphthylene	U	0.10	ug/L	1	.2	0.20	0.054	0.10
Acenaphthene		1.1	ug/L	1	.2	0.20	0.064	0.10
Fluorene		1.5	ug/L	1	.2	0.20	0.061	0.10
Phenanthrene		3.9	ug/L	1	.2	0.20	0.051	0.10
Anthracene		0.73	ug/L	1	.2	0.20	0.044	0.10
Fluoranthene		0.21	ug/L	1	.2	0.20	0.073	0.10
Pyrene		0.59	ug/L	1	.2	0.20	0.059	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Benzo(b)Fluoranthene	J	0.13	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Methylnaphthalene	E	16.	ug/L	1	.2	0.20	0.077	0.10
2-Methylnaphthalene-D10		48.4	%					
Fluorene-D10		84.2	%					
pyrene-d10		72.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-7DL
Client ID: SITE 4TS-HWF2-L1
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6792.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165103

Analysis Date: 24-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		22	ug/L	3	.2	0.60	0.19	0.30
Acenaphthylene	U	0.30	ug/L	3	.2	0.60	0.16	0.30
Acenaphthene		1.9	ug/L	3	.2	0.60	0.19	0.30
Fluorene		2.4	ug/L	3	.2	0.60	0.18	0.30
Phenanthrene		3.8	ug/L	3	.2	0.60	0.15	0.30
Anthracene		0.92	ug/L	3	.2	0.60	0.13	0.30
Fluoranthene	J	0.36	ug/L	3	.2	0.60	0.22	0.30
Pyrene		0.67	ug/L	3	.2	0.60	0.18	0.30
Benzo(a)anthracene	J	0.29	ug/L	3	.2	0.60	0.14	0.30
Chrysene	U	0.30	ug/L	3	.2	0.60	0.11	0.30
Benzo(b)Fluoranthene		0.65	ug/L	3	.2	0.60	0.27	0.30
Benzo(k)fluoranthene	U	0.30	ug/L	3	.2	0.60	0.15	0.30
Benzo(a)pyrene	J	0.25	ug/L	3	.2	0.60	0.20	0.30
Indeno(1,2,3-cd)pyrene	U	0.30	ug/L	3	.2	0.60	0.16	0.30
Dibenzo(a,h)anthracene	U	0.30	ug/L	3	.2	0.60	0.21	0.30
Benzo(g,h,i)perylene	U	0.30	ug/L	3	.2	0.60	0.20	0.30
2-Methylnaphthalene		18	ug/L	3	.2	0.60	0.23	0.30
2-Methylnaphthalene-D10		80.0	%					
Fluorene-D10	*	186.	%					
pyrene-d10		80.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-8DL
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6727.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164996

Analysis Date: 19-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 92.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	280	ug/Kgdrywt	10	20	420	55.	210
Acenaphthylene	U	210	ug/Kgdrywt	10	20	420	25.	210
Acenaphthene		800	ug/Kgdrywt	10	20	420	32.	210
Fluorene		840	ug/Kgdrywt	10	20	420	67.	210
Phenanthrene		2700	ug/Kgdrywt	10	20	420	38.	210
Anthracene		2000	ug/Kgdrywt	10	20	420	25.	210
Fluoranthene		600	ug/Kgdrywt	10	20	420	38.	210
Pyrene	E	11000	ug/Kgdrywt	10	20	420	44.	210
Benzo(a)anthracene		1800	ug/Kgdrywt	10	20	420	40.	210
Chrysene		3300	ug/Kgdrywt	10	20	420	36.	210
Benzo(b)Fluoranthene		760	ug/Kgdrywt	10	20	420	50.	210
Benzo(k)fluoranthene	U	210	ug/Kgdrywt	10	20	420	65.	210
Benzo(a)pyrene		1400	ug/Kgdrywt	10	20	420	70.	210
Indeno(1,2,3-cd)pyrene	J	360	ug/Kgdrywt	10	20	420	40.	210
Dibenzo(a,h)anthracene	J	280	ug/Kgdrywt	10	20	420	38.	210
Benzo(g,h,i)perylene		860	ug/Kgdrywt	10	20	420	42.	210
2-Methylnaphthalene		1000	ug/Kgdrywt	10	20	420	46.	210
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-8DL2
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6755.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG164996

Analysis Date: 22-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 92.
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	630	ug/Kgdrywt	30	20	1300	160	630
Acenaphthylene	U	630	ug/Kgdrywt	30	20	1300	76.	630
Acenaphthene	J	790	ug/Kgdrywt	30	20	1300	95.	630
Fluorene	J	780	ug/Kgdrywt	30	20	1300	200	630
Phenanthrene		2200	ug/Kgdrywt	30	20	1300	110	630
Anthracene	J	1100	ug/Kgdrywt	30	20	1300	76.	630
Fluoranthene	J	650	ug/Kgdrywt	30	20	1300	110	630
Pyrene		7800	ug/Kgdrywt	30	20	1300	130	630
Benzo(a)anthracene		1800	ug/Kgdrywt	30	20	1300	120	630
Chrysene		2800	ug/Kgdrywt	30	20	1300	110	630
Benzo(b)Fluoranthene	J	940	ug/Kgdrywt	30	20	1300	150	630
Benzo(k)fluoranthene	U	630	ug/Kgdrywt	30	20	1300	200	630
Benzo(a)pyrene		1400	ug/Kgdrywt	30	20	1300	210	630
Indeno(1,2,3-cd)pyrene	J	340	ug/Kgdrywt	30	20	1300	120	630
Dibenzo(a,h)anthracene	J	260	ug/Kgdrywt	30	20	1300	110	630
Benzo(g,h,i)perylene	J	840	ug/Kgdrywt	30	20	1300	130	630
2-Methylnaphthalene	J	980	ug/Kgdrywt	30	20	1300	140	630
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-10
Client ID: SITE 4TS-HWF2-L2
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6713.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 18-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165103

Analysis Date: 18-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 30-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		3.1	ug/L	1	.2	0.20	0.064	0.10
Acenaphthylene	U	0.10	ug/L	1	.2	0.20	0.054	0.10
Acenaphthene		0.89	ug/L	1	.2	0.20	0.064	0.10
Fluorene		1.0	ug/L	1	.2	0.20	0.061	0.10
Phenanthrene		1.4	ug/L	1	.2	0.20	0.051	0.10
Anthracene		0.33	ug/L	1	.2	0.20	0.044	0.10
Fluoranthene	J	0.15	ug/L	1	.2	0.20	0.073	0.10
Pyrene		0.72	ug/L	1	.2	0.20	0.059	0.10
Benzo(a)anthracene	J	0.11	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Benzo(b)Fluoranthene	J	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
2-Methylnaphthalene-D10		63.3	%					
Fluorene-D10	*	125.	%					
pyrene-d10		66.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6393.D N6394.D N6392.D N6395.D N6396.D N6397.D **Column ID:**
Calibration Date(s): 05-JUN-15 11:28 05-JUN-15 13:54

	0.200000(Level 1	0.500000(Level 2	1.0000 Level 3	3.0000 Level 4	7.0000 Level 5	10.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Naphthalene	0.94693	0.99217	1.00383	0.98243	0.90376	0.84536	AVG		0.94575		6.46931	15.00000	O
2-Methylnaphthalene	0.80464	0.76169	0.69738	0.67193	0.59987	0.56138	AVG		0.68282		13.58437	15.00000	O
Acenaphthylene	1.65471	1.71811	1.79549	1.72285	1.69520	1.60580	AVG		1.69869		3.80652	15.00000	O
Acenaphthene	1.06761	1.10401	1.11741	1.08398	1.09097	0.99594	AVG		1.07666		3.99820	15.00000	O
Fluorene	1.16631	1.16414	1.26852	1.22661	1.20387	1.15320	AVG		1.19711		3.73202	15.00000	O
Phenanthrene	1.05251	1.07407	1.13064	1.05309	1.05622	1.01203	AVG		1.06309		3.65535	15.00000	O
Anthracene	1.12854	1.07273	1.11514	1.07039	1.07225	1.00328	AVG		1.07705		4.07478	15.00000	O
Fluoranthene	1.09319	1.03376	1.13932	1.09596	1.13667	1.03291	AVG		1.08864		4.32168	15.00000	O
Pyrene	2.15102	1.99815	1.80146	1.75384	1.54217	1.46725	AVG		1.78565		14.61585	15.00000	O
Benzo(a)anthracene	0.98404	1.00064	1.04724	1.01158	1.03497	0.99563	AVG		1.01235		2.39852	15.00000	O
Chrysene	26145	48292	115504	351816	976758	1580779	LNR	-0.25656	0.99061		0.99769	0.99000	O
Benzo(b)fluoranthene	1.24381	1.09769	1.25045	1.15156	1.29505	1.23721	AVG		1.21263		6.03087	15.00000	O
Benzo(k)fluoranthene	20139	40770	95172	289233	820399	1329974	LNR	-0.24135	1.36508		0.99686	0.99000	O
Benzo(a)pyrene	1.28595	1.13162	1.10326	1.06166	1.10044	1.05904	AVG		1.12366		7.48582	15.00000	O
Indeno(1,2,3-cd)pyrene	0.85824	0.78022	0.76299	0.75240	0.79701	0.76105	AVG		0.78532		4.98130	15.00000	O
Dibenzo(a,h)anthracene	0.54145	0.54237	0.54037	0.54163	0.58588	0.56496	AVG		0.55278		3.39348	15.00000	O
Benzo(g,h,i)perylene	0.93508	0.83332	0.78628	0.75375	0.74962	0.69782	AVG		0.79265		10.45517	15.00000	O
2-Methylnaphthalene-D10	1.00905	1.02883	1.07957	1.01453	0.98828	0.92286	AVG		1.00719		5.10795	15.00000	
Fluorene-D10	0.87129	0.85247	0.92818	0.88195	0.88446	0.84062	AVG		0.87649		3.48128	15.00000	
Pyrene-D10	1.41829	1.37689	1.23514	1.23225	1.07061	1.03060	AVG		1.22730		12.73725	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N060515.b\N6398.D
Report Date: 08-Jun-2015 14:36

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: WG164187-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: SIM_IND_CHK.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N060515.b\NSPSIM44.m
Misc Info: WG164187,WG164187,WG164187-4,SI3862-3

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	2.01	100.59	80-120
3 Benzaldehyde	2.00	1.38	68.86*	80-120
4 Phenol	2.00	2.05	102.74	80-120
5 Bis(2-Chloroethyl)	2.00	1.73	86.74	80-120
6 2-Chlorophenol	2.00	1.96	97.85	80-120
7 1,3-Dichlorobenzen	2.00	2.05	102.38	80-120
9 1,4-Dichlorobenzen	2.00	2.15	107.63	80-120
10 1,2-Dichlorobenzen	2.00	2.08	103.94	80-120
11 2,2'-Oxybis(1-chlo	2.00	1.76	88.10	80-120
12 2-Methylphenol	2.00	2.20	110.29	80-120
13 Acetophenone	2.00	2.04	102.21	80-120
14 N-Nitroso-di-n-pro	2.00	1.90	94.81	80-120
16 Hexachloroethane	2.00	2.08	104.11	80-120
15 3&4-Methylphenol	2.00	1.82	90.83	80-120
17 Nitrobenzene	2.00	2.16	108.14	80-120
18 Isophorone	2.00	2.08	104.13	80-120
19 2-Nitrophenol	2.00	1.87	93.38	80-120
20 2,4-Dimethylphenol	2.00	1.80	89.96	80-120
21 bis(2-Chloroethoxy	2.00	1.99	99.58	80-120
22 2,4-Dichlorophenol	2.00	1.85	92.49	80-120
23 1,2,4-Trichloroben	2.00	2.04	101.88	80-120
25 Naphthalene	2.00	2.07	103.66	80-120
26 4-Chloroaniline	2.00	1.88	94.15	80-120
27 Hexachlorobutadien	2.00	2.04	102.12	80-120
28 Caprolactam	2.00	1.94	97.05	80-120
29 4-Chloro-3-Methylp	2.00	1.81	90.74	80-120
31 2-Methylnaphthalen	2.00	1.85	92.43	80-120
32 1-Methylnaphthalen	2.00	1.94	97.03	80-120
34 1,2,4,5-Tetrachlor	2.00	1.86	92.98	80-120
33 Hexachlorocyclopen	2.00	1.34	66.85*	80-120
36 2,4,6-Trichlorophe	2.00	1.75	87.60	80-120
37 2,4,5-Trichlorophe	2.00	1.83	91.52	80-120
39 2-Chloronaphthalen	2.00	1.85	92.72	80-120
38 1,1'-Biphenyl	2.00	1.93	96.49	80-120
40 2-Nitroaniline	2.00	1.91	95.36	80-120
41 Dimethyl Phthalate	2.00	1.88	93.80	80-120
43 Acenaphthylene	2.00	1.70	84.77	80-120
42 2,6-Dinitrotoluene	2.00	1.86	93.03	80-120
44 3-Nitroaniline	2.00	2.06	103.08	80-120
46 Acenaphthene	2.00	1.94	96.79	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N060515.b\N6398.D
Report Date: 08-Jun-2015 14:36

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 2,4-Dinitrophenol	2.00	1.52	75.77*	80-120
48 Dibenzofuran	2.00	1.88	94.09	80-120
49 2,4-Dinitrotoluene	2.00	1.73	86.38	80-120
50 4-Nitrophenol	2.00	1.51	75.52*	80-120
51 2,3,4,6-Tetrachlor	2.00	1.60	79.76*	80-120
52 Diethylphthalate	2.00	1.97	98.60	80-120
54 Fluorene	2.00	1.88	94.00	80-120
56 4-Nitroaniline	2.00	2.26	112.82	80-120
57 4,6-Dinitro-2-Meth	2.00	1.67	83.40	80-120
58 N-Nitrosodiphenyla	2.00	1.52	76.12*	80-120
59 4-Bromophenyl-phen	2.00	1.91	95.45	80-120
60 Hexachlorobenzene	2.00	1.91	95.71	80-120
61 Atrazine	2.00	1.78	88.94	80-120
62 Pentachlorophenol	2.00	1.60	79.86*	80-120
64 Phenanthrene	2.00	1.90	94.87	80-120
65 Anthracene	2.00	1.94	97.05	80-120
66 Carbazole	2.00	1.89	94.38	80-120
67 Di-n-butylphthalat	2.00	2.04	102.21	80-120
68 Fluoranthene	2.00	1.96	97.75	80-120
70 Pyrene	2.00	1.95	97.43	80-120
71 Butylbenzylphthala	2.00	1.74	87.09	80-120
72 Benzo(a)anthracene	2.00	1.76	88.23	80-120
75 Chrysene	2.00	1.95	97.73	80-120
73 3,3'-Dichlorobenzi	2.00	1.80	89.90	80-120
76 bis(2-Ethylhexyl)p	2.00	1.59	79.51*	80-120
77 Di-n-octylphthalat	2.00	1.88	93.80	80-120
78 Benzo(b)fluoranthe	2.00	1.89	94.51	80-120
79 Benzo(k)fluoranthe	2.00	1.95	97.75	80-120
80 Benzo(a)pyrene	2.00	1.61	80.47	80-120
82 Indeno(1,2,3-cd)py	2.00	1.72	85.85	80-120
83 Dibenzo(a,h)anthra	2.00	1.69	84.68	80-120
84 Benzo(g,h,i)peryle	2.00	1.75	87.30	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	10-93
$ 30 2-Methylnaphthale	2.00	0.000	*	43-92
$ 35 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 53 Fluorene-D10	2.00	0.000	*	29-101
$ 69 Pyrene-D10	2.00	0.000	*	53-166

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6779.D N6780.D N6778.D N6781.D N6782.D N6783.D **Column ID:**
Calibration Date(s): 23-JUN-15 13:03 23-JUN-15 15:23

	0.200000(Level 1	0.500000(Level 2	1.0000 Level 3	3.0000 Level 4	7.0000 Level 5	10.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Naphthalene	1.14657	0.96464	1.00870	0.97468	0.94567	0.88692	AVG		0.98786		8.86019	15.00000	O
2-Methylnaphthalene	60910	143297	275312	724702	1544385	2210172	LNR	-0.25197	0.63698		0.99737	0.99000	O
Acenaphthylene	2.22876	2.37478	2.40908	2.27085	2.35204	2.20386	AVG		2.30656		3.63289	15.00000	O
Acenaphthene	1.37272	1.45465	1.47437	1.39113	1.45032	1.32283	AVG		1.41100		4.14486	15.00000	O
Fluorene	1.39907	1.50265	1.51958	1.44270	1.52562	1.40814	AVG		1.46629		3.87447	15.00000	O
Phenanthrene	1.25216	1.23333	1.28818	1.22719	1.28422	1.21678	AVG		1.25031		2.40849	15.00000	O
Anthracene	1.50554	1.61772	1.53726	1.33509	1.42329	1.27865	AVG		1.44959		8.84014	15.00000	O
Fluoranthene	1.25300	1.20210	1.24336	1.11653	1.24233	1.16556	AVG		1.20381		4.48136	15.00000	O
Pyrene	49747	118527	258919	728876	1818636	2584079	QUA	-0.03154	0.35532	0.00654	0.99994	0.99000	O
Benzo(a)anthracene	27521	56401	132357	366200	1069947	1681282	LNR	-0.04547	1.25158		0.99949	0.99000	O
Chrysene	40645	84668	138690	434554	1133242	1688346	LNR	-0.27845	1.26064		0.99861	0.99000	O
Benzo(b)fluoranthene	18197	34502	75742	213765	703846	998280	QUA	0.05333	0.59674	0.00295	0.99109	0.99000	O
Benzo(k)fluoranthene	23958	53018	104578	316787	780100	1296802	LNR	-0.15933	1.87606		0.99926	0.99000	O
Benzo(a)pyrene	1.75015	1.62696	1.30023	1.23861	1.35856	1.30267	AVG		1.42953		14.54197	15.00000	O
Indeno(1,2,3-cd)pyrene	1.16040	0.94659	0.95291	0.84337	0.88721	0.82105	AVG		0.93525		13.08892	15.00000	O
Dibenzo(a,h)anthracene	0.80886	0.66139	0.68002	0.60210	0.64051	0.60032	AVG		0.66553		11.57493	15.00000	O
Benzo(g,h,i)perylene	7694	19553	41765	129813	338222	494804	LNR	-0.18495	0.74765		0.99618	0.99000	O
2-Methylnaphthalene-D10	1.09203	1.13690	1.13834	1.07092	1.10734	1.01694	AVG		1.09374		4.18158	15.00000	
Fluorene-D10	0.89557	0.92877	0.93832	0.88861	0.91713	0.85627	AVG		0.90411		3.33644	15.00000	
Pyrene-D10	23587	66268	142886	419789	1048907	1494345	LNR	-0.29475	1.13914		0.99509	0.99000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N062315.b\N6784.D
Report Date: 24-Jun-2015 10:51

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG165324-8
Level: LOW
Data Type: MS DATA
SpikeList File: SIM_IND_CHK.spk
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N062315.b\NSPSIM45.m
Misc Info: WG165324,WG165324,WG164324-4

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	2.53	126.35*	80-120
3 Benzaldehyde	2.00	1.77	88.57	80-120
4 Phenol	2.00	2.25	112.68	80-120
5 Bis(2-Chloroethyl)	2.00	2.14	107.22	80-120
6 2-Chlorophenol	2.00	2.13	106.73	80-120
7 1,3-Dichlorobenzen	2.00	1.84	92.21	80-120
9 1,4-Dichlorobenzen	2.00	2.26	113.04	80-120
10 1,2-Dichlorobenzen	2.00	2.18	108.83	80-120
11 2,2'-Oxybis(1-chlo	2.00	1.95	97.30	80-120
12 2-Methylphenol	2.00	1.98	99.13	80-120
13 Acetophenone	2.00	2.09	104.41	80-120
14 N-Nitroso-di-n-pro	2.00	1.97	98.53	80-120
16 Hexachloroethane	2.00	2.04	101.82	80-120
15 3&4-Methylphenol	2.00	2.46	123.08*	80-120
17 Nitrobenzene	2.00	2.61	130.61*	80-120
18 Isophorone	2.00	2.33	116.47	80-120
19 2-Nitrophenol	2.00	2.06	102.76	80-120
20 2,4-Dimethylphenol	2.00	1.97	98.32	80-120
21 bis(2-Chloroethoxy	2.00	2.17	108.45	80-120
22 2,4-Dichlorophenol	2.00	2.08	103.83	80-120
23 1,2,4-Trichloroben	2.00	2.18	109.15	80-120
25 Naphthalene	2.00	2.14	107.06	80-120
26 4-Chloroaniline	2.00	2.10	105.16	80-120
27 Hexachlorobutadien	2.00	2.15	107.44	80-120
28 Caprolactam	2.00	2.00	100.00	80-120
29 4-Chloro-3-Methylp	2.00	2.07	103.67	80-120
31 2-Methylnaphthalen	2.00	2.19	109.72	80-120
32 1-Methylnaphthalen	2.00	2.46	122.85*	80-120
34 1,2,4,5-Tetrachlor	2.00	1.92	96.28	80-120
33 Hexachlorocyclopen	2.00	1.26	63.04*	80-120
36 2,4,6-Trichlorophe	2.00	1.84	91.86	80-120
37 2,4,5-Trichlorophe	2.00	2.08	104.07	80-120
39 2-Chloronaphthalen	2.00	1.99	99.46	80-120
38 1,1'-Biphenyl	2.00	1.98	99.12	80-120
40 2-Nitroaniline	2.00	2.03	101.59	80-120
41 Dimethyl Phthalate	2.00	2.06	102.80	80-120
43 Acenaphthylene	2.00	1.75	87.71	80-120
42 2,6-Dinitrotoluene	2.00	1.88	93.93	80-120
44 3-Nitroaniline	2.00	2.08	103.95	80-120
46 Acenaphthene	2.00	2.03	101.73	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N062315.b\N6784.D
Report Date: 24-Jun-2015 10:51

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 2,4-Dinitrophenol	2.00	1.33	66.50*	80-120
48 Dibenzofuran	2.00	2.02	101.30	80-120
49 2,4-Dinitrotoluene	2.00	1.96	97.87	80-120
50 4-Nitrophenol	2.00	1.67	83.66	80-120
51 2,3,4,6-Tetrachlor	2.00	1.57	78.72*	80-120
52 Diethylphthalate	2.00	2.16	107.99	80-120
54 Fluorene	2.00	1.98	99.24	80-120
56 4-Nitroaniline	2.00	2.49	124.55*	80-120
57 4,6-Dinitro-2-Meth	2.00	1.81	90.39	80-120
58 N-Nitrosodiphenyla	2.00	1.60	80.24	80-120
59 4-Bromophenyl-phen	2.00	1.96	98.19	80-120
60 Hexachlorobenzene	2.00	1.92	95.76	80-120
61 Atrazine	2.00	1.74	86.93	80-120
62 Pentachlorophenol	2.00	1.77	88.66	80-120
64 Phenanthrene	2.00	1.90	94.98	80-120
65 Anthracene	2.00	2.03	101.62	80-120
66 Carbazole	2.00	2.00	99.96	80-120
67 Di-n-butylphthalat	2.00	2.13	106.62	80-120
68 Fluoranthene	2.00	1.96	98.04	80-120
70 Pyrene	2.00	1.92	96.03	80-120
71 Butylbenzylphthala	2.00	1.83	91.33	80-120
72 Benzo(a)anthracene	2.00	1.92	95.98	80-120
75 Chrysene	2.00	2.13	106.34	80-120
73 3,3'-Dichlorobenzi	2.00	2.18	109.20	80-120
76 bis(2-Ethylhexyl)p	2.00	1.72	85.90	80-120
77 Di-n-octylphthalat	2.00	1.78	88.98	80-120
78 Benzo(b)fluoranthe	2.00	1.68	83.84	80-120
79 Benzo(k)fluoranthe	2.00	2.17	108.47	80-120
80 Benzo(a)pyrene	2.00	1.73	86.35	80-120
82 Indeno(1,2,3-cd)py	2.00	1.81	90.36	80-120
83 Dibenzo(a,h)anthra	2.00	1.83	91.58	80-120
84 Benzo(g,h,i)peryle	2.00	2.03	101.53	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	10-93
$ 30 2-Methylnaphthale	2.00	0.000	*	43-92
$ 35 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 53 Fluorene-D10	2.00	0.000	*	29-101
$ 69 Pyrene-D10	2.00	0.000	*	53-166

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165004-2
Analytical Date: 06/18/15 11:20
Lab File ID : N6700.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/05/15 11:28 06/05/15 13:54
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
25 Naphthalene	0.94575	0.87135	0.87135	0.010	-7.86627	20.00000	Averaged	
31 2-Methylnaphthalene	0.68282	0.69306	0.69306	0.010	1.49977	20.00000	Averaged	
43 Acenaphthylene	1.69869	1.73079	1.73079	0.010	1.88965	20.00000	Averaged	
46 Acenaphthene	1.07666	1.11565	1.11565	0.010	3.62161	20.01000	Averaged	
54 Fluorene	1.19711	1.23342	1.23342	0.010	3.03359	20.00000	Averaged	
64 Phenanthrene	1.06309	0.99148	0.99148	0.010	-6.73589	20.00000	Averaged	
65 Anthracene	1.07705	1.14760	1.14760	0.010	6.54943	20.00000	Averaged	
68 Fluoranthene	1.08864	0.93472	0.93472	0.010	-14.13854	20.01000	Averaged	
70 Pyrene	1.78565	1.98944	1.98944	0.010	11.41252	20.00000	Averaged	
72 Benzo(a)anthracene	1.01235	1.08489	1.08489	0.010	7.16539	20.00000	Averaged	
75 Chrysene	1.00000	1.25516	1.44670	0.010	25.51648	20.00000	Linear	*
78 Benzo(b)fluoranthene	1.21263	1.02777	1.02777	0.010	-15.24458	20.00000	Averaged	
79 Benzo(k)fluoranthene	1.00000	0.91723	1.51567	0.010	-8.27658	20.00000	Linear	
80 Benzo(a)pyrene	1.12366	1.04982	1.04982	0.010	-6.57127	20.01000	Averaged	
82 Indeno(1,2,3-cd)pyrene	0.78532	0.80260	0.80260	0.010	2.20036	20.00000	Averaged	
83 Dibenzo(a,h)anthracene	0.55278	0.61631	0.61631	0.010	11.49318	20.00000	Averaged	
84 Benzo(g,h,i)perylene	0.79265	0.75562	0.75562	0.010	-4.67062	20.00000	Averaged	
30 2-Methylnaphthalene-D10	1.00719	0.99650	0.99650	0.010	-1.06153	20.00000	Averaged	
53 Fluorene-D10	0.87649	0.86112	0.86112	0.010	-1.75397	20.00000	Averaged	
69 Pyrene-D10	1.22730	1.29142	1.29142	0.010	5.22480	20.00000	Averaged	

*** = Compound out of QC criteria**

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165089-2
Analytical Date: 06/19/15 11:27
Lab File ID : N6715.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/05/15 11:28 06/05/15 13:54
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
25 Naphthalene	0.94575	0.87304	0.87304	0.010	-7.68741	20.00000	Averaged
31 2-Methylnaphthalene	0.68282	0.67429	0.67429	0.010	-1.24839	20.00000	Averaged
43 Acenaphthylene	1.69869	1.69207	1.69207	0.010	-0.38978	20.00000	Averaged
46 Acenaphthene	1.07666	1.07179	1.07179	0.010	-0.45203	20.01000	Averaged
54 Fluorene	1.19711	1.15869	1.15869	0.010	-3.20953	20.00000	Averaged
64 Phenanthrene	1.06309	0.93085	0.93085	0.010	-12.43985	20.00000	Averaged
65 Anthracene	1.07705	1.13930	1.13930	0.010	5.77921	20.00000	Averaged
68 Fluoranthene	1.08864	1.11443	1.11443	0.010	2.36906	20.01000	Averaged
70 Pyrene	1.78565	1.62442	1.62442	0.010	-9.02895	20.00000	Averaged
72 Benzo(a)anthracene	1.01235	0.96808	0.96808	0.010	-4.37247	20.00000	Averaged
75 Chrysene	1.00000	0.86578	1.06097	0.010	-13.42225	20.00000	Linear
78 Benzo(b)fluoranthene	1.21263	1.14828	1.14828	0.010	-5.30649	20.00000	Averaged
79 Benzo(k)fluoranthene	1.00000	0.89218	1.48147	0.010	-10.78202	20.00000	Linear
80 Benzo(a)pyrene	1.12366	0.93062	0.93062	0.010	-17.17960	20.01000	Averaged
82 Indeno(1,2,3-cd)pyrene	0.78532	0.71958	0.71958	0.010	-8.37061	20.00000	Averaged
83 Dibenzo(a,h)anthracene	0.55278	0.52037	0.52037	0.010	-5.86337	20.00000	Averaged
84 Benzo(g,h,i)perylene	0.79265	0.67312	0.67312	0.010	-15.07904	20.00000	Averaged
30 2-Methylnaphthalene-D10	1.00719	0.96643	0.96643	0.010	-4.04631	20.00000	Averaged
53 Fluorene-D10	0.87649	0.81686	0.81686	0.010	-6.80348	20.00000	Averaged
69 Pyrene-D10	1.22730	1.09895	1.09895	0.010	-10.45784	20.00000	Averaged

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165238-2
Analytical Date: 06/22/15 13:09
Lab File ID : N6752.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/05/15 11:28 06/05/15 13:54
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
25 Naphthalene	0.94575	0.90037	0.90037	0.010	-4.79780	20.00000	Averaged	
31 2-Methylnaphthalene	0.68282	0.68253	0.68253	0.010	-0.04234	20.00000	Averaged	
43 Acenaphthylene	1.69869	1.63797	1.63797	0.010	-3.57445	20.00000	Averaged	
46 Acenaphthene	1.07666	1.02768	1.02768	0.010	-4.54892	20.01000	Averaged	
54 Fluorene	1.19711	1.11464	1.11464	0.010	-6.88918	20.00000	Averaged	
64 Phenanthrene	1.06309	0.93820	0.93820	0.010	-11.74837	20.00000	Averaged	
65 Anthracene	1.07705	1.03674	1.03674	0.010	-3.74320	20.00000	Averaged	
68 Fluoranthene	1.08864	0.95064	0.95064	0.010	-12.67636	20.01000	Averaged	
70 Pyrene	1.78565	1.93379	1.93379	0.010	8.29624	20.00000	Averaged	
72 Benzo(a)anthracene	1.01235	0.97928	0.97928	0.010	-3.26616	20.00000	Averaged	
75 Chrysene	1.00000	0.94975	1.14416	0.010	-5.02464	20.00000	Linear	
78 Benzo(b)fluoranthene	1.21263	1.21013	1.21013	0.010	-0.20624	20.00000	Averaged	
79 Benzo(k)fluoranthene	1.00000	0.90643	1.50092	0.010	-9.35735	20.00000	Linear	
80 Benzo(a)pyrene	1.12366	1.00395	1.00395	0.010	-10.65329	20.01000	Averaged	
82 Indeno(1,2,3-cd)pyrene	0.78532	0.65690	0.65690	0.010	-16.35241	20.00000	Averaged	
83 Dibenzo(a,h)anthracene	0.55278	0.47111	0.47111	0.010	-14.77318	20.00000	Averaged	
84 Benzo(g,h,i)perylene	0.79265	0.62231	0.62231	0.010	-21.48985	20.00000	Averaged	*
30 2-Methylnaphthalene-D10	1.00719	0.92263	0.92263	0.010	-8.39566	20.00000	Averaged	
53 Fluorene-D10	0.87649	0.79029	0.79029	0.010	-9.83564	20.00000	Averaged	
69 Pyrene-D10	1.22730	1.31715	1.31715	0.010	7.32135	20.00000	Averaged	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165381-2
Analytical Date: 06/24/15 12:48
Lab File ID : N6791.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/23/15 13:03 06/23/15 15:23
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
25 Naphthalene	0.98786	1.07858	1.07858	0.010	9.18337	20.00000	Averaged	
31 2-Methylnaphthalene	1.00000	1.03100	0.78513	0.010	3.10032	20.00000	Linear	
43 Acenaphthylene	2.30656	2.54665	2.54665	0.010	10.40905	20.00000	Averaged	
46 Acenaphthene	1.41100	1.53427	1.53427	0.010	8.73598	20.01000	Averaged	
54 Fluorene	1.46629	1.54476	1.54476	0.010	5.35152	20.00000	Averaged	
64 Phenanthrene	1.25031	1.39243	1.39243	0.010	11.36684	20.00000	Averaged	
65 Anthracene	1.44959	1.44428	1.44428	0.010	-0.36667	20.00000	Averaged	
68 Fluoranthene	1.20381	1.26698	1.26698	0.010	5.24776	20.01000	Averaged	
70 Pyrene	1.00000	0.97603	2.65553	0.010	-2.39728	20.00000	Quadratic	
72 Benzo(a)anthracene	1.00000	1.18669	1.53077	0.010	18.66933	20.00000	Linear	
75 Chrysene	1.00000	1.15240	1.73357	0.010	15.23973	20.00000	Linear	
78 Benzo(b)fluoranthene	1.00000	1.38199	2.21411	0.010	38.19855	20.00000	Quadratic	*
79 Benzo(k)fluoranthene	1.00000	0.97819	2.07426	0.010	-2.18148	20.00000	Linear	
80 Benzo(a)pyrene	1.42953	1.62871	1.62871	0.010	13.93323	20.01000	Averaged	
82 Indeno(1,2,3-cd)pyrene	0.93525	0.98558	0.98558	0.010	5.38046	20.00000	Averaged	
83 Dibenzo(a,h)anthracene	0.66553	0.70077	0.70077	0.010	5.29532	20.00000	Averaged	
84 Benzo(g,h,i)perylene	1.00000	1.13631	0.96019	0.010	13.63115	20.00000	Linear	
30 2-Methylnaphthalene-D10	1.09374	1.18105	1.18105	0.010	7.98192	20.00000	Averaged	
53 Fluorene-D10	0.90411	0.92791	0.92791	0.010	2.63175	20.00000	Averaged	
69 Pyrene-D10	1.00000	1.05582	1.47134	0.010	5.58163	20.00000	Linear	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Logbooks and Supporting Documents

S/S
Son

KATAHDIN ANALYTICAL SERVICES, INC.

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method:	SW846 3550 (SONIC.)	SW846 3540 (SOX)	SW846 3545 (ASE)	SW846 3580 (OIL / WIPES)
Analytical Method:	SW846 8270	OTHER		
Standards	Surrogate ID (1): SV2717	Spike ID (1): SV6A SV2715	Spike ID (3):	
	Surrogate ID (2):	Spike ID (2): SIM SV6716		
Solvents / Chemicals / Consumables	Solvent Lot # (Mecl2): DM824	Solvent Lot # (Acetone): DM724	Sodium Sulfate (granular) Lot # 27465001	
	Filter Paper Lot # (SON) R0096181501	Filter Paper Lot # (KD) 96181511	Sodium Sulfate (powder) Lot # 27475002	
Misc.	Nitrogen Bath Temperature: 36°C	Sonicator Horns Tuned: 40%	Balance ID: UMHHPJ400	
Prep Start Time: 9:30	Prep Stop Time: 10:45	Sox Start Time: —	Sox End Time: —	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SONIC	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. SV28	Comments
6-18-15	HS	W6104995-1 W6104996-1	30.01	1.0	NR	✓	/	6-18-15	HAS	50ml	6-19-15	HS	1.0	D6	R322046 SV
		W6104995-2	30.02		1.0	✓								D7	R322047 SM
		-3	30.05			✓								D8	
		W6104996-2	29.99				✓							D9	
		-3	30.04				✓							D10	
	GPC Blank		6-18-15											E10	
										HS	6-19-15				

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SONIC	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. SV	Comments
6-18-15	HS	SI4190-1H	30.82	1.0	NR	✓		6-18-15	HAS	50ml	6-19-15	HS	1.0	E1	
		SI4226-1D	30.39				✓							E2	Wet
		SI4226-2D	33.75											E3	
		-5D	31.13											E4	
		-7D	35.13											E5	
		-8D	32.74											E6	
		-9D	30.07											E7	
		-10D	32.95				✓							E8	
		SI4270-1F	31.39			✓							✓	E9	
		SI4291 -1F	30.96										2.0ml	EVD D4	HWF1-B
		-3F	32.40											D5	~~HWF2~~ HWF2-B
		-5F	30.58											D6	HWF1-PT
		-6F	30.47											D7	HWF2-PT
										HS	6-19-15				

Reviewed By_____ Date_____

SVOA | 625
SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625 ✓	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV 2717		Spike ID (1): SV 2715		
	Surrogate ID (2):		Spike ID (2): SIM: SV2716		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM 804		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96191511		$NaSO_4$ Lot # 37965002		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) 52		pH (2nd Extraction) ≥11
Prep Start Time: 1000	Prep End Time: 1315		CLLE Start Time:		CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV835	Initials	Comments
		WG165103-1 (SIM)										SIM-R 322162
6-18-15	KF	WG165006-1 (SV)	1000	1m	NR	✓		1mL	6-18-15	B4	JMS	SV-R 322034
		WG165007-1 (625)										625-R 322062
		WG165006-2			1m	✓				B5		
		WG165007-2										
		-3				✓				B6		
		-3										
		LCS Test 1				✓				B7		pH=5 Neutral pH - 3 shakes
		LCSD Test 2				✓				B8		pH=5
		SIM LCS WG165103-2					✓			B9		
		WG165006-4	1050			✓				B10		MS S14191-34
		-5	1050			✓				C1		MSD 11-32

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	SV835 Tray Location	Initials	Comments
6-18-15	KF	S14191-1J	1050	1m	NR	✓		1mL	6-18-15	C2	JMS	
		-2J	970							C3		
		-3A1	910							C4		MS/D
		-4J	1040							C5		
		-5J	1080							C6		
		-6J	1050							C7		
		-7J	1050							C8		
		-8J	1050							C9		
		-9J	1050							C10		
		-10J	970							D1		
		-11J	1060							D2		
		S14261-1G	1040			✓				D3		625 em-5.5
		S14291-7	1000			✓	✓			D4		HWF2-L1
		-10	1000			✓	✓			D5		HWF2-L2

Reviewed By_____ Date_____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 060515

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG164187-1	50ng DFTPP	N0946	1	1	DFTPP SVM	2.0	JLG	OK
-4	SSTD 1.00 N0605	N6392		2	NSPSIM44			✓
-2	0.2	93		3				✓
-3	0.5	94		4				✓
-5	3.0	95		5				✓
-6	7.0	96		6				✓
-7	10.	97		7				✓
-8	100	98		8				OK
7550.	WG164111-1	99		9				OK
	-2	N6400		10				OK
	SI3800-7DL	01	3	11				OK DL1:5 100/300
	-13RA	02	1	12				OK
	-6	03		13				OK
	-9	04		14				OK
	WG164181-3	05		15				OK
	-4	06		16				OK
	SI3800-10	07		17				OK DL1:4
	-15	08		18				OK
	-16	09		19				OK
	-3	10		20				OK
	-17	11		21				OK
	-28	12		22				OK
	-8	13		23				— DL1:10
	-22RA	14		24				OK
	-23RA	15		25				OK
	-33	16		26				OK
	-5	17		27				OK
	Meh	18-23		28				—

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52624
IS MIX	52615

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 061815

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165004-1	50ng DFTPP	ND955	1	1	DFTPPSIM	2.0	JLK	OK
-2	SS ~~1.00~~ ND618	N6700	1	2	NSPSIM44			OK
3550	SI3897-25DL	01	100	3				JK (50/500)x2
	-37DL	02	3	4				OK 60/300
	-40DL	03	75	5				OK 50/250 → 50/750
	-41DL	04	10	6				— 50/500
	-41	05	1	7				OK 1556
	MeCl2	06-09		8				—
3510	WG165603 -1	10		9				OK
	-2	11		10				OK
	SI4291-7	12		11				OK DL 1:3
	-10	13		12				SS 2 +
	SI3879-1	14		13				1534 EPA
								JLK 061915

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52624
IS MIX	52633

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 061915

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165089-1	50ng DFTPP	N0956	1	1	DFTPPSIM	2.0	SM	OK
-2	SS 1.50 N0619	N6715	1	2	NJPSIM44			OK
3550	SI3897-10DL2	16	75	3				— DL1:100 50/250 → 50/750
	-10DL	17	10	4				OK 50/500
	SI3772-8	18	1	5				OK
	SI3897-10DL2	19	100	6				OK (50/500)x2
	MeCl2	20	1	7				—
3550	WG164996-1	21		8				OK
	-2	22		9				OK
	-3	23		10				OK
	SI4291-1X	24	10	11				1556 DL1:20 50/500
	-3DL	25		12				1552 DL1:20
	-5DL	26		13				1556 DL1:30
	-8DL	27		14				1556 DL1:30
	-1	28	1	15				— not run
	-3	29		16				—
	-5	30		17				—
	-8	31		18				—
	MeCl2	32-44		19				
	SI4015-1	45		20				
	-2	46		21				
	SI4083-1	47		22				
	SI4138-1	48		23				
	-2	49		24				
	SI4142-4	50		25				
	SI2721-DL	51		26				

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52624
IS MIX	52633

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

QAMS570

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 062215

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WH65238-1	50 ng DFTPP	ND957	1	1	DFTPPSIM	2.0	DLY	OK
-2	SSTD 1WD N0622	N6752	1	2	NSPSIM44			OK
3550	SI4291-10RA	53	1	3				5921
	SI4291-5DL2	54	30	4				1561 50/250 → 50/300
	-8DL2	55	30	5				OK
	-1DL2	56	20	6				1561 50/300 → 50/250
	-3 DL2	57	20	7				1561
	SI4226-8	58	1	8				OK DL1:7
	-2	59		9				1556 DL1:20
	-10	60		10				1561 DL1:40
	-1	61		11				1556 DL1:30
	-9	62		12				1556 DL1:20
	-5	63		13				1556 DL1:8
	-7	64		14				1556 DL1:8
	MeCl2	65-77		15				—

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52624
IS MIX	52633

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 062315

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165304-1	50ng DFTPP	ND958	1	1	DFTPPSV4	2.0	JLG	OK
-4	SSTD1.00 ND623	N6978		2	NSP SV445			✓
-2	0.2	79		3				✓
-3	0.5	80		4				✓
-5	3.0	81		5				✓
-6	7.0	82		6				✓
-7	12.	83		7				✓
-8	IND	84		8				OK
3510	WG165249-1	85		9				OK
	-4	86		10				OK SPLP PB1125LA
	~~-2~~	87		11				OK
	~~-3~~	88		12				OK
	~~-5~~	89		13				OK SI3862 SPLP
	-6	90		14				OK SSY4
	SI4291-2	91		15				~~OK~~ not run; power loss SPLP
	-4	92		16				
	-6	93		17				
	-9	94		18				
	SI4332-1	95		19				
	-3	96		20				
	-5	97		21				
	-7	98		22				
	-9	99		23				
	-10	N6800		24				
	-11	01		25				
3550	SI4226-7DL	02	8	26				50/400
	-8DL	03	7	27				50/350
	~~SI~~ WG165008-1	04	1	28				EPLF

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52637
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

cont next page

SVOA-005 – Revision 1 – 03/01/2011

DATE OF DFTPP INJECTION: 062415

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165381-1	50ng DFTPP	ND959	1	1	DFTPPSIM	2.0	JM	OK
-2	50 TD 1.00 ND624	N6791	1	2	NSESIM45			OK
3560	SI 4291-7DL	92	3	3				SS2↑
	-2	93	1	4				OK
	-4	94		5				OK
	-6	95		6				SS3↓
	-8	96		7				OK
3550	SI 4332-1	97		8				OK
	-3	98		9				OK
	-5	99		10				OK
	-7	N6800		11				OK
	-9	01		12				OK
	-10	02		13				OK
	-11	03		14				OK
	SI 4226-1DL	04	30	15				OK 50/250→50/300
	-2DL	05	20	16				— DL 1:25 50/200→50/250
	-5DL	06	8	17				SS3↓ 50/400
	-7DL	07	8	18				SS3↓ ↓
	-8DL	08	JM 20 7	19				OK 50/350
	-9DL	09	20	20				OK 50/200→50/250
	-10DL	10	40	21				OK 50/250→50/400
	SI 4332-22	11	1	22				OK DL 1:6
	-20	12		23				OK DL 1:12
	-16	13		24				OK DL 1:10
	-13	14		25				1556↓ DL 1:40
	-19	15		26				1561↓ DL 1:60
	-21	16		27				DOC DL 1:100
	-18	17		28				↓ DL 1:75

STANDARD	CODE
DFTPP	52611
CAL. STD.	52545 52638
IS MIX	52637

REVIEWED AND APPROVED BY: _____
DATE: _____

Cont'd next page

SPLP SEMIVOLATILE DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4291

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
SITE 4TS-HWF1-B	SI4291-2		80.2		27.6		76.8		17.0		63.8		81.2	
SITE 4TS-HWF2-B	SI4291-4		77.4		20.6		73.7		15.4		68.4		88.7	
SITE 4TS-HWF1-PT	SI4291-6		65.4		16.2	*	59.0		14.0		53.6		81.2	
SITE 4TS-HWF2-PT	SI4291-9		70.4		28.4		93.4		18.0		87.2		91.1	
Method Blank Sample	WG165248-1		82.1		38.0		80.2		27.2		54.9		78.8	
Laboratory Control S	WG165248-2		93.7		38.6		81.8		28.5		96.4		93.8	
Laboratory Control S	WG165248-3		83.1		36.4		76.7		23.8		95.3		82.7	
SPLP Blank	WG165248-4		71.5		29.5		72.3		19.4		58.7		67.2	

		QC Limits
2FBP	2-FLUOROBIPHENYL	50-110
2FP	2-FLUOROPHENOL	20-110
PHL	PHENOL-D6	10-115
TPH	TERPHENYL-D14	50-135
NBZ	NITROBENZENE-D5	40-110
TBP	2,4,6-TRIBROMOPHENOL	40-125

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0790.D
Instrument ID : GCMS-U
Matrix : AQ

SDG : SI4291
Lab Sample ID : WG165248-1
Date Extracted : 22-JUN-15
Date Analyzed : 23-JUN-15
Time Analyzed : 12:08

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
SPLP Blank	WG165248-4	U0791.D	06/23/15	12:35
Laboratory Control S	WG165248-2	U0793.D	06/23/15	13:31
Laboratory Control S	WG165248-3	U0794.D	06/23/15	13:59
SITE 4TS-HWF1-B	SI4291-2	U0795.D	06/23/15	14:27
SITE 4TS-HWF2-B	SI4291-4	U0796.D	06/23/15	14:55
SITE 4TS-HWF1-PT	SI4291-6	U0797.D	06/23/15	15:23
SITE 4TS-HWF2-PT	SI4291-9	U0798.D	06/23/15	15:51

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165248-1
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: U0790.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165248

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	7.5	ug/L	1	10	10.	1.0	7.5
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
Acetophenone	U	7.5	ug/L	1	10	10.	3.9	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Caprolactam	U	7.5	ug/L	1	10	10.	0.40	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.8	7.5
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
2-Fluorophenol		38.0	%					
Phenol-d6		27.2	%					
Nitrobenzene-d5		80.2	%					
2-Fluorobiphenyl		82.1	%					
2,4,6-Tribromophenol		54.9	%					
Terphenyl-d14		78.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165248-4
Client ID: SPLP Blank
Project:
SDG: SI4291
Lab File ID: U0791.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165248

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	7.4	ug/L	1	10	9.9	0.99	7.4
Phenol	U	7.4	ug/L	1	10	9.9	1.8	7.4
2-Methylphenol	U	7.4	ug/L	1	10	9.9	3.8	7.4
Acetophenone	U	7.4	ug/L	1	10	9.9	3.9	7.4
Isophorone	U	7.4	ug/L	1	10	9.9	1.7	7.4
2,4-Dimethylphenol	U	7.4	ug/L	1	10	9.9	4.4	7.4
Caprolactam	U	7.4	ug/L	1	10	9.9	0.40	7.4
4-Chloro-3-Methylphenol	U	7.4	ug/L	1	10	9.9	3.6	7.4
2-Chloronaphthalene	U	7.4	ug/L	1	10	9.9	2.8	7.4
Dimethyl Phthalate	U	7.4	ug/L	1	10	9.9	2.0	7.4
Acenaphthylene	U	7.4	ug/L	1	10	9.9	1.5	7.4
3-Nitroaniline	U	19.	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.4	ug/L	1	10	9.9	1.5	7.4
Diethylphthalate	U	7.4	ug/L	1	10	9.9	2.0	7.4
Fluorene	U	7.4	ug/L	1	10	9.9	2.1	7.4
4-Bromophenyl-Phenylether	U	7.4	ug/L	1	10	9.9	1.9	7.4
Carbazole	U	7.4	ug/L	1	10	9.9	2.1	7.4
2-Fluorophenol		29.5	%					
Phenol-d6		19.4	%					
Nitrobenzene-d5		72.3	%					
2-Fluorobiphenyl		71.5	%					
2,4,6-Tribromophenol		58.7	%					
Terphenyl-d14		67.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165248-2
LCSD ID: WG165248-3
Project:
SDG: SI4291
Report Date: 24-JUN-15
LCS File ID: U0793.D

Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165248
LCSD File ID: U0794.D

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Benzaldehyde	50.0	133.	266.*	141.	282.*	ug/L	6	30	10-189
Phenol	100.	27.5	27.5	24.3	24.3	ug/L	12	30	0-115
2-Methylphenol	100.	58.5	58.5	53.2	53.2	ug/L	9	30	40-110
Acetophenone	50.0	40.5	81.0	37.2	74.4	ug/L	8	30	49-102
Isophorone	50.0	32.4	64.8	30.2	60.4	ug/L	7	30	50-110
2,4-Dimethylphenol	100.	77.1	77.1	77.4	77.4	ug/L	0	30	30-110
Caprolactam	50.0	8.45	16.9	7.85	15.7	ug/L	7	30	10-86
4-Chloro-3-Methylphenol	100.	85.6	85.6	86.0	86.0	ug/L	0	30	45-110
2-Chloronaphthalene	50.0	37.9	75.8	33.9	67.8	ug/L	11	30	50-105
Dimethyl Phthalate	50.0	49.5	99.0	40.6	81.2	ug/L	20	30	25-125
Acenaphthylene	50.0	44.6	89.2	38.3	76.6	ug/L	15	30	50-105
3-Nitroaniline	50.0	38.6	77.2	33.6	67.2	ug/L	14	30	20-125
Acenaphthene	50.0	46.8	93.6	42.0	84.0	ug/L	11	30	45-110
Diethylphthalate	50.0	59.0	118.	47.9	95.8	ug/L	21	30	45-120
Fluorene	50.0	54.2	108.	49.2	98.4	ug/L	10	30	50-110
4-Bromophenyl-Phenylether	50.0	47.9	95.8	40.7	81.4	ug/L	16	30	50-115
Carbazole	50.0	51.2	102.	44.2	88.4	ug/L	15	30	50-115
2-Fluorophenol			38.6		36.4				20-110
Phenol-d6			28.5		23.8				10-115
Nitrobenzene-d5			81.8		76.7				40-110
2-Fluorobiphenyl			93.7		83.1				50-110
2,4,6-Tribromophenol			96.4		95.3				40-125
Terphenyl-d14			93.8		82.7				50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD391.D
Instrument ID : GCMS-U

SDG : SI4291
Date Analyzed : 22-JUN-15
Time Analyzed : 13:30

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	34.9		
68	Less than 2.0% of mass 69	0.2	0.71	1
69	Less than 100.0% of mass 198	25.9		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	44.0		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.3		
275	10.0 - 30.0% of mass 198	17.2		
365	1.0 - 100.0% of mass 198	1.6		
441	0.0 - 100.0% of mass 443	13.2	82.85	2
442	40.0 - 100.0% of mass 198	83.4		
443	17.0 - 23.0% of mass 442	15.9	19.06	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165272-4	U0757.D	06/22/15	13:48
Initial Calibration	WG165272-2	U0758.D	06/22/15	14:16
Initial Calibration	WG165272-3	U0759.D	06/22/15	14:44
Initial Calibration	WG165272-5	U0760.D	06/22/15	15:12
Initial Calibration	WG165272-6	U0761.D	06/22/15	15:40
Initial Calibration	WG165272-7	U0762.D	06/22/15	16:08
Independent Source	WG165272-8	U0763.D	06/22/15	16:36

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD392.D
Instrument ID : GCMS-U

SDG : SI4291
Date Analyzed : 23-JUN-15
Time Analyzed : 10:54

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	33.1		
68	Less than 2.0% of mass 69	0.1	0.57	1
69	Less than 100.0% of mass 198	26.3		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	44.4		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	17.1		
365	1.0 - 100.0% of mass 198	1.7		
441	0.0 - 100.0% of mass 443	12.6	82.55	2
442	40.0 - 100.0% of mass 198	79.9		
443	17.0 - 23.0% of mass 442	15.2	19.05	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165301-2	U0788.D	06/23/15	11:12
Method Blank Sample	WG165248-1	U0790.D	06/23/15	12:08
SPLP Blank	WG165248-4	U0791.D	06/23/15	12:35
Laboratory Control S	WG165248-2	U0793.D	06/23/15	13:31
Laboratory Control S	WG165248-3	U0794.D	06/23/15	13:59
SITE 4TS-HWF1-B	SI4291-2	U0795.D	06/23/15	14:27
SITE 4TS-HWF2-B	SI4291-4	U0796.D	06/23/15	14:55
SITE 4TS-HWF1-PT	SI4291-6	U0797.D	06/23/15	15:23
SITE 4TS-HWF2-PT	SI4291-9	U0798.D	06/23/15	15:51

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD392.D
Instrument ID : GCMS-U

SDG : SI4291
Date Analyzed : 23-JUN-15
Time Analyzed : 10:54

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	33.1		
68	Less than 2.0% of mass 69	0.1	0.57	1
69	Less than 100.0% of mass 198	26.3		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	44.4		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	17.1		
365	1.0 - 100.0% of mass 198	1.7		
441	0.0 - 100.0% of mass 443	12.6	82.55	2
442	40.0 - 100.0% of mass 198	79.9		
443	17.0 - 23.0% of mass 442	15.2	19.05	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165301-2	U0788.D	06/23/15	11:12
Method Blank Sample	WG165248-1	U0790.D	06/23/15	12:08
SPLP Blank	WG165248-4	U0791.D	06/23/15	12:35
Laboratory Control S	WG165248-2	U0793.D	06/23/15	13:31
Laboratory Control S	WG165248-3	U0794.D	06/23/15	13:59
SITE 4TS-HWF1-B	SI4291-2	U0795.D	06/23/15	14:27
SITE 4TS-HWF2-B	SI4291-4	U0796.D	06/23/15	14:55
SITE 4TS-HWF1-PT	SI4291-6	U0797.D	06/23/15	15:23
SITE 4TS-HWF2-PT	SI4291-9	U0798.D	06/23/15	15:51

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165272-4
Lab File ID : U0757.D

SDG: SI4291
Analytical Date: 06/22/15 13:48
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	319771		4.53		1162914		5.92		598316		8.01	
	Upper Limit	639542		5.03		2325828		6.42		1196632		8.51	
	Lower Limit	159885.5		4.03		581457		5.42		299158		7.51	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165301-2	253482		4.52		1009168		5.92		510564		8.01	
Method Blank Sample	WG165248-1	358845		4.52		1367124		5.91		661718		8.01	
SPLP Blank	WG165248-4	339529		4.52		1314201		5.91		645376		8.01	
Laboratory Control S	WG165248-2	341080		4.52		1256846		5.91		614389		8.00	
Laboratory Control S	WG165248-3	341276		4.52		1282735		5.91		511500		8.00	
SITE 4TS-HWF1-B	SI4291-2	343091		4.52		1382151		5.91		631316		8.00	
SITE 4TS-HWF2-B	SI4291-4	373148		4.52		1401056		5.91		647968		8.00	
SITE 4TS-HWF1-PT	SI4291-6	360410		4.52		1394703		5.91		660871		8.00	
SITE 4TS-HWF2-PT	SI4291-9	402306		4.52		1103240		5.91		529469		8.00	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165272-4
Lab File ID : U0757.D

SDG: SI4291
Analytical Date: 06/22/15 13:48
Instrument ID: GCMS-U

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	926799		9.82		468408		13.38		194522		16.34	
	Upper Limit	1853598		10.32		936816		13.88		389044		16.84	
	Lower Limit	463399.5		9.32		234204		12.88		97261		15.84	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165301-2	581733		9.81		316215		13.37		165443		16.33	
Method Blank Sample	WG165248-1	660146		9.81		410775		13.36		230772		16.33	
SPLP Blank	WG165248-4	872372		9.81		533781		13.36		284374		16.32	
Laboratory Control S	WG165248-2	968176		9.81		547047		13.36		260405		16.33	
Laboratory Control S	WG165248-3	799924		9.81		460939		13.36		217287		16.33	
SITE 4TS-HWF1-B	SI4291-2	722605		9.81		360100		13.35		200734		16.32	
SITE 4TS-HWF2-B	SI4291-4	950048		9.81		308823		13.35		184015		16.32	
SITE 4TS-HWF1-PT	SI4291-6	988335		9.81		385376		13.35		205880		16.32	
SITE 4TS-HWF2-PT	SI4291-9	797047		9.81		460515		13.35		176395		16.32	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-2
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0795.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165248

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	ULL	7.4	ug/L	1	10	9.8	0.98	7.4
Phenol	U	7.4	ug/L	1	10	9.8	1.8	7.4
2-Methylphenol	U	7.4	ug/L	1	10	9.8	3.7	7.4
Acetophenone	U	7.4	ug/L	1	10	9.8	3.8	7.4
Isophorone	U	7.4	ug/L	1	10	9.8	1.7	7.4
2,4-Dimethylphenol	U	7.4	ug/L	1	10	9.8	4.3	7.4
Caprolactam	U	7.4	ug/L	1	10	9.8	0.39	7.4
4-Chloro-3-Methylphenol	U	7.4	ug/L	1	10	9.8	3.5	7.4
2-Chloronaphthalene	U	7.4	ug/L	1	10	9.8	2.7	7.4
Dimethyl Phthalate	U	7.4	ug/L	1	10	9.8	2.0	7.4
Acenaphthylene	U	7.4	ug/L	1	10	9.8	1.5	7.4
3-Nitroaniline	U	19	ug/L	1	25	24.	1.5	19.
Acenaphthene	U	7.4	ug/L	1	10	9.8	1.5	7.4
Diethylphthalate	U	7.4	ug/L	1	10	9.8	2.0	7.4
Fluorene	U	7.4	ug/L	1	10	9.8	2.0	7.4
4-Bromophenyl-Phenylether	U	7.4	ug/L	1	10	9.8	1.9	7.4
Carbazole	U	7.4	ug/L	1	10	9.8	2.0	7.4
2-Fluorophenol		27.6	%					
Phenol-d6		17.0	%					
Nitrobenzene-d5		76.8	%					
2-Fluorobiphenyl		80.2	%					
2,4,6-Tribromophenol		63.8	%					
Terphenyl-d14		81.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-4
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0796.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165248

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	ULL	7.4	ug/L	1	10	9.8	0.98	7.4
Phenol	U	7.4	ug/L	1	10	9.8	1.8	7.4
2-Methylphenol	U	7.4	ug/L	1	10	9.8	3.7	7.4
Acetophenone	U	7.4	ug/L	1	10	9.8	3.8	7.4
Isophorone	U	7.4	ug/L	1	10	9.8	1.7	7.4
2,4-Dimethylphenol	U	7.4	ug/L	1	10	9.8	4.3	7.4
Caprolactam	U	7.4	ug/L	1	10	9.8	0.39	7.4
4-Chloro-3-Methylphenol	U	7.4	ug/L	1	10	9.8	3.5	7.4
2-Chloronaphthalene	U	7.4	ug/L	1	10	9.8	2.7	7.4
Dimethyl Phthalate	U	7.4	ug/L	1	10	9.8	2.0	7.4
Acenaphthylene	U	7.4	ug/L	1	10	9.8	1.5	7.4
3-Nitroaniline	U	19	ug/L	1	25	24.	1.5	19.
Acenaphthene	U	7.4	ug/L	1	10	9.8	1.5	7.4
Diethylphthalate	U	7.4	ug/L	1	10	9.8	2.0	7.4
Fluorene	U	7.4	ug/L	1	10	9.8	2.0	7.4
4-Bromophenyl-Phenylether	U	7.4	ug/L	1	10	9.8	1.9	7.4
Carbazole	U	7.4	ug/L	1	10	9.8	2.0	7.4
2-Fluorophenol		20.6	%					
Phenol-d6		15.4	%					
Nitrobenzene-d5		73.7	%					
2-Fluorobiphenyl		77.4	%					
2,4,6-Tribromophenol		68.4	%					
Terphenyl-d14		88.7	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-6
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0797.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165248

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	ULL	7.8	ug/L	1	10	10.	1.0	7.8
Phenol	U	7.8	ug/L	1	10	10.	1.9	7.8
2-Methylphenol	U	7.8	ug/L	1	10	10.	4.0	7.8
Acetophenone	U	7.8	ug/L	1	10	10.	4.1	7.8
Isophorone	U	7.8	ug/L	1	10	10.	1.8	7.8
2,4-Dimethylphenol	U	7.8	ug/L	1	10	10.	4.6	7.8
Caprolactam	U	7.8	ug/L	1	10	10.	0.42	7.8
4-Chloro-3-Methylphenol	U	7.8	ug/L	1	10	10.	3.8	7.8
2-Chloronaphthalene	U	7.8	ug/L	1	10	10.	2.9	7.8
Dimethyl Phthalate	U	7.8	ug/L	1	10	10.	2.1	7.8
Acenaphthylene	U	7.8	ug/L	1	10	10.	1.6	7.8
3-Nitroaniline	U	20	ug/L	1	25	26.	1.6	20.
Acenaphthene	U	7.8	ug/L	1	10	10.	1.6	7.8
Diethylphthalate	U	7.8	ug/L	1	10	10.	2.1	7.8
Fluorene	U	7.8	ug/L	1	10	10.	2.2	7.8
4-Bromophenyl-Phenylether	U	7.8	ug/L	1	10	10.	2.0	7.8
Carbazole	U	7.8	ug/L	1	10	10.	2.2	7.8
2-Fluorophenol	*	16.2	%					
Phenol-d6		14.0	%					
Nitrobenzene-d5		59.0	%					
2-Fluorobiphenyl		65.4	%					
2,4,6-Tribromophenol		53.6	%					
Terphenyl-d14		81.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-9
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: U0798.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165248

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 24-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	ULL	8.5	ug/L	1	10	11.	1.1	8.5
Phenol	U	8.5	ug/L	1	10	11.	2.0	8.5
2-Methylphenol	U	8.5	ug/L	1	10	11.	4.3	8.5
Acetophenone	U	8.5	ug/L	1	10	11.	4.4	8.5
Isophorone	U	8.5	ug/L	1	10	11.	1.9	8.5
2,4-Dimethylphenol	U	8.5	ug/L	1	10	11.	5.0	8.5
Caprolactam	U	8.5	ug/L	1	10	11.	0.45	8.5
4-Chloro-3-Methylphenol	U	8.5	ug/L	1	10	11.	4.1	8.5
2-Chloronaphthalene	U	8.5	ug/L	1	10	11.	3.2	8.5
Dimethyl Phthalate	U	8.5	ug/L	1	10	11.	2.3	8.5
Acenaphthylene	U	8.5	ug/L	1	10	11.	1.7	8.5
3-Nitroaniline	U	22	ug/L	1	25	28.	1.7	22.
Acenaphthene	U	8.5	ug/L	1	10	11.	1.7	8.5
Diethylphthalate	U	8.5	ug/L	1	10	11.	2.3	8.5
Fluorene	U	8.5	ug/L	1	10	11.	2.4	8.5
4-Bromophenyl-Phenylether	U	8.5	ug/L	1	10	11.	2.2	8.5
Carbazole	U	8.5	ug/L	1	10	11.	2.4	8.5
2-Fluorophenol		28.4	%					
Phenol-d6		18.0	%					
Nitrobenzene-d5		93.4	%					
2-Fluorobiphenyl		70.4	%					
2,4,6-Tribromophenol		87.2	%					
Terphenyl-d14		91.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0758.D U0759.D U0757.D U0760.D U0761.D U0762.D **Column ID:**
Calibration Date(s): 22-JUN-15 13:48 22-JUN-15 16:08

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Crv					Max	
	10.0000	25.0000	50.0000	75.0000	100.0000	125.0000	New	b	m1	m2	%RSD	%RSD	
Benzaldehyde	0.13557	0.12330	0.11466	0.10355	0.09317	0.09947	AVG		0.11162		14.29268	15.00000	O
Phenol	1.55176	1.49106	1.54595	1.45120	1.36000	1.29535	AVG		1.44922		7.12175	30.00000	O
2-Methylphenol	1.23970	1.16464	1.22111	1.23711	1.23117	1.21538	AVG		1.21819		2.28474	15.00000	O
Acetophenone	0.43458	0.42534	0.41830	0.39794	0.37503	0.36724	AVG		0.40307		6.85507	15.00000	O
Isophorone	0.56285	0.54220	0.54812	0.52863	0.49633	0.46796	AVG		0.52435		6.79615	15.00000	O
2,4-Dimethylphenol	0.27722	0.28385	0.28869	0.27891	0.25667	0.22409	AVG		0.26824		9.03971	15.00000	O
Caprolactam	0.10576	0.10957	0.11382	0.11591	0.11315	0.10940	AVG		0.11127		3.32112	15.00000	O
4-Chloro-3-Methylphenol	0.22570	0.22899	0.24689	0.24024	0.23409	0.22204	AVG		0.23299		4.00869	30.00000	O
2-Chloronaphthalene	1.22423	1.21542	1.09093	1.04117	0.96641	1.13060	AVG		1.11146		9.02343	15.00000	O
Dimethyl Phthalate	1.19539	1.16366	1.19378	1.25572	1.08266	1.06409	AVG		1.15922		6.30927	15.00000	O
Acenaphthylene	1.80551	1.77679	1.84139	1.73275	1.45473	1.25319	AVG		1.64406		14.37095	15.00000	O
3-Nitroaniline	0.33271	0.32248	0.31877	0.33674	0.30862	0.30541	AVG		0.32079		3.91393	15.00000	O
Acenaphthene	1.05737	1.05564	1.00224	0.97808	0.75203	0.78740	AVG		0.93879		14.37685	30.00000	O
Diethylphthalate	1.20247	1.17334	1.14190	1.10982	0.96163	0.82800	AVG		1.06953		13.56814	15.00000	O
Fluorene	1.25253	1.20727	1.00409	0.82078	0.61377	0.59793	AVG		0.91606		31.16156	15.00000	W(
4-Bromophenyl-phenylether	0.18069	0.18132	0.19695	0.19113	0.18682	0.17117	AVG		0.18468		4.88257	15.00000	O
Carbazole	0.94970	0.94227	0.89938	0.79383	0.73662	0.79704	AVG		0.85314		10.43762	15.00000	O
2-Fluorophenol	1.23079	1.18588	1.30868	1.24658	1.30576	1.24411	AVG		1.25363		3.74148	15.00000	
Phenol-D6	1.49098	1.41535	1.41242	1.30591	1.19054	1.16838	AVG		1.33060		9.86440	15.00000	
Nitrobenzene-D5	0.25354	0.25124	0.25857	0.25791	0.23837	0.22803	AVG		0.24794		4.91553	15.00000	
2-Fluorobiphenyl	1.18754	1.13682	1.20507	1.13801	0.86528	0.87967	AVG		1.06873		14.45195	15.00000	
2,4,6-Tribromophenol	0.15766	0.16284	0.18248	0.18292	0.16880	0.14577	AVG		0.16674		8.69547	15.00000	
Terphenyl-D14	0.82974	0.93391	1.03382	0.97858	1.00736	0.94814	AVG		0.95526		7.50400	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U0763.D
Report Date: 24-Jun-2015 15:15

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: WG165272-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: INDcheck8270.spk
Quant Type: ISTD
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U8270C79.m
Misc Info: WG165272,WG165272,WG165272-4,SI4291-1

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	49.4	98.87	80-120
3 Pyridine	50.0	55.4	110.88	80-120
2 N-Nitrosodimethyla	50.0	44.2	88.49	80-120
5 2-Picoline	50.0	61.7	123.45*	80-120
6 N-Nitrosomethyleth	50.0	54.1	108.19	80-120
7 Methyl Methanesulf	50.0	43.3	86.57	80-120
9 N-Nitrosodiethylam	50.0	57.2	114.43	80-120
10 Ethyl Methanesulfo	50.0	49.9	99.80	80-120
11 Benzaldehyde	50.0	18.8	37.57*	80-120
14 Aniline	50.0	51.9	103.72	80-120
13 Phenol	50.0	54.9	109.87	80-120
16 Bis(2-Chloroethyl)	50.0	65.8	131.52*	80-120
17 2-Chlorophenol	50.0	53.8	107.56	80-120
18 1,3-Dichlorobenzen	50.0	54.7	109.33	80-120
20 1,4-Dichlorobenzen	50.0	53.9	107.77	80-120
22 Benzyl alcohol	50.0	48.8	97.50	80-120
21 1,2-Dichlorobenzen	50.0	54.5	109.01	80-120
25 2,2'-Oxybis(1-chlo	50.0	48.2	96.46	80-120
23 2-Methylphenol	50.0	52.1	104.24	80-120
26 Acetophenone	100	93.3	93.27	80-120
27 N-Nitrosopyrrolidi	50.0	54.8	109.62	80-120
30 N-Nitrosomorpholin	50.0	52.1	104.20	80-120
28 N-Nitroso-di-n-pro	50.0	45.8	91.72	80-120
29 3&4-Methylphenol	50.0	53.8	107.62	80-120
32 Hexachloroethane	50.0	53.6	107.25	80-120
31 o-Toluidine	50.0	56.6	113.20	80-120
34 Nitrobenzene	50.0	55.8	111.62	80-120
35 N-Nitrosopiperidin	50.0	57.0	114.09	80-120
36 Isophorone	50.0	54.4	108.86	80-120
37 2-Nitrophenol	50.0	51.8	103.50	80-120
38 2,4-Dimethylphenol	50.0	54.3	108.61	80-120
40 Bis(2-Chloroethoxy	50.0	52.3	104.56	80-120
39 O,O,O-Triethylphos	50.0	53.0	106.04	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	145	289.32*	80-120
42 2,4-Dichlorophenol	50.0	53.3	106.57	80-120
44 1,2,4-Trichloroben	50.0	55.2	110.37	80-120
46 Naphthalene	50.0	58.0	116.07	80-120
43 2,6-Dichlorophenol	50.0	57.2	114.39	80-120
47 4-Chloroaniline	50.0	49.6	99.17	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U0763.D
Report Date: 24-Jun-2015 15:15

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	57.3	114.61	80-120
49 Hexachlorobutadien	50.0	58.5	116.95	80-120
51 N-Nitroso-Di-N-But	50.0	59.6	119.21	80-120
53 Caprolactam	50.0	50.7	101.40	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	48.1	96.30	80-120
55 4-Chloro-3-Methylp	50.0	55.1	110.14	80-120
57 2-Methylnaphthalen	50.0	55.9	111.82	80-120
58 1-Methylnaphthalen	50.0	56.5	112.97	80-120
60 1,2,4,5-Tetrachlor	100	95.4	95.42	80-120
59 Hexachlorocyclopen	50.0	47.4	94.80	80-120
61 2,4,6-Trichlorophe	50.0	57.0	114.09	80-120
62 2,4,5-Trichlorophe	50.0	60.7	121.38*	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	56.9	113.82	80-120
65 1,1'-Biphenyl	50.0	54.9	109.83	80-120
66 2-Chloronaphthalen	50.0	57.4	114.73	80-120
67 1-Chloronaphthalen	50.0	49.4	98.90	80-120
69 2-Nitroaniline	50.0	57.1	114.21	80-120
70 1,4-Naphthoquinone	50.0	69.8	139.69*	80-120
72 Dimethyl Phthalate	50.0	56.4	112.79	80-120
73 1,3-Dinitrobenzene	50.0	53.7	107.44	80-120
75 Acenaphthylene	50.0	52.8	105.59	80-120
74 2,6-Dinitrotoluene	50.0	59.9	119.77	80-120
77 3-Nitroaniline	50.0	51.7	103.33	80-120
79 Acenaphthene	50.0	55.6	111.17	80-120
80 2,4-Dinitrophenol	50.0	56.0	111.95	80-120
83 Dibenzofuran	50.0	61.0	122.10*	80-120
81 Pentachlorobenzene	50.0	55.4	110.92	80-120
82 4-Nitrophenol	50.0	55.7	111.35	80-120
84 2,4-Dinitrotoluene	50.0	55.3	110.56	80-120
85 1-Naphthylamine	50.0	53.0	106.00	80-120
88 2-Naphthylamine	50.0	56.6	113.29	80-120
87 2,3,4,6-Tetrachlor	50.0	55.6	111.28	80-120
89 Diethylphthalate	50.0	55.5	111.04	80-120
91 Fluorene	50.0	55.3	110.65	80-120
92 4-Chlorophenyl-phe	50.0	54.2	108.36	80-120
90 O,O-diethyl-o-2-py	50.0	57.8	115.55	80-120
93 5-Nitro-O-Toluidin	50.0	56.0	112.05	80-120
94 4-Nitroaniline	50.0	53.4	106.78	80-120
96 N-Nitrosodiphenyla	100	82.8	82.81	80-120
95 4,6-Dinitro-2-Meth	50.0	54.3	108.58	80-120
98 1,2-Diphenylhydraz	50.0	54.4	108.86	80-120
101 Sulfotepp	50.0	52.5	104.95	80-120
102 Diallate	50.0	55.8	111.52	80-120
103 Phorate	50.0	24.4	48.82*	80-120
105 4-Bromophenyl-phen	50.0	56.2	112.35	80-120
106 Phenacetin	50.0	53.1	106.25	80-120
104 1,3,5-Trinitrobenz	50.0	49.1	98.14	80-120
107 Hexachlorobenzene	50.0	56.8	113.65	80-120
108 Dimethoate	50.0	45.9	91.90	80-120
109 Atrazine	50.0	20.8	41.59*	80-120
110 4-Aminobiphenyl	50.0	45.9	91.86	80-120
111 Pentachlorophenol	50.0	66.6	133.25*	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062215B.b\U0763.D
Report Date: 24-Jun-2015 15:15

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
113 Pronamide	50.0	50.5	101.09	80-120
112 Pentachloronitrobe	50.0	52.7	105.33	80-120
116 Phenanthrene	50.0	52.0	103.96	80-120
115 Disulfoton	50.0	47.1	94.22	80-120
118 Anthracene	50.0	52.9	105.87	80-120
117 Dinoseb	50.0	51.4	102.75	80-120
119 Carbazole	50.0	52.0	104.03	80-120
120 Methyl Parathion	50.0	55.0	110.01	80-120
121 Di-n-butylphthalat	50.0	54.9	109.82	80-120
122 Ethyl Parathion	50.0	48.2	96.38	80-120
123 4-Nitroquinoline-1	50.0	49.4	98.71	80-120
124 Methapyrilene	50.0	42.3	84.66	80-120
125 Isodrin	50.0	51.8	103.63	80-120
126 Fluoranthene	50.0	50.5	101.01	80-120
127 Benzidine	50.0	51.0	101.96	80-120
128 Pyrene	50.0	48.6	97.30	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	55.1	110.15	80-120
133 Chlorobenzilate	50.0	47.7	95.38	80-120
134 Famphur	50.0	28.1	56.27*	80-120
135 3,3'-Dimethylbenzi	50.0	97.2	194.51*	80-120
136 Butylbenzylphthala	50.0	52.5	105.00	80-120
137 Bis(2-ethylhexyl)a	50.0	47.4	94.85	80-120
138 2-Acetylaminofluor	50.0	55.0	110.10	80-120
140 Benzo(a)anthracene	50.0	52.1	104.28	80-120
139 3,3'-Dichlorobenzi	50.0	54.6	109.15	80-120
141 Chrysene	50.0	53.0	106.00	80-120
143 bis(2-Ethylhexyl)p	50.0	51.2	102.47	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	55.8	111.65	80-120
147 Benzo(b)fluoranthe	50.0	52.8	105.59	80-120
146 7,12-Dimethylbenz(	50.0	50.2	100.50	80-120
148 Benzo(k)fluoranthe	50.0	52.8	105.52	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	48.0	96.05	80-120
151 3-Methylcholanthre	50.0	56.7	113.32	80-120
152 Dibenz(a,j)acridin	50.0	50.0	99.93	80-120
153 Indeno(1,2,3-cd)py	50.0	55.1	110.17	80-120
155 Dibenzo(a,h)anthra	50.0	54.2	108.36	80-120
156 Benzo(g,h,i)peryle	50.0	51.9	103.76	80-120

SURROGATE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	35-105
$ 12 Phenol-D6	100	0.000	*	40-100
$ 33 Nitrobenzene-D5	50.0	0.000	*	35-100
$ 63 2-Fluorobiphenyl	50.0	0.000	*	45-105
$ 100 2,4,6-Tribromophe	100	0.000	*	35-125
$ 129 Terphenyl-D14	50.0	0.000	*	30-125

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165301-2
Analytical Date: 06/23/15 11:12
Lab File ID : U0788.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 06/22/15 13:48 06/22/15 16:08
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
11 Benzaldehyde	0.11162	0.11962	0.11962	0.010	7.16912	20.00000	Averaged	
13 Phenol	1.44922	1.66004	1.66004	0.010	14.54696	20.01000	Averaged	
23 2-Methylphenol	1.21819	1.24381	1.24381	0.010	2.10339	20.00000	Averaged	
26 Acetophenone	0.40307	0.40845	0.40845	0.010	1.33436	20.00000	Averaged	
36 Isophorone	0.52435	0.53506	0.53506	0.010	2.04375	20.00000	Averaged	
38 2,4-Dimethylphenol	0.26824	0.27428	0.27428	0.010	2.25116	20.00000	Averaged	
53 Caprolactam	0.11127	0.10633	0.10633	0.010	-4.43436	20.00000	Averaged	
55 4-Chloro-3-Methylphenol	0.23299	0.22948	0.22948	0.010	-1.50794	20.01000	Averaged	
66 2-Chloronaphthalene	1.11146	0.96744	0.96744	0.010	-12.95731	20.00000	Averaged	
72 Dimethyl Phthalate	1.15922	1.00835	1.00835	0.010	-13.01427	20.00000	Averaged	
75 Acenaphthylene	1.64406	1.62848	1.62848	0.010	-0.94758	20.00000	Averaged	
77 3-Nitroaniline	0.32079	0.29557	0.29557	0.010	-7.86011	20.00000	Averaged	
79 Acenaphthene	0.93879	0.97184	0.97184	0.010	3.51983	20.01000	Averaged	
89 Diethylphthalate	1.06953	1.00832	1.00832	0.010	-5.72240	20.00000	Averaged	
91 Fluorene	0.91606	0.91720	0.91720	0.010	0.12453	20.00000	Averaged	
105 4-Bromophenyl-phenylether	0.18468	0.22527	0.22527	0.010	21.98053	20.00000	Averaged	*
119 Carbazole	0.85314	0.83980	0.83980	0.010	-1.56363	20.00000	Averaged	
8 2-Fluorophenol	1.25363	1.29736	1.29736	0.010	3.48801	20.00000	Averaged	
12 Phenol-D6	1.33060	1.53655	1.53655	0.010	15.47811	20.00000	Averaged	
33 Nitrobenzene-D5	0.24794	0.25788	0.25788	0.010	4.00914	20.00000	Averaged	
63 2-Fluorobiphenyl	1.06873	1.05646	1.05646	0.010	-1.14878	20.00000	Averaged	
100 2,4,6-Tribromophenol	0.16674	0.14064	0.14064	0.010	-15.65530	20.00000	Averaged	
129 Terphenyl-D14	0.95526	0.91006	0.91006	0.010	-4.73091	20.00000	Averaged	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Logbooks and Supporting Documents

5/5/625
sep

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625 ✓	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV2721		Spike ID (1): SV2715(SV)		
	Surrogate ID (2):		Spike ID (2): SV2716(SIM)		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM824		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 27965002		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) ≤2		pH (2nd Extraction) ≥11
Prep Start Time: 1130	Prep End Time: 1330		CLLE Start Time:		CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SVD39	Initials	Comments Rsv 322505
6-22-15	WBS	WG-165248-1 248-1 251-1	1000	1mL	NR	✓	✓	1µ	6-22-15	A1	KF	Rsim 322506
		WG-165248-2 251-2			1mL					12		Rsv 322507
		248-3 251-3								3		
		WG165248-4	1010		NR					4		SPLP Blank 1251A
		-5	200							5		TCLP Blank 1250A → 2000mL WIDE
		-6	900		1mL					6		MS SD3862-6
		-7	880							7		MSD -6
		WG165249-2	~~750~~ 1000				✓			8		
		-3	~~103~~ MS							9		
		-4	1010		NR					A10		SPLP Blank 1251A
		-5	750		1mL					B1		MS SD3862-6
		-6	1030							B2		MSD -6

EX-007 – Revision 2 – 12/05/2013 QAEX284 0000

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-22-15	WBS	SD4240-1	200	1mL	NR	✓		1µ	6-22-15	B3	KF	TCLP → 2000mL WIDE
		SD4297-2	1020				✓			4		SPLP
		-4								5		
		-6	960							6		
		-9	880							7		
		SD4306-7 H	1050			✓				8		
		SD4319-1 F	1060			✓				9		625
		SD4332-1 H	980				✓			B10		
		-3 H	1010							C1		emulsion → SS
		-5 H	1050							2		
		-7 H	1000							3		
		-9 G	1060							4		Centrifuge
		-10 F	1010							5		
		-11 H	1050			✓	✓			C6		
									KF	6-22-15		

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

DATE OF DFTPP INJECTION: 062215

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
IJG165272-1	50ng DFTPP	UD391	1	1	DFTPP 390	2.0	JCG	OK
-4	SSTD050 U0622	U0757		2	U8270C79	1.0		✓
-2	010	58		3				✓
-3	025	59		4				✓
-5	075	60		5				✓
-6	100	61		6				✓
-7	125	62		7				✓
-8	1MD	63		8				OK
3550	IJG165995-1	64		9				1564
	-2	65		10				OK
	-3	66		11				OK
	SI4190-1	67		12				OK
	SI4270-1R1	68		13				OK
	SI4226-8	69		14				OK
	-1	70		15				1556↓
	-2	71		16				1556↓
	-9	72		17				1556↓
	-10	73		18				1556↓ 551-5↓ DL 1:2 ✓
3550	SI4291-1DL	74	3	19				1556↓ 556↑ 100/300
	-3DL	75		20				1556↓ 556↑
	-8DL	76		21				1556↓ 554,6↑
	-5DL	77		22				1556↓ 55 34,6↑
	SI4226-5	78	1	23				1556↓
	-7	79		24				1556↓ 556↑
	MeCl2	80-82		25				

STANDARD	CODE
DFTPP	52641
CAL. STD.	52636 STD4917
IS MIX	STD5001

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 062315

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165391-1	50ng DFTPP	U0392	1	1	DFTPPSIM	2.0	JLM	OK
-2	SSTD050U0623	U0788		2	U8270C79	1.0		OK
3530	WG164995-1RA	89		3				OK
3510	WG165248-1	90		4				OK
	-4	91		5				OK PGT1251A
	-5	92		6				OK PGT1250A
	-2	93		7				OK
	-3	94		8				OK
	SI4291-2	95		9				~~SS21~~ SPLP
	-4	96		10				~~SS01~~ JLM
	-6	97		11				SS1X1
	-9	98		12				~~SS21~~
	SI4240-1	99		13				OK
	SI4306-7	U0800		14				OK
	SI4332-11	01		15				SS1b
	WG165248-6	02		16				OK
	-7	03		17				OK
3550	SI4226-10DL	04	2	18				1:5b SS4Sb 100/200
	meOH	05-07	1	19				
								JLM062415

STANDARD	CODE
DFTPP	52611
CAL. STD.	526310 STK4917
IS MIX	STK5001

REVIEWED AND APPROVED BY: _____
DATE: _____

SPLP SEMIVOLATILE SIM DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4291

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	DBP	#	FLO	#	PYR	#
SITE 4TS-HWF1-B	SI4291-2		66.5		86.2		91.6		63.5	
SITE 4TS-HWF2-B	SI4291-4		62.5		85.1		95.0		94.2	
SITE 4TS-HWF1-PT	SI4291-6		52.1		72.4		75.9		86.4	
SITE 4TS-HWF2-PT	SI4291-9		58.5		86.1		85.8		70.6	
Method Blank Sample	WG165249-1		76.6		80.6		75.0		102.	
Laboratory Control S	WG165249-2		65.9		73.7		69.5		85.8	
Laboratory Control S	WG165249-3		61.5		66.5		63.8		85.2	
SPLP Blank	WG165249-4		63.2		71.4		65.9		87.1	

		QC Limits
DBP	2,4-DIBROMOPHENOL	10-130
2MN	2-METHYLNAPHTHALENE-D10	43-92
FLO	FLUORENE-D10	29-101
PYR	PYRENE-D10	53-166

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : N6785.D
Instrument ID : GCMS-N
Matrix : AQ

SDG : SI4291
Lab Sample ID : WG165249-1
Date Extracted : 22-JUN-15
Date Analyzed : 23-JUN-15
Time Analyzed : 16:20

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
SPLP Blank	WG165249-4	N6786.D	06/23/15	16:48
Laboratory Control S	WG165249-2	N6787.D	06/23/15	17:16
Laboratory Control S	WG165249-3	N6788.D	06/23/15	17:45
SITE 4TS-HWF1-B	SI4291-2	N6793.D	06/24/15	13:49
SITE 4TS-HWF2-B	SI4291-4	N6794.D	06/24/15	14:17
SITE 4TS-HWF1-PT	SI4291-6	N6795.D	06/24/15	14:45
SITE 4TS-HWF2-PT	SI4291-9	N6796.D	06/24/15	15:13

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165249-1
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: N6785.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165249

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.10	ug/L	1	.2	0.20	0.041	0.10
2-Chlorophenol	U	0.50	ug/L	1	1	1.0	0.28	0.50
2,2'-Oxybis(1-Chloropropane)	U	0.15	ug/L	1	.2	0.20	0.12	0.15
3&4-Methylphenol	U	0.50	ug/L	1	1	1.0	0.44	0.50
N-Nitroso-Di-N-Propylamine	U	0.10	ug/L	1	.2	0.20	0.072	0.10
Hexachloroethane	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Nitrobenzene	U	0.15	ug/L	1	.2	0.20	0.13	0.15
2-Nitrophenol	U	1.0	ug/L	1	2	2.0	0.81	1.0
Bis(2-Chloroethoxy)Methane	U	0.25	ug/L	1	.5	0.50	0.18	0.25
2,4-Dichlorophenol	U	1.0	ug/L	1	2	2.0	0.89	1.0
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
4-Chloroaniline	U	1.5	ug/L	1	3	3.0	1.4	1.5
Hexachlorobutadiene	U	0.10	ug/L	1	.2	0.20	0.087	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
Hexachlorocyclopentadiene	U	0.10	ug/L	1	.2	0.20	0.067	0.10
2,4,6-Trichlorophenol	U	0.50	ug/L	1	1	1.0	0.12	0.50
2,4,5-Trichlorophenol	U	0.50	ug/L	1	1	1.0	0.078	0.50
1,1'-Biphenyl	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Nitroaniline	U	0.15	ug/L	1	.2	0.20	0.12	0.15
2,6-Dinitrotoluene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
2,4-Dinitrophenol	U	0.50	ug/L	1	1	1.0	0.24	0.50
4-Nitrophenol	U	0.50	ug/L	1	1	1.0	0.23	0.50
Dibenzofuran	U	0.10	ug/L	1	.2	0.20	0.068	0.10
2,4-Dinitrotoluene	U	0.10	ug/L	1	.2	0.20	0.035	0.10
4-Chlorophenyl-Phenylether	U	0.25	ug/L	1	.5	0.50	0.16	0.25
4-Nitroaniline	U	0.10	ug/L	1	.2	0.20	0.065	0.10
4,6-Dinitro-2-Methylphenol	U	0.75	ug/L	1	1	1.0	0.50	0.75
N-Nitrosodiphenylamine	U	0.10	ug/L	1	.2	0.20	0.071	0.10
1,2,4,5-Tetrachlorobenzene	U	0.10	ug/L	1	.2	0.20	0.037	0.10
Hexachlorobenzene	U	0.10	ug/L	1	.2	0.20	0.055	0.10
Atrazine	U	0.10	ug/L	1	.2	0.20	0.038	0.10
Pentachlorophenol	U	0.50	ug/L	1	1	1.0	0.33	0.50
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165249-1
Client ID: Method Blank Sample
Project:
SDG: SI4291
Lab File ID: N6785.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165249

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-N-Butylphthalate	U	1.0	ug/L	1	2	2.0	0.83	1.0
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Butylbenzylphthalate	U	0.50	ug/L	1	1	1.0	0.13	0.50
3,3'-Dichlorobenzidine	U	0.10	ug/L	1	.2	0.20	0.056	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Bis(2-Ethylhexyl)Phthalate	U	0.50	ug/L	1	1	1.0	0.50	0.50
Di-N-Octylphthalate	U	0.50	ug/L	1	1	1.0	0.079	0.50
Benzo(b)Fluoranthene	J	0.16	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	J	0.065	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2,3,4,6-Tetrachlorophenol	U	0.50	ug/L	1	1	1.0	0.071	0.50
2-Methylnaphthalene-D10		76.6	%					
Fluorene-D10		75.0	%					
Pyrene-D10		102.	%					
2,4-Dibromophenol		80.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165249-4
Client ID: SPLP Blank
Project:
SDG: SI4291
Lab File ID: N6786.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.099	ug/L	1	.2	0.20	0.040	0.099
2-Chlorophenol	U	0.50	ug/L	1	1	0.99	0.28	0.50
2,2'-Oxybis(1-Chloropropane)	U	0.15	ug/L	1	.2	0.20	0.12	0.15
3&4-Methylphenol	U	0.50	ug/L	1	1	0.99	0.44	0.50
N-Nitroso-Di-N-Propylamine	U	0.099	ug/L	1	.2	0.20	0.071	0.099
Hexachloroethane	U	0.099	ug/L	1	.2	0.20	0.072	0.099
Nitrobenzene	U	0.15	ug/L	1	.2	0.20	0.13	0.15
2-Nitrophenol	U	0.99	ug/L	1	2	2.0	0.80	0.99
Bis(2-Chloroethoxy)Methane	U	0.25	ug/L	1	.5	0.50	0.18	0.25
2,4-Dichlorophenol	U	0.99	ug/L	1	2	2.0	0.88	0.99
Naphthalene	U	0.099	ug/L	1	.2	0.20	0.063	0.099
4-Chloroaniline	U	1.5	ug/L	1	3	3.0	1.4	1.5
Hexachlorobutadiene	U	0.099	ug/L	1	.2	0.20	0.086	0.099
2-Methylnaphthalene	U	0.099	ug/L	1	.2	0.20	0.076	0.099
Hexachlorocyclopentadiene	U	0.099	ug/L	1	.2	0.20	0.066	0.099
2,4,6-Trichlorophenol	U	0.50	ug/L	1	1	0.99	0.12	0.50
2,4,5-Trichlorophenol	U	0.50	ug/L	1	1	0.99	0.077	0.50
1,1'-Biphenyl	U	0.099	ug/L	1	.2	0.20	0.064	0.099
2-Nitroaniline	U	0.15	ug/L	1	.2	0.20	0.12	0.15
2,6-Dinitrotoluene	U	0.099	ug/L	1	.2	0.20	0.069	0.099
2,4-Dinitrophenol	U	0.50	ug/L	1	1	0.99	0.24	0.50
4-Nitrophenol	U	0.50	ug/L	1	1	0.99	0.23	0.50
Dibenzofuran	U	0.099	ug/L	1	.2	0.20	0.067	0.099
2,4-Dinitrotoluene	U	0.099	ug/L	1	.2	0.20	0.035	0.099
4-Chlorophenyl-Phenylether	U	0.25	ug/L	1	.5	0.50	0.16	0.25
4-Nitroaniline	U	0.099	ug/L	1	.2	0.20	0.064	0.099
4,6-Dinitro-2-Methylphenol	U	0.74	ug/L	1	1	0.99	0.50	0.74
N-Nitrosodiphenylamine	U	0.099	ug/L	1	.2	0.20	0.070	0.099
1,2,4,5-Tetrachlorobenzene	U	0.099	ug/L	1	.2	0.20	0.037	0.099
Hexachlorobenzene	U	0.099	ug/L	1	.2	0.20	0.054	0.099
Atrazine	U	0.099	ug/L	1	.2	0.20	0.038	0.099
Pentachlorophenol	U	0.50	ug/L	1	1	0.99	0.33	0.50
Phenanthrene	U	0.099	ug/L	1	.2	0.20	0.050	0.099
Anthracene	U	0.099	ug/L	1	.2	0.20	0.044	0.099

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165249-4
Client ID: SPLP Blank
Project:
SDG: SI4291
Lab File ID: N6786.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-N-Butylphthalate	U	0.99	ug/L	1	2	2.0	0.82	0.99
Fluoranthene	U	0.099	ug/L	1	.2	0.20	0.072	0.099
Pyrene	U	0.099	ug/L	1	.2	0.20	0.058	0.099
Butylbenzylphthalate	U	0.50	ug/L	1	1	0.99	0.13	0.50
3,3'-Dichlorobenzidine	U	0.099	ug/L	1	.2	0.20	0.055	0.099
Benzo(a)anthracene	U	0.099	ug/L	1	.2	0.20	0.046	0.099
Chrysene	U	0.099	ug/L	1	.2	0.20	0.036	0.099
Bis(2-Ethylhexyl)Phthalate	U	0.50	ug/L	1	1	0.99	0.50	0.50
Di-N-Octylphthalate	U	0.50	ug/L	1	1	0.99	0.078	0.50
Benzo(b)Fluoranthene	U	0.099	ug/L	1	.2	0.20	0.088	0.099
Benzo(k)fluoranthene	U	0.099	ug/L	1	.2	0.20	0.048	0.099
Benzo(a)pyrene	U	0.099	ug/L	1	.2	0.20	0.065	0.099
Indeno(1,2,3-cd)pyrene	U	0.099	ug/L	1	.2	0.20	0.051	0.099
Dibenzo(a,h)anthracene	U	0.099	ug/L	1	.2	0.20	0.069	0.099
Benzo(g,h,i)perylene	U	0.099	ug/L	1	.2	0.20	0.064	0.099
2,3,4,6-Tetrachlorophenol	U	0.50	ug/L	1	1	0.99	0.070	0.50
2-Methylnaphthalene-D10		63.2	%					
Fluorene-D10		65.9	%					
Pyrene-D10		87.1	%					
2,4-Dibromophenol		71.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165249-2
LCSD ID: WG165249-3
Project:
SDG: SI4291
Report Date: 01-JUL-15
LCS File ID: N6787.D

Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165249
LCSD File ID: N6788.D

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Bis(2-Chloroethyl)Ether	2.00	1.05	52.5*	0.981	49.0*	ug/L	7	30	56-87
2-Chlorophenol	4.00	2.59	64.8	2.27	56.8	ug/L	13	30	30-112
2,2'-Oxybis(1-Chloropropane)	2.00	1.00	50.0*	0.879	44.0*	ug/L	13	30	57-90
3&4-Methylphenol	4.00	1.87	46.8	1.66	41.5	ug/L	12	30	31-78
N-Nitroso-Di-N-Propylamine	2.00	0.883	44.2	0.652	32.6*	ug/L	30*	30	43-86
Hexachloroethane	2.00	1.06	53.0	0.950	47.5*	ug/L	11	30	48-80
Nitrobenzene	2.00	1.80	90.0*	1.52	76.0	ug/L	17	30	43-89
2-Nitrophenol	4.00	2.72	68.0	2.39	59.8	ug/L	13	30	30-113
Bis(2-Chloroethoxy)Methane	2.00	1.26	63.0	1.16	58.0	ug/L	8	30	53-93
2,4-Dichlorophenol	4.00	2.69	67.2	2.39	59.8	ug/L	12	30	31-106
Naphthalene	2.00	1.25	62.5	1.07	53.5	ug/L	16	30	46-84
4-Chloroaniline	2.00	1.21	60.5	1.07	53.5	ug/L	12	30	38-122
Hexachlorobutadiene	2.00	1.19	59.5	1.04	52.0	ug/L	13	30	48-95
2-Methylnaphthalene	2.00	1.40	70.0	1.15	57.5	ug/L	20	30	51-114
Hexachlorocyclopentadiene	2.00	0.739	37.0	0.687	34.4	ug/L	7	30	10-96
2,4,6-Trichlorophenol	4.00	2.52	63.0	2.26	56.5	ug/L	11	30	19-139
2,4,5-Trichlorophenol	4.00	2.84	71.0	2.74	68.5	ug/L	4	30	20-133
1,1'-Biphenyl	2.00	1.22	61.0	1.10	55.0*	ug/L	10	30	56-96
2-Nitroaniline	2.00	1.20	60.0	1.17	58.5	ug/L	2	30	54-105
2,6-Dinitrotoluene	2.00	1.15	57.5	1.10	55.0	ug/L	4	30	47-86
2,4-Dinitrophenol	4.00	2.34	58.5	2.42	60.5	ug/L	3	30	10-95
4-Nitrophenol	4.00	1.18	29.5	1.09	27.2	ug/L	8	30	10-160
Dibenzofuran	2.00	1.17	58.5	1.10	55.0*	ug/L	6	30	56-98
2,4-Dinitrotoluene	2.00	1.27	63.5	1.14	57.0	ug/L	11	30	48-95
4-Chlorophenyl-Phenylether	2.00	1.22	61.0	1.17	58.5	ug/L	4	30	57-95
4-Nitroaniline	2.00	1.69	84.5	1.61	80.5	ug/L	5	30	42-152
4,6-Dinitro-2-Methylphenol	4.00	1.97	49.2	2.16	54.0	ug/L	9	30	10-77
N-Nitrosodiphenylamine	2.00	0.914	45.7*	0.852	42.6*	ug/L	7	30	48-82
1,2,4,5-Tetrachlorobenzene	2.00	1.17	58.5	1.05	52.5	ug/L	11	30	30-150
Hexachlorobenzene	2.00	1.08	54.0*	1.02	51.0*	ug/L	6	30	62-90
Atrazine	2.00	1.25	62.5*	1.27	63.5*	ug/L	2	30	66-126
Pentachlorophenol	4.00	2.72	68.0*	2.93	73.2*	ug/L	7	30	10-66
Phenanthrene	2.00	1.12	56.0*	1.10	55.0*	ug/L	2	30	73-100
Anthracene	2.00	1.47	73.5	1.34	67.0*	ug/L	9	30	70-95

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165249-2
LCSD ID: WG165249-3
Project:
SDG: SI4291
Report Date: 01-JUL-15
LCS File ID: N6787.D

Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165249
LCSD File ID: N6788.D

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Di-N-Butylphthalate	2.00	1.58	79.0	1.59	79.5	ug/L	1	30	46-163
Fluoranthene	2.00	1.40	70.0*	1.40	70.0*	ug/L	0	30	81-109
Pyrene	2.00	1.33	66.5*	1.35	67.5*	ug/L	1	30	71-104
Butylbenzylphthalate	2.00	1.23	61.5	1.27	63.5	ug/L	3	30	30-119
3,3'-Dichlorobenzidine	2.00	3.28	164.*	2.20	110.	ug/L	39*	30	10-118
Benzo(a)anthracene	2.00	1.16	58.0*	1.15	57.5*	ug/L	1	30	70-110
Chrysene	2.00	2.05	102.*	1.88	94.0	ug/L	9	30	70-95
Bis(2-Ethylhexyl)Phthalate	2.00	1.21	60.5*	1.26	63.0*	ug/L	4	30	97-188
Di-N-Octylphthalate	2.00	1.35	67.5	1.79	89.5	ug/L	28	30	56-122
Benzo(b)Fluoranthene	2.00	1.06	53.0*	0.863	43.2*	ug/L	20	30	67-102
Benzo(k)fluoranthene	2.00	2.10	105.*	2.09	104.*	ug/L	0	30	68-103
Benzo(a)pyrene	2.00	1.51	75.5	1.50	75.0	ug/L	1	30	63-98
Indeno(1,2,3-cd)pyrene	2.00	1.43	71.5	1.46	73.0	ug/L	2	30	61-112
Dibenzo(a,h)anthracene	2.00	1.45	72.5	1.51	75.5	ug/L	4	30	66-108
Benzo(g,h,i)perylene	2.00	1.54	77.0	1.54	77.0	ug/L	0	30	62-106
2,3,4,6-Tetrachlorophenol	4.00	2.39	59.8	2.31	57.8	ug/L	3	30	10-101
2-Methylnaphthalene-D10			65.9		61.5				43-92
Fluorene-D10			69.5		63.8				29-101
Pyrene-D10			85.8		85.2				53-166
2,4-Dibromophenol			73.7		66.5				10-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND958.D
Instrument ID : GCMS-N

SDG : SI4291
Date Analyzed : 23-JUN-15
Time Analyzed : 12:11

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.1		
68	Less than 2.0% of mass 69	0.7	1.60	1
69	Less than 100.0% of mass 198	40.7		
70	Less than 2.0% of mass 69	0.2	0.55	1
127	40.0 - 60.0% of mass 198	60.0		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	22.8		
365	1.0 - 100.0% of mass 198	2.3		
441	0.0 - 100.0% of mass 443	11.0	73.31	2
442	40.0 - 100.0% of mass 198	78.5		
443	17.0 - 23.0% of mass 442	15.0	19.11	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165324-4	N6778.D	06/23/15	13:03
Initial Calibration	WG165324-2	N6779.D	06/23/15	13:31
Initial Calibration	WG165324-3	N6780.D	06/23/15	13:59
Initial Calibration	WG165324-5	N6781.D	06/23/15	14:27
Initial Calibration	WG165324-6	N6782.D	06/23/15	14:55
Initial Calibration	WG165324-7	N6783.D	06/23/15	15:23
Independent Source	WG165324-8	N6784.D	06/23/15	15:51
Method Blank Sample	WG165249-1	N6785.D	06/23/15	16:20
SPLP Blank	WG165249-4	N6786.D	06/23/15	16:48
Laboratory Control S	WG165249-2	N6787.D	06/23/15	17:16
Laboratory Control S	WG165249-3	N6788.D	06/23/15	17:45

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND959.D
Instrument ID : GCMS-N

SDG : SI4291
Date Analyzed : 24-JUN-15
Time Analyzed : 12:08

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	31.5		
68	Less than 2.0% of mass 69	0.6	1.51	1
69	Less than 100.0% of mass 198	40.0		
70	Less than 2.0% of mass 69	0.2	0.52	1
127	40.0 - 60.0% of mass 198	58.8		
197	Less than 1.0% of mass 198	0.1		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	23.6		
365	1.0 - 100.0% of mass 198	2.3		
441	0.0 - 100.0% of mass 443	12.7	75.21	2
442	40.0 - 100.0% of mass 198	91.5		
443	17.0 - 23.0% of mass 442	16.9	18.46	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165381-2	N6791.D	06/24/15	12:48
SITE 4TS-HWF1-B	SI4291-2	N6793.D	06/24/15	13:49
SITE 4TS-HWF2-B	SI4291-4	N6794.D	06/24/15	14:17
SITE 4TS-HWF1-PT	SI4291-6	N6795.D	06/24/15	14:45
SITE 4TS-HWF2-PT	SI4291-9	N6796.D	06/24/15	15:13

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI4291
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	88250		4.40		265068		5.77		116126		7.83	
	Upper Limit	176500		4.90		530136		6.27		232252		8.33	
	Lower Limit	44125		3.90		132534		5.27		58063		7.33	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165249-1	76424		4.40		237826		5.82		105148		7.86	
SPLP Blank	WG165249-4	66927		4.41		210573		5.82		93995		7.86	
Laboratory Control S	WG165249-2	69452		4.39		211977		5.78		100687		7.84	
Laboratory Control S	WG165249-3	72113		4.39		221532		5.78		102574		7.84	
Continuing Calibrati	WG165381-2	62465		4.37		191323		5.73		79121		7.80	
SITE 4TS-HWF1-B	SI4291-2	61157		4.37		187399		5.73		93664		7.80	
SITE 4TS-HWF2-B	SI4291-4	63113		4.37		192015		5.73		95736		7.80	
SITE 4TS-HWF1-PT	SI4291-6	61135		4.37		181755		5.73		90374		7.80	
SITE 4TS-HWF2-PT	SI4291-9	63297		4.37		195326		5.73		96484		7.80	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI4291
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	156981		9.62		75747		12.97		36246		15.72	
	Upper Limit	313962		10.12		151494		13.47		72492		16.22	
	Lower Limit	78490.5		9.12		37873.5		12.47		18123		15.22	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165249-1	156520		9.64		63274		13.00		24386		15.76	
SPLP Blank	WG165249-4	137170		9.65		58386		13.00		26183		15.76	
Laboratory Control S	WG165249-2	158809		9.63		77607		12.98		35763		15.75	
Laboratory Control S	WG165249-3	162888		9.62		77562		12.98		28169		15.75	
Continuing Calibrati	WG165381-2	103815		9.58		50993		12.92		28396		15.64	
SITE 4TS-HWF1-B	SI4291-2	135599		9.58		78098		12.92		29077		15.63	
SITE 4TS-HWF2-B	SI4291-4	139834		9.58		63305		12.92		32101		15.64	
SITE 4TS-HWF1-PT	SI4291-6	129376		9.58		63304		12.92		30995		15.64	
SITE 4TS-HWF2-PT	SI4291-9	141320		9.58		80784		12.92		31837		15.64	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-2
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6793.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 24-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	ULL	0.098	ug/L	1	.2	0.20	0.040	0.098
2-Chlorophenol	U	0.49	ug/L	1	1	0.98	0.27	0.49
2,2'-Oxybis(1-Chloropropane)	ULL	0.15	ug/L	1	.2	0.20	0.12	0.15
3&4-Methylphenol	U	0.49	ug/L	1	1	0.98	0.43	0.49
N-Nitroso-Di-N-Propylamine	UL	0.098	ug/L	1	.2	0.20	0.070	0.098
Hexachloroethane	UL	0.098	ug/L	1	.2	0.20	0.072	0.098
Nitrobenzene	UL	0.15	ug/L	1	.2	0.20	0.13	0.15
2-Nitrophenol	U	0.98	ug/L	1	2	2.0	0.79	0.98
Bis(2-Chloroethoxy)Methane	U	0.24	ug/L	1	.5	0.49	0.18	0.24
2,4-Dichlorophenol	U	0.98	ug/L	1	2	2.0	0.87	0.98
Naphthalene		0.84	ug/L	1	.2	0.20	0.063	0.098
4-Chloroaniline	U	1.5	ug/L	1	3	2.9	1.4	1.5
Hexachlorobutadiene	U	0.098	ug/L	1	.2	0.20	0.085	0.098
2-Methylnaphthalene		2.0	ug/L	1	.2	0.20	0.075	0.098
Hexachlorocyclopentadiene	U	0.098	ug/L	1	.2	0.20	0.066	0.098
2,4,6-Trichlorophenol	U	0.49	ug/L	1	1	0.98	0.12	0.49
2,4,5-Trichlorophenol	U	0.49	ug/L	1	1	0.98	0.076	0.49
1,1'-Biphenyl	UL	0.098	ug/L	1	.2	0.20	0.064	0.098
2-Nitroaniline	U	0.15	ug/L	1	.2	0.20	0.12	0.15
2,6-Dinitrotoluene	U	0.098	ug/L	1	.2	0.20	0.069	0.098
2,4-Dinitrophenol	U	0.49	ug/L	1	1	0.98	0.24	0.49
4-Nitrophenol	U	0.49	ug/L	1	1	0.98	0.22	0.49
Dibenzofuran	JL	0.14	ug/L	1	.2	0.20	0.067	0.098
2,4-Dinitrotoluene	U	0.098	ug/L	1	.2	0.20	0.034	0.098
4-Chlorophenyl-Phenylether	U	0.24	ug/L	1	.5	0.49	0.16	0.24
4-Nitroaniline	U	0.098	ug/L	1	.2	0.20	0.064	0.098
4,6-Dinitro-2-Methylphenol	U	0.74	ug/L	1	1	0.98	0.49	0.74
N-Nitrosodiphenylamine	ULL	0.098	ug/L	1	.2	0.20	0.070	0.098
1,2,4,5-Tetrachlorobenzene	U	0.098	ug/L	1	.2	0.20	0.036	0.098
Hexachlorobenzene	ULL	0.098	ug/L	1	.2	0.20	0.054	0.098
Atrazine	ULL	0.098	ug/L	1	.2	0.20	0.037	0.098
Pentachlorophenol	ULL	0.49	ug/L	1	1	0.98	0.32	0.49
Phenanthrene	LL	0.56	ug/L	1	.2	0.20	0.050	0.098
Anthracene	JL	0.12	ug/L	1	.2	0.20	0.043	0.098
Di-N-Butylphthalate	U	0.98	ug/L	1	2	2.0	0.81	0.98

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-2
Client ID: SITE 4TS-HWF1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6793.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 24-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Fluoranthene	ULL	0.098	ug/L	1	.2	0.20	0.072	0.098
Pyrene	JLL	0.16	ug/L	1	.2	0.20	0.058	0.098
Butylbenzylphthalate	U	0.49	ug/L	1	1	0.98	0.13	0.49
3,3'-Dichlorobenzidine	UL	0.098	ug/L	1	.2	0.20	0.055	0.098
Benzo(a)anthracene	ULL	0.098	ug/L	1	.2	0.20	0.045	0.098
Chrysene	UL	0.098	ug/L	1	.2	0.20	0.035	0.098
Bis(2-Ethylhexyl)Phthalate	ULL	0.49	ug/L	1	1	0.98	0.49	0.49
Di-N-Octylphthalate	U	0.49	ug/L	1	1	0.98	0.077	0.49
Benzo(b)Fluoranthene	JBLL	0.18	ug/L	1	.2	0.20	0.087	0.098
Benzo(k)fluoranthene	ULL	0.098	ug/L	1	.2	0.20	0.048	0.098
Benzo(a)pyrene	J	0.081	ug/L	1	.2	0.20	0.065	0.098
Indeno(1,2,3-cd)pyrene	J	0.064	ug/L	1	.2	0.20	0.051	0.098
Dibenzo(a,h)anthracene	U	0.098	ug/L	1	.2	0.20	0.069	0.098
Benzo(g,h,i)perylene	U	0.098	ug/L	1	.2	0.20	0.064	0.098
2,3,4,6-Tetrachlorophenol	U	0.49	ug/L	1	1	0.98	0.070	0.49
2-Methylnaphthalene-D10		66.5	%					
Fluorene-D10		91.6	%					
Pyrene-D10		63.5	%					
2,4-Dibromophenol		86.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-4
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6794.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 24-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	ULL	0.098	ug/L	1	.2	0.20	0.040	0.098
2-Chlorophenol	U	0.49	ug/L	1	1	0.98	0.27	0.49
2,2'-Oxybis(1-Chloropropane)	ULL	0.15	ug/L	1	.2	0.20	0.12	0.15
3&4-Methylphenol	U	0.49	ug/L	1	1	0.98	0.43	0.49
N-Nitroso-Di-N-Propylamine	UL	0.098	ug/L	1	.2	0.20	0.070	0.098
Hexachloroethane	UL	0.098	ug/L	1	.2	0.20	0.072	0.098
Nitrobenzene	UL	0.15	ug/L	1	.2	0.20	0.13	0.15
2-Nitrophenol	U	0.98	ug/L	1	2	2.0	0.79	0.98
Bis(2-Chloroethoxy)Methane	U	0.24	ug/L	1	.5	0.49	0.18	0.24
2,4-Dichlorophenol	U	0.98	ug/L	1	2	2.0	0.87	0.98
Naphthalene		0.73	ug/L	1	.2	0.20	0.063	0.098
4-Chloroaniline	U	1.5	ug/L	1	3	2.9	1.4	1.5
Hexachlorobutadiene	U	0.098	ug/L	1	.2	0.20	0.085	0.098
2-Methylnaphthalene		1.7	ug/L	1	.2	0.20	0.075	0.098
Hexachlorocyclopentadiene	U	0.098	ug/L	1	.2	0.20	0.066	0.098
2,4,6-Trichlorophenol	U	0.49	ug/L	1	1	0.98	0.12	0.49
2,4,5-Trichlorophenol	U	0.49	ug/L	1	1	0.98	0.076	0.49
1,1'-Biphenyl	UL	0.098	ug/L	1	.2	0.20	0.064	0.098
2-Nitroaniline	U	0.15	ug/L	1	.2	0.20	0.12	0.15
2,6-Dinitrotoluene	U	0.098	ug/L	1	.2	0.20	0.069	0.098
2,4-Dinitrophenol	U	0.49	ug/L	1	1	0.98	0.24	0.49
4-Nitrophenol	U	0.49	ug/L	1	1	0.98	0.22	0.49
Dibenzofuran	JL	0.12	ug/L	1	.2	0.20	0.067	0.098
2,4-Dinitrotoluene	U	0.098	ug/L	1	.2	0.20	0.034	0.098
4-Chlorophenyl-Phenylether	U	0.24	ug/L	1	.5	0.49	0.16	0.24
4-Nitroaniline	U	0.098	ug/L	1	.2	0.20	0.064	0.098
4,6-Dinitro-2-Methylphenol	U	0.74	ug/L	1	1	0.98	0.49	0.74
N-Nitrosodiphenylamine	ULL	0.098	ug/L	1	.2	0.20	0.070	0.098
1,2,4,5-Tetrachlorobenzene	U	0.098	ug/L	1	.2	0.20	0.036	0.098
Hexachlorobenzene	ULL	0.098	ug/L	1	.2	0.20	0.054	0.098
Atrazine	ULL	0.098	ug/L	1	.2	0.20	0.037	0.098
Pentachlorophenol	ULL	0.49	ug/L	1	1	0.98	0.32	0.49
Phenanthrene	LL	0.54	ug/L	1	.2	0.20	0.050	0.098
Anthracene	JL	0.11	ug/L	1	.2	0.20	0.043	0.098
Di-N-Butylphthalate	U	0.98	ug/L	1	2	2.0	0.81	0.98

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-4
Client ID: SITE 4TS-HWF2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6794.D

Sample Date: 15-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 24-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Fluoranthene	ULL	0.098	ug/L	1	.2	0.20	0.072	0.098
Pyrene	LL	0.21	ug/L	1	.2	0.20	0.058	0.098
Butylbenzylphthalate	U	0.49	ug/L	1	1	0.98	0.13	0.49
3,3'-Dichlorobenzidine	UL	0.098	ug/L	1	.2	0.20	0.055	0.098
Benzo(a)anthracene	ULL	0.098	ug/L	1	.2	0.20	0.045	0.098
Chrysene	UL	0.098	ug/L	1	.2	0.20	0.035	0.098
Bis(2-Ethylhexyl)Phthalate	ULL	0.49	ug/L	1	1	0.98	0.49	0.49
Di-N-Octylphthalate	U	0.49	ug/L	1	1	0.98	0.077	0.49
Benzo(b)Fluoranthene	JBLL	0.14	ug/L	1	.2	0.20	0.087	0.098
Benzo(k)fluoranthene	ULL	0.098	ug/L	1	.2	0.20	0.048	0.098
Benzo(a)pyrene	U	0.098	ug/L	1	.2	0.20	0.065	0.098
Indeno(1,2,3-cd)pyrene	U	0.098	ug/L	1	.2	0.20	0.051	0.098
Dibenzo(a,h)anthracene	U	0.098	ug/L	1	.2	0.20	0.069	0.098
Benzo(g,h,i)perylene	U	0.098	ug/L	1	.2	0.20	0.064	0.098
2,3,4,6-Tetrachlorophenol	U	0.49	ug/L	1	1	0.98	0.070	0.49
2-Methylnaphthalene-D10		62.5	%					
Fluorene-D10		95.0	%					
Pyrene-D10		94.2	%					
2,4-Dibromophenol		85.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-6
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6795.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 24-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	JLL	0.076	ug/L	1	.2	0.21	0.043	0.10
2-Chlorophenol	U	0.52	ug/L	1	1	1.0	0.29	0.52
2,2'-Oxybis(1-Chloropropane)	ULL	0.16	ug/L	1	.2	0.21	0.12	0.16
3&4-Methylphenol	U	0.52	ug/L	1	1	1.0	0.46	0.52
N-Nitroso-Di-N-Propylamine	UL	0.10	ug/L	1	.2	0.21	0.075	0.10
Hexachloroethane	UL	0.10	ug/L	1	.2	0.21	0.076	0.10
Nitrobenzene	UL	0.16	ug/L	1	.2	0.21	0.14	0.16
2-Nitrophenol	U	1.0	ug/L	1	2	2.1	0.84	1.0
Bis(2-Chloroethoxy)Methane	U	0.26	ug/L	1	.5	0.52	0.19	0.26
2,4-Dichlorophenol	U	1.0	ug/L	1	2	2.1	0.93	1.0
Naphthalene		0.51	ug/L	1	.2	0.21	0.067	0.10
4-Chloroaniline	U	1.6	ug/L	1	3	3.1	1.4	1.6
Hexachlorobutadiene	U	0.10	ug/L	1	.2	0.21	0.091	0.10
2-Methylnaphthalene		0.28	ug/L	1	.2	0.21	0.080	0.10
Hexachlorocyclopentadiene	U	0.10	ug/L	1	.2	0.21	0.070	0.10
2,4,6-Trichlorophenol	U	0.52	ug/L	1	1	1.0	0.12	0.52
2,4,5-Trichlorophenol	U	0.52	ug/L	1	1	1.0	0.081	0.52
1,1'-Biphenyl	UL	0.10	ug/L	1	.2	0.21	0.068	0.10
2-Nitroaniline	U	0.16	ug/L	1	.2	0.21	0.12	0.16
2,6-Dinitrotoluene	U	0.10	ug/L	1	.2	0.21	0.073	0.10
2,4-Dinitrophenol	U	0.52	ug/L	1	1	1.0	0.25	0.52
4-Nitrophenol	U	0.52	ug/L	1	1	1.0	0.24	0.52
Dibenzofuran	UL	0.10	ug/L	1	.2	0.21	0.071	0.10
2,4-Dinitrotoluene	U	0.10	ug/L	1	.2	0.21	0.036	0.10
4-Chlorophenyl-Phenylether	U	0.26	ug/L	1	.5	0.52	0.17	0.26
4-Nitroaniline	U	0.10	ug/L	1	.2	0.21	0.068	0.10
4,6-Dinitro-2-Methylphenol	U	0.78	ug/L	1	1	1.0	0.52	0.78
N-Nitrosodiphenylamine	ULL	0.10	ug/L	1	.2	0.21	0.074	0.10
1,2,4,5-Tetrachlorobenzene	U	0.10	ug/L	1	.2	0.21	0.038	0.10
Hexachlorobenzene	ULL	0.10	ug/L	1	.2	0.21	0.057	0.10
Atrazine	ULL	0.10	ug/L	1	.2	0.21	0.040	0.10
Pentachlorophenol	ULL	0.52	ug/L	1	1	1.0	0.34	0.52
Phenanthrene	LL	0.33	ug/L	1	.2	0.21	0.053	0.10
Anthracene	JL	0.080	ug/L	1	.2	0.21	0.046	0.10
Di-N-Butylphthalate	U	1.0	ug/L	1	2	2.1	0.86	1.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-6
Client ID: SITE 4TS-HWF1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6795.D

Sample Date: 16-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 24-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Fluoranthene	ULL	0.10	ug/L	1	.2	0.21	0.076	0.10
Pyrene	JLL	0.18	ug/L	1	.2	0.21	0.061	0.10
Butylbenzylphthalate	U	0.52	ug/L	1	1	1.0	0.14	0.52
3,3'-Dichlorobenzidine	UL	0.10	ug/L	1	.2	0.21	0.058	0.10
Benzo(a)anthracene	ULL	0.10	ug/L	1	.2	0.21	0.048	0.10
Chrysene	UL	0.10	ug/L	1	.2	0.21	0.038	0.10
Bis(2-Ethylhexyl)Phthalate	ULL	0.52	ug/L	1	1	1.0	0.52	0.52
Di-N-Octylphthalate	U	0.52	ug/L	1	1	1.0	0.082	0.52
Benzo(b)Fluoranthene	JBLL	0.17	ug/L	1	.2	0.21	0.093	0.10
Benzo(k)fluoranthene	ULL	0.10	ug/L	1	.2	0.21	0.051	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.21	0.069	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.21	0.054	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.21	0.073	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.21	0.068	0.10
2,3,4,6-Tetrachlorophenol	U	0.52	ug/L	1	1	1.0	0.074	0.52
2-Methylnaphthalene-D10		52.1	%					
Fluorene-D10		75.9	%					
Pyrene-D10		86.4	%					
2,4-Dibromophenol		72.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-9
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6796.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 24-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	ULL	0.11	ug/L	1	.2	0.23	0.046	0.11
2-Chlorophenol	U	0.57	ug/L	1	1	1.1	0.32	0.57
2,2'-Oxybis(1-Chloropropane)	ULL	0.17	ug/L	1	.2	0.23	0.14	0.17
3&4-Methylphenol	U	0.57	ug/L	1	1	1.1	0.50	0.57
N-Nitroso-Di-N-Propylamine	UL	0.11	ug/L	1	.2	0.23	0.082	0.11
Hexachloroethane	UL	0.11	ug/L	1	.2	0.23	0.083	0.11
Nitrobenzene	UL	0.17	ug/L	1	.2	0.23	0.15	0.17
2-Nitrophenol	U	1.1	ug/L	1	2	2.3	0.92	1.1
Bis(2-Chloroethoxy)Methane	U	0.28	ug/L	1	.5	0.57	0.20	0.28
2,4-Dichlorophenol	U	1.1	ug/L	1	2	2.3	1.0	1.1
Naphthalene		0.43	ug/L	1	.2	0.23	0.073	0.11
4-Chloroaniline	U	1.7	ug/L	1	3	3.4	1.6	1.7
Hexachlorobutadiene	U	0.11	ug/L	1	.2	0.23	0.099	0.11
2-Methylnaphthalene	J	0.22	ug/L	1	.2	0.23	0.088	0.11
Hexachlorocyclopentadiene	U	0.11	ug/L	1	.2	0.23	0.076	0.11
2,4,6-Trichlorophenol	U	0.57	ug/L	1	1	1.1	0.14	0.57
2,4,5-Trichlorophenol	U	0.57	ug/L	1	1	1.1	0.089	0.57
1,1'-Biphenyl	UL	0.11	ug/L	1	.2	0.23	0.074	0.11
2-Nitroaniline	U	0.17	ug/L	1	.2	0.23	0.14	0.17
2,6-Dinitrotoluene	U	0.11	ug/L	1	.2	0.23	0.080	0.11
2,4-Dinitrophenol	U	0.57	ug/L	1	1	1.1	0.27	0.57
4-Nitrophenol	U	0.57	ug/L	1	1	1.1	0.26	0.57
Dibenzofuran	UL	0.11	ug/L	1	.2	0.23	0.077	0.11
2,4-Dinitrotoluene	U	0.11	ug/L	1	.2	0.23	0.040	0.11
4-Chlorophenyl-Phenylether	U	0.28	ug/L	1	.5	0.57	0.18	0.28
4-Nitroaniline	U	0.11	ug/L	1	.2	0.23	0.074	0.11
4,6-Dinitro-2-Methylphenol	U	0.85	ug/L	1	1	1.1	0.57	0.85
N-Nitrosodiphenylamine	ULL	0.11	ug/L	1	.2	0.23	0.081	0.11
1,2,4,5-Tetrachlorobenzene	U	0.11	ug/L	1	.2	0.23	0.042	0.11
Hexachlorobenzene	ULL	0.11	ug/L	1	.2	0.23	0.062	0.11
Atrazine	ULL	0.11	ug/L	1	.2	0.23	0.043	0.11
Pentachlorophenol	ULL	0.57	ug/L	1	1	1.1	0.38	0.57
Phenanthrene	LL	0.32	ug/L	1	.2	0.23	0.058	0.11
Anthracene	JL	0.091	ug/L	1	.2	0.23	0.050	0.11
Di-N-Butylphthalate	U	1.1	ug/L	1	2	2.3	0.94	1.1

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4291-9
Client ID: SITE 4TS-HWF2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4291
Lab File ID: N6796.D

Sample Date: 17-JUN-15
Received Date: 18-JUN-15
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 24-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Fluoranthene	ULL	0.11	ug/L	1	.2	0.23	0.083	0.11
Pyrene	JLL	0.16	ug/L	1	.2	0.23	0.067	0.11
Butylbenzylphthalate	U	0.57	ug/L	1	1	1.1	0.15	0.57
3,3'-Dichlorobenzidine	UL	0.11	ug/L	1	.2	0.23	0.064	0.11
Benzo(a)anthracene	ULL	0.11	ug/L	1	.2	0.23	0.052	0.11
Chrysene	UL	0.11	ug/L	1	.2	0.23	0.041	0.11
Bis(2-Ethylhexyl)Phthalate	ULL	0.57	ug/L	1	1	1.1	0.57	0.57
Di-N-Octylphthalate	U	0.57	ug/L	1	1	1.1	0.090	0.57
Benzo(b)Fluoranthene	JBLL	0.18	ug/L	1	.2	0.23	0.10	0.11
Benzo(k)fluoranthene	ULL	0.11	ug/L	1	.2	0.23	0.056	0.11
Benzo(a)pyrene	U	0.11	ug/L	1	.2	0.23	0.075	0.11
Indeno(1,2,3-cd)pyrene	U	0.11	ug/L	1	.2	0.23	0.059	0.11
Dibenzo(a,h)anthracene	U	0.11	ug/L	1	.2	0.23	0.080	0.11
Benzo(g,h,i)perylene	U	0.11	ug/L	1	.2	0.23	0.074	0.11
2,3,4,6-Tetrachlorophenol	U	0.57	ug/L	1	1	1.1	0.081	0.57
2-Methylnaphthalene-D10		58.5	%					
Fluorene-D10		85.8	%					
Pyrene-D10		70.6	%					
2,4-Dibromophenol		86.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6779.D N6780.D N6778.D N6781.D N6782.D N6783.D **Column ID:**
Calibration Date(s): 23-JUN-15 13:03 23-JUN-15 15:23

	0.200000(Level 1	0.500000(Level 2	1.0000 Level 3	3.0000 Level 4	7.0000 Level 5	10.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Bis(2-Chloroethyl)ether	1.83775	1.76222	1.71511	1.56607	1.50589	1.38524	AVG		1.62871		10.5374(	15.00000	O
2-Chlorophenol	1.18120	1.20951	1.23275	1.28905	1.41854	1.34827	AVG		1.27989		7.06628	15.00000	O
2,2'-Oxybis(1-chloropropane	0.79441	0.85727	0.88883	0.92184	0.98219	0.90240	AVG		0.89116		7.07353	15.00000	O
N-Nitroso-di-n-propylamine	0.66603	0.67707	0.70862	0.76129	0.80587	0.75482	AVG		0.72895		7.43714	15.00000	O
3&4-Methylphenol	1.04630	1.06067	1.10049	1.17084	1.29956	1.26416	AVG		1.15700		9.20604	15.00000	O
Hexachloroethane	0.50797	0.46548	0.39326	0.46447	0.51162	0.47073	AVG		0.46892		9.10121	15.00000	O
Nitrobenzene	41105	76586	151588	372977	773419	1097223	LNR	-0.35787	0.31489		0.99610	0.99000	O
2-Nitrophenol	0.19944	0.20357	0.21578	0.20312	0.21261	0.19933	AVG		0.20564		3.37051	15.00000	O
bis(2-Chloroethoxy)methane	0.39950	0.42629	0.43196	0.42087	0.41116	0.37180	AVG		0.41026		5.37991	15.00000	O
2,4-Dichlorophenol	0.24346	0.26248	0.27822	0.26807	0.28407	0.26593	AVG		0.26704		5.27984	15.00000	O
Naphthalene	1.14657	0.96464	1.00870	0.97468	0.94567	0.88692	AVG		0.98786		8.86019	15.00000	O
4-Chloroaniline	0.40587	0.43745	0.44855	0.42744	0.43428	0.40986	AVG		0.42724		3.87013	15.00000	O
Hexachlorobutadiene	0.19445	0.18175	0.18895	0.17904	0.17417	0.15892	AVG		0.17955		6.91204	15.00000	O
2-Methylnaphthalene	60910	143297	275312	724702	1544385	2210172	LNR	-0.25197	0.63698		0.99737	0.99000	O
Hexachlorocyclopentadiene	2266	8616	24159	94850	272351	419176	LNR	0.38848	0.29712		0.99576	0.99000	O
1,2,4,5-Tetrachlorobenzene	0.60341	0.63862	0.64036	0.60794	0.63952	0.59515	AVG		0.62083		3.36033	15.00000	O
2,4,6-Trichlorophenol	0.26568	0.31159	0.35205	0.34763	0.38685	0.37164	AVG		0.33924		13.00105	15.00000	O
2,4,5-Trichlorophenol	0.53115	0.50255	0.49462	0.44106	0.47523	0.44828	AVG		0.48215		7.09812	15.00000	O
1,1'-Biphenyl	1.76129	1.81933	1.82538	1.73784	1.78730	1.68333	AVG		1.76908		3.03523	15.00000	O
2-Nitroaniline	0.26661	0.30108	0.32503	0.32210	0.35003	0.33656	AVG		0.31690		9.31494	15.00000	O
2,6-Dinitrotoluene	0.30899	0.35345	0.38076	0.37356	0.41112	0.38602	AVG		0.36898		9.44002	15.00000	O
2,4-Dinitrophenol	0.04431	0.07834	0.10103	0.11871	0.16917	0.18009	AVG		0.11528		45.44248	15.00000	W(
Dibenzofuran	1.77759	1.84398	1.90833	1.81617	1.91940	1.79845	AVG		1.84399		3.16992	15.00000	O
2,4-Dinitrotoluene	0.35636	0.42498	0.46011	0.44373	0.49852	0.48449	AVG		0.44470		11.4272(	15.00000	O
4-Nitrophenol	0.18464	0.19877	0.22329	0.20933	0.25972	0.25118	AVG		0.22116		13.36357	15.00000	O
2,3,4,6-Tetrachlorophenol	0.32387	0.34375	0.36720	0.36967	0.42044	0.39482	AVG		0.36996		9.35233	15.00000	O
4-Chlorophenyl-phenylether	0.65810	0.69070	0.71499	0.67377	0.70175	0.65047	AVG		0.68163		3.70351	15.00000	O
4-Nitroaniline	0.21473	0.24232	0.24298	0.20472	0.23311	0.22579	AVG		0.22728		6.74735	15.00000	O
4,6-Dinitro-2-Methylphenol	13724	37602	73097	129926	215973	331901	QUA	0.37425	7.63949	-0.75686	0.99411	0.99000	O
N-Nitrosodiphenylamine	0.84479	0.86017	0.87388	0.77148	0.80612	0.74726	AVG		0.81728		6.22067	15.00000	O
Hexachlorobenzene	0.32176	0.33213	0.32847	0.29509	0.30385	0.27815	AVG		0.30991		6.83628	15.00000	O
Atrazine	0.17045	0.18312	0.19182	0.17346	0.18655	0.17466	AVG		0.18001		4.68017	15.00000	O
Pentachlorophenol	0.15294	0.15400	0.16814	0.14576	0.16018	0.15965	AVG		0.15678		4.88089	15.00000	O
Phenanthrene	1.25216	1.23333	1.28818	1.22719	1.28422	1.21678	AVG		1.25031		2.40849	15.00000	O
Anthracene	1.50554	1.61772	1.53726	1.33509	1.42329	1.27865	AVG		1.44959		8.84014	15.00000	O
Di-n-butylphthalate	2.24719	2.23762	2.25564	1.97310	2.18807	1.97746	AVG		2.14651		6.27534	15.00000	O
Fluoranthene	1.25300	1.20210	1.24336	1.11653	1.24233	1.16556	AVG		1.20381		4.48136	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4291
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6779.D N6780.D N6778.D N6781.D N6782.D N6783.D **Column ID:**
Calibration Date(s): 23-JUN-15 13:03 23-JUN-15 15:23

Pyrene	49747	118527	258919	728876	1818636	2584079	QUA	-0.03154	0.35532	0.00654	0.99994	0.99000	O
Butylbenzylphthalate	140561	300858	501251	773352	1213502	1744498	QUA	-0.07383	0.49108	0.01704	0.99936	0.99000	O
Benzo(a)anthracene	27521	56401	132357	366200	1069947	1681282	LNR	-0.04547	1.25158		0.99949	0.99000	O
3,3'-Dichlorobenzidine	0.26659	0.27549	0.27834	0.28168	0.28328	0.28992	AVG		0.27922		2.82612	15.00000	O
Chrysene	40645	84668	138690	434554	1133242	1688346	LNR	-0.27845	1.26064		0.99861	0.99000	O
bis(2-Ethylhexyl)phthalate	229661	463778	745091	1132682	1735941	2510966	QUA	-0.14342	0.32257	0.00926	0.99842	0.99000	O
Di-n-octylphthalate	284339	612568	1018407	1557782	2475073	3647767	QUA	-0.11686	0.12880	0.00087	0.99429	0.99000	O
Benzo(b)fluoranthene	18197	34502	75742	213765	703846	998280	QUA	0.05333	0.59674	0.00295	0.99109	0.99000	O
Benzo(k)fluoranthene	23958	53018	104578	316787	780100	1296802	LNR	-0.15933	1.87606		0.99926	0.99000	O
Benzo(a)pyrene	1.75015	1.62696	1.30023	1.23861	1.35856	1.30267	AVG		1.42953		14.54197	15.00000	O
Indeno(1,2,3-cd)pyrene	1.16040	0.94659	0.95291	0.84337	0.88721	0.82105	AVG		0.93525		13.08892	15.00000	O
Dibenzo(a,h)anthracene	0.80886	0.66139	0.68002	0.60210	0.64051	0.60032	AVG		0.66553		11.57493	15.00000	O
Benzo(g,h,i)perylene	7694	19553	41765	129813	338222	494804	LNR	-0.18495	0.74765		0.99618	0.99000	O
2-Methylnaphthalene-D10	1.09203	1.13690	1.13834	1.07092	1.10734	1.01694	AVG		1.09374		4.18158	15.00000	
2,4-Dibromophenol	0.33531	0.34989	0.36407	0.35348	0.37563	0.35369	AVG		0.35534		3.82815	15.00000	
Fluorene-D10	0.89557	0.92877	0.93832	0.88861	0.91713	0.85627	AVG		0.90411		3.33644	15.00000	
Pyrene-D10	23587	66268	142886	419789	1048907	1494345	LNR	-0.29475	1.13914		0.99509	0.99000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N062315.b\N6784.D
Report Date: 24-Jun-2015 10:51

Katahdin Analytical Services

RECOVERY REPORT

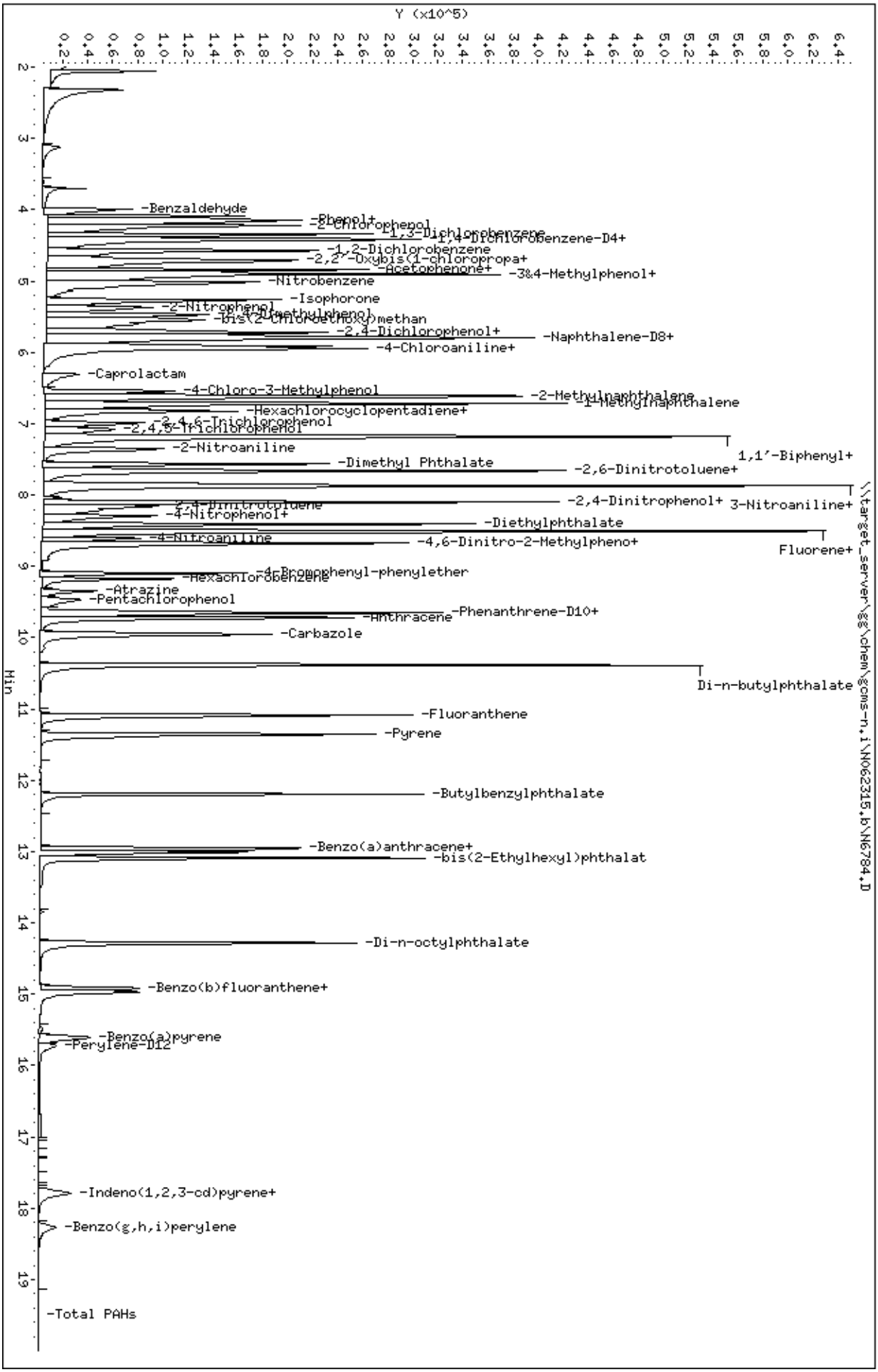
Client Name:
Client SDG: 021497
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: WG165324-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: SIM_IND_CHK.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N062315.b\NSPSIM45.m
Misc Info: WG165324,WG165324,WG164324-4

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	2.53	126.35*	80-120
3 Benzaldehyde	2.00	1.77	88.57	80-120
4 Phenol	2.00	2.25	112.68	80-120
5 Bis(2-Chloroethyl)	2.00	2.14	107.22	80-120
6 2-Chlorophenol	2.00	2.13	106.73	80-120
7 1,3-Dichlorobenzen	2.00	1.84	92.21	80-120
9 1,4-Dichlorobenzen	2.00	2.26	113.04	80-120
10 1,2-Dichlorobenzen	2.00	2.18	108.83	80-120
11 2,2'-Oxybis(1-chlo	2.00	1.95	97.30	80-120
12 2-Methylphenol	2.00	1.98	99.13	80-120
13 Acetophenone	2.00	2.09	104.41	80-120
14 N-Nitroso-di-n-pro	2.00	1.97	98.53	80-120
16 Hexachloroethane	2.00	2.04	101.82	80-120
15 3&4-Methylphenol	2.00	2.46	123.08*	80-120
17 Nitrobenzene	2.00	2.61	130.61*	80-120
18 Isophorone	2.00	2.33	116.47	80-120
19 2-Nitrophenol	2.00	2.06	102.76	80-120
20 2,4-Dimethylphenol	2.00	1.97	98.32	80-120
21 bis(2-Chloroethoxy	2.00	2.17	108.45	80-120
22 2,4-Dichlorophenol	2.00	2.08	103.83	80-120
23 1,2,4-Trichloroben	2.00	2.18	109.15	80-120
25 Naphthalene	2.00	2.14	107.06	80-120
26 4-Chloroaniline	2.00	2.10	105.16	80-120
27 Hexachlorobutadien	2.00	2.15	107.44	80-120
28 Caprolactam	2.00	2.00	100.00	80-120
29 4-Chloro-3-Methylp	2.00	2.07	103.67	80-120
31 2-Methylnaphthalen	2.00	2.19	109.72	80-120
32 1-Methylnaphthalen	2.00	2.46	122.85*	80-120
34 1,2,4,5-Tetrachlor	2.00	1.92	96.28	80-120
33 Hexachlorocyclopen	2.00	1.26	63.04*	80-120
36 2,4,6-Trichlorophe	2.00	1.84	91.86	80-120
37 2,4,5-Trichlorophe	2.00	2.08	104.07	80-120
39 2-Chloronaphthalen	2.00	1.99	99.46	80-120
38 1,1'-Biphenyl	2.00	1.98	99.12	80-120
40 2-Nitroaniline	2.00	2.03	101.59	80-120
41 Dimethyl Phthalate	2.00	2.06	102.80	80-120
43 Acenaphthylene	2.00	1.75	87.71	80-120
42 2,6-Dinitrotoluene	2.00	1.88	93.93	80-120
44 3-Nitroaniline	2.00	2.08	103.95	80-120
46 Acenaphthene	2.00	2.03	101.73	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N062315.b\N6784.D
Report Date: 24-Jun-2015 10:51

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 2,4-Dinitrophenol	2.00	1.33	66.50*	80-120
48 Dibenzofuran	2.00	2.02	101.30	80-120
49 2,4-Dinitrotoluene	2.00	1.96	97.87	80-120
50 4-Nitrophenol	2.00	1.67	83.66	80-120
51 2,3,4,6-Tetrachlor	2.00	1.57	78.72*	80-120
52 Diethylphthalate	2.00	2.16	107.99	80-120
54 Fluorene	2.00	1.98	99.24	80-120
56 4-Nitroaniline	2.00	2.49	124.55*	80-120
57 4,6-Dinitro-2-Meth	2.00	1.81	90.39	80-120
58 N-Nitrosodiphenyla	2.00	1.60	80.24	80-120
59 4-Bromophenyl-phen	2.00	1.96	98.19	80-120
60 Hexachlorobenzene	2.00	1.92	95.76	80-120
61 Atrazine	2.00	1.74	86.93	80-120
62 Pentachlorophenol	2.00	1.77	88.66	80-120
64 Phenanthrene	2.00	1.90	94.98	80-120
65 Anthracene	2.00	2.03	101.62	80-120
66 Carbazole	2.00	2.00	99.96	80-120
67 Di-n-butylphthalat	2.00	2.13	106.62	80-120
68 Fluoranthene	2.00	1.96	98.04	80-120
70 Pyrene	2.00	1.92	96.03	80-120
71 Butylbenzylphthala	2.00	1.83	91.33	80-120
72 Benzo(a)anthracene	2.00	1.92	95.98	80-120
75 Chrysene	2.00	2.13	106.34	80-120
73 3,3'-Dichlorobenzi	2.00	2.18	109.20	80-120
76 bis(2-Ethylhexyl)p	2.00	1.72	85.90	80-120
77 Di-n-octylphthalat	2.00	1.78	88.98	80-120
78 Benzo(b)fluoranthe	2.00	1.68	83.84	80-120
79 Benzo(k)fluoranthe	2.00	2.17	108.47	80-120
80 Benzo(a)pyrene	2.00	1.73	86.35	80-120
82 Indeno(1,2,3-cd)py	2.00	1.81	90.36	80-120
83 Dibenzo(a,h)anthra	2.00	1.83	91.58	80-120
84 Benzo(g,h,i)peryle	2.00	2.03	101.53	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	10-93
$ 30 2-Methylnaphthale	2.00	0.000	*	43-92
$ 35 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 53 Fluorene-D10	2.00	0.000	*	29-101
$ 69 Pyrene-D10	2.00	0.000	*	53-166


Data File: \\target_server\gg\chem\gcms-n,i\N062315,b\N6784,D
Date : 23-JUN-2015 15:51
Client ID:
Sample Info: WG165324-8
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N062315,b\N6784,D
Y (x10^5)
Min
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol+
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4,6-Trichlorophenol
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
3-Nitroaniline+
-2,4-Dinitrophenol+
2,4-Dinitrotoluene
-4-Nitrophenol+
-Diethylphthalate
-4-Nitroaniline
-4,6-Dinitro-2-Methylpheno+
Fluorene+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene
-Pyrene
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
-Total PAHs

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165381-2
Analytical Date: 06/24/15 12:48
Lab File ID : N6791.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/23/15 13:03 06/23/15 15:23
Column ID:

	Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
5	Bis(2-Chloroethyl)ether	1.62871	1.64803	1.64803	0.010	1.18579	20.00000	Averaged	
6	2-Chlorophenol	1.27989	1.26687	1.26687	0.010	-1.01716	20.00000	Averaged	
11	2,2'-Oxybis(1-chloropropane	0.89116	0.96861	0.96861	0.010	8.69094	20.00000	Averaged	
14	N-Nitroso-di-n-propylamine	0.72895	0.82617	0.82617	0.050	13.33624	20.00000	Averaged	
15	3&4-Methylphenol	1.15700	1.15919	1.15919	0.010	0.18922	20.00000	Averaged	
16	Hexachloroethane	0.46892	0.48807	0.48807	0.010	4.08272	20.00000	Averaged	
17	Nitrobenzene	1.00000	1.15497	0.45384	0.010	15.49688	20.00000	Linear	
19	2-Nitrophenol	0.20564	0.21581	0.21581	0.010	4.94590	20.01000	Averaged	
21	bis(2-Chloroethoxy)methane	0.41026	0.48069	0.48069	0.010	17.16729	20.00000	Averaged	
22	2,4-Dichlorophenol	0.26704	0.28947	0.28947	0.010	8.40148	20.01000	Averaged	
25	Naphthalene	0.98786	1.07858	1.07858	0.010	9.18337	20.00000	Averaged	
26	4-Chloroaniline	0.42724	0.45008	0.45008	0.010	5.34682	20.00000	Averaged	
27	Hexachlorobutadiene	0.17955	0.18250	0.18250	0.010	1.64364	20.01000	Averaged	
31	2-Methylnaphthalene	1.00000	1.03100	0.78513	0.010	3.10032	20.00000	Linear	
33	Hexachlorocyclopentadiene	1.00000	1.16920	0.25505	0.050	16.92029	20.00000	Linear	
34	1,2,4,5-Tetrachlorobenzene	0.62083	0.70017	0.70017	0.010	12.77970	20.00000	Averaged	
36	2,4,6-Trichlorophenol	0.33924	0.40684	0.40684	0.010	19.92732	20.01000	Averaged	
37	2,4,5-Trichlorophenol	0.48215	0.48208	0.48208	0.010	-0.01501	20.00000	Averaged	
38	1,1'-Biphenyl	1.76908	1.95757	1.95757	0.010	10.65473	20.00000	Averaged	
40	2-Nitroaniline	0.31690	0.36332	0.36332	0.010	14.64800	20.00000	Averaged	
42	2,6-Dinitrotoluene	0.36898	0.40604	0.40604	0.010	10.04381	20.00000	Averaged	
47	2,4-Dinitrophenol	0.11528	0.12737	0.12737	0.050	10.48982	20.00000	Averaged	
48	Dibenzofuran	1.84399	1.98882	1.98882	0.010	7.85449	20.00000	Averaged	
49	2,4-Dinitrotoluene	0.44470	0.46202	0.46202	0.010	3.89438	20.00000	Averaged	
50	4-Nitrophenol	0.22116	0.25452	0.25452	0.050	15.08448	20.00000	Averaged	
51	2,3,4,6-Tetrachlorophenol	0.36996	0.35825	0.35825	0.010	-3.16373	20.00000	Averaged	
55	4-Chlorophenyl-phenylether	0.68163	0.69794	0.69794	0.010	2.39263	20.00000	Averaged	
56	4-Nitroaniline	0.22728	0.29418	0.29418	0.010	29.43822	20.00000	Averaged	*
57	4,6-Dinitro-2-Methylphenol	3.00000	3.27207	0.13664	0.010	9.06895	20.00000	Quadratic	
58	N-Nitrosodiphenylamine	0.81728	0.91419	0.91419	0.010	11.85679	20.01000	Averaged	
60	Hexachlorobenzene	0.30991	0.32603	0.32603	0.010	5.20337	20.00000	Averaged	
61	Atrazine	0.18001	0.20341	0.20341	0.010	12.99807	20.00000	Averaged	
62	Pentachlorophenol	0.15678	0.17997	0.17997	0.010	14.79169	20.01000	Averaged	
64	Phenanthrene	1.25031	1.39243	1.39243	0.010	11.36684	20.00000	Averaged	
65	Anthracene	1.44959	1.44428	1.44428	0.010	-0.36667	20.00000	Averaged	
67	Di-n-butylphthalate	2.14651	2.32043	2.32043	0.010	8.10207	20.00000	Averaged	
68	Fluoranthene	1.20381	1.26698	1.26698	0.010	5.24776	20.01000	Averaged	
70	Pyrene	1.00000	0.97603	2.65553	0.010	-2.39728	20.00000	Quadratic	
71	Butylbenzylphthalate	3.00000	3.22740	1.80627	0.010	7.57993	20.00000	Quadratic	
72	Benzo(a)anthracene	1.00000	1.18669	1.53077	0.010	18.66933	20.00000	Linear	
73	3,3'-Dichlorobenzidine	0.27922	0.37624	0.37624	0.010	34.74829	20.00000	Averaged	*

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4291
Lab ID : WG165381-2
Analytical Date: 06/24/15 12:48
Lab File ID : N6791.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/23/15 13:03 06/23/15 15:23
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
75 Chrysene	1.00000	1.15240	1.73357	0.010	15.23973	20.00000	Linear	
76 bis(2-Ethylhexyl)phthalate	3.00000	3.26865	2.70745	0.010	8.95510	20.00000	Quadratic	
77 Di-n-octylphthalate	3.00000	3.03850	6.90313	0.010	1.28349	20.01000	Quadratic	
78 Benzo(b)fluoranthene	1.00000	1.38199	2.21411	0.010	38.19855	20.00000	Quadratic	*
79 Benzo(k)fluoranthene	1.00000	0.97819	2.07426	0.010	-2.18148	20.00000	Linear	
80 Benzo(a)pyrene	1.42953	1.62871	1.62871	0.010	13.93323	20.01000	Averaged	
82 Indeno(1,2,3-cd)pyrene	0.93525	0.98558	0.98558	0.010	5.38046	20.00000	Averaged	
83 Dibenzo(a,h)anthracene	0.66553	0.70077	0.70077	0.010	5.29532	20.00000	Averaged	
84 Benzo(g,h,i)perylene	1.00000	1.13631	0.96019	0.010	13.63115	20.00000	Linear	
30 2-Methylnaphthalene-D10	1.09374	1.18105	1.18105	0.010	7.98192	20.00000	Averaged	
35 2,4-Dibromophenol	0.35534	0.37940	0.37940	0.010	6.76948	20.00000	Averaged	
53 Fluorene-D10	0.90411	0.92791	0.92791	0.010	2.63175	20.00000	Averaged	
69 Pyrene-D10	1.00000	1.05582	1.47134	0.010	5.58163	20.00000	Linear	

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

5/5/625
sep

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625 ✓	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV2721		Spike ID (1): SV2715(SV)		
	Surrogate ID (2):		Spike ID (2): SV2716(SIM)		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DMB24		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 27965002		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) ≤2		pH (2nd Extraction) ≥11
Prep Start Time: 1130	Prep End Time: 1330		CLLE Start Time:		CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SVD34	Initials	Comments Rev 322505
6-22-15	WAS	WG165248-1 248-1 251-1	1000	1mL	NR	✓	✓	1mL	6-22-15	A1	KF	Rev 322506
		WG165248-2 251-2			1mL					A2		Rev 322507
		248-3 251-3								3		
		WG165248-4	1010		NR					4		SPLP Blank 1251A
		-5	200							5		TCLP Blank 1250A → 2000mL w/DI
		-6	900		1mL					6		MS SD3862-6
		-7	880							7		MSD -6
		WG165249-2	~~750~~ 1000				✓			8		
		-3	~~703~~							9		
		-4	1010		NR					A10		SPLP Blank 1251
		-5	750		1mL					B1		MS SD3862-
		-6	1030							B2		MSD

EX-007 – Revision 2 – 12/05/2013

QAEX284

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-22-15	WAS	SD4240-1	200	1mL	NR	✓		1mL	6-22-15	B3	KF	TCLP → 2000mL w/DI
		SD4259-2	1020				✓			4		SPLP
		-4								5		
		-6	960							6		
		-9	880							7		
		SD4306-7 H	1050			✓				8		
		SD4319-1 F	1060			✓				9		625
		SD4332-1 H	980				✓			B10		
		-3 H	1010							C1		emulsion → SS
		-5 H	1050							2		
		-7 H	1000							3		
		-9 G	1060							4		Continue
		-10 F	1010							5		
		-11 H	1050			✓	✓			C6		
									KF	6-22-15		

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 062315

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165304-1	50ng DFTPP	ND958	1	1	DFTPPSVM	2.0	JLL	OK
-4	SSTD1.00 ND623	N6778		2	NSP SVMS			✓
-2	0.2	79		3				✓
-3	0.5	80		4				✓
-5	3.0	81		5				✓
-6	7.0	82		6				✓
-7	12.	83		7				✓
-8	IND	84		8				OK
3510	WG165249-1	85		9				OK
	-4	86		10				OK SPLP PB1125LA
	-2	87		11				OK
	-3	88		12				OK
	-5	89		13				OK 513862 SPLP
	-6	90		14				OK 5544
	SE4291-2	91		15				~~OK~~ not run; power loss SPLP
	-4	92		16				
	-6	93		17				
	-9	94		18				
	SE4332-1	95		19				
	-3	96		20				
	-5	97		21				
	-7	98		22				
	-9	99		23				
	-10	N6800		24				
	-11	01		25				
3550	SE4226-7DL	02	8	26				50/400
	-8DL	03	7	27				50/350
	~~SE~~ WG165004-1	04	1	28				SPLP

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52637
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

con't next page

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 062415

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165381-1	50ng DFTPP	ND959	1	1	DFTPPSIM	2.0	JLK	OK
-2	SSTD1.00 ND624	N6791	1	2	NSESIM45			OK
3560	SI4291-7DL	92	3	3				SS2↑
	-2	93	1	4				OK
	-4	94		5				OK
	-6	95		6				SS3↓
	-8	96		7				OK
3550	SI4332-1	97		8				OK
	-3	98		9				OK
	-5	99		10				OK
	-7	N6800		11				OK
	-9	01		12				OK
	-10	02		13				OK
	-11	03		14				OK
	SI4226-1DL	04	30	15				OK 50/250→50/300
	-2DL	05	20	16				— DL1:25 50/200→50/220
	-5DL	06	8	17				SS3↓ 50/420
	-7DL	07	8	18				SS3↓ ↓
	-8DL	08	20	19				OK 50/320
	-9DL	09	20	20				OK 50/200→50/250
	-10DL	10	40	21				OK 50/250→50/400
	SI4332-22	11	1	22				OK DL1:6
	-20	12		23				OK DL1:12
	-16	13		24				OK DL1:10
	-13	14		25				1556↓ DL1:40
	-19	15		26				156↓ DL1:60
	-21	16		27				DOC DL1:100
	-18	17		28				↓ DL1:75

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52638
IS MIX	52637

REVIEWED AND APPROVED BY: _____
DATE: _____

Cont'd next page

SVOA-005 – Revision 1 – 03/01/2011

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG165143	SM2540	22-JUN-15	19-JUN-15	U 1 %	1 %	N/A

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG165143-2	LCS	WG165143	22-JUN-15	19-JUN-15	%	90	90.	100	90-110	

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfide H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI4291-1
Report Date: 07-JUL-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI4291

Sample Description	Matrix	Date Sampled	Date Received
SITE 4TS-HWF1-B	SL	15-JUN-15 14:00:00	18-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	93. %	1		N/A	SM2540G	WG165143	22-JUN-15 10:02:07	SM2540G	19-JUN-15	

200 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI4291-3
Report Date: 07-JUL-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI4291

Sample Description	Matrix	Date Sampled	Date Received
SITE 4TS-HWF2-B	SL	15-JUN-15 14:15:00	18-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	94. %	1		N/A	SM2540G	WG165143	22-JUN-15 10:02:17	SM2540G	19-JUN-15	

000 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI4291-5
Report Date: 07-JUL-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI4291

Sample Description	Matrix	Date Sampled	Date Received
SITE 4TS-HWF1-PT	SL	16-JUN-15 14:30:00	18-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	93. %	1		N/A	SM2540G	WG165143	22-JUN-15 10:02:31	SM2540G	19-JUN-15	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI4291-8
Report Date: 07-JUL-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI4291

Sample Description	Matrix	Date Sampled	Date Received
SITE 4TS-HWF2-PT	SL	17-JUN-15 15:15:00	18-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	92. %	1		N/A	SM2540G	WG165143	22-JUN-15 10:02:44	SM2540G	19-JUN-15	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Raw Data Section

TOTAL SOLIDS BATCH REPORT
Jun 22 2015, 10:24 am
Batch: WG165143

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SI4270-1	SL	SAMP	19-JUN-15	1.3085 g	30.5179 g	29.5565 g	29.5565 g	AZ	22-JUN-15	96.7080	97. %		
SI4291-1	SL	SAMP	19-JUN-15	1.3087 g	28.8963 g	27.0542 g	27.0542 g	AZ	22-JUN-15	93.3230	93. %		
SI4291-3	SL	SAMP	19-JUN-15	1.3022 g	29.2519 g	27.5301 g	27.5301 g	AZ	22-JUN-15	93.8400	94. %		
SI4291-5	SL	SAMP	19-JUN-15	1.3146 g	31.9008 g	29.7336 g	29.7336 g	AZ	22-JUN-15	92.9140	93. %		
SI4291-8	SL	SAMP	19-JUN-15	1.3247 g	32.2974 g	29.7808 g	29.7808 g	AZ	22-JUN-15	91.8750	92. %		
WG165143-1	SL	MBLANK	19-JUN-15	1.3169 g	1.81 g	1.3164 g	1.3164 g	AZ	22-JUN-15	-0.1010	1 %		
WG165143-2	SL	LCS	19-JUN-15	1.3196 g	6.3251 g	5.8305 g	5.8305 g	AZ	22-JUN-15	90.1190	90. %	100	
WG165143-3	SL	DUP	19-JUN-15	1.3138 g	26.7681 g	25.8876 g	25.8876 g	AZ	22-JUN-15	96.5410	96. %		0

Comments:

SI4270-1	VOA: 15 ml MEOh, 2x5ml DI
SI4291-5	Metals on hold
SI4291-8	Metals on hold
WG165143-1	SI4270-1
WG165143-2	SI4270-1
WG165143-3	SI4270-1

Entered by: _____ Date: 6-22-15 Accepted by: _____ Date: 06/22/15

R322301 ~~WG165~~ WG165143

KATAHDIN ANALYTICAL SERVICES

R322302 WG165144

Total Solids: SM2540 G / ASTM D2216			PQL: 0.10%	Total Volatile Solids: SM2540 G / E160.4			PQL: 0.10%	Balance Calibrated?
TS/TVS	In 1	In 2	TS Only	Out 1	Out 2	TVS Only		Y / N
ANALYST IN:	[illegible]	[illegible]	ANALYST OUT:	[illegible]		ANALYST OUT:		In: Y
DATE IN:	6-19-15	6-22-15	DATE OUT:	6-22-15		DATE OUT:		Out (TS): Y
TIME IN:	17:35	10:13	TIME OUT:	8:32		TIME OUT:		Out (TVS):
TEMP IN:	104°C	104°C	TEMP OUT:	104°C		TEMP OUT:		Balance ID:
Oven ID: Oven-4			Muffle Oven ID: 030807 (assigned)					S/N 112401631

	SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)	1st DISH DRY WT (g)	2nd DISH DRY WT (g)	DISH/ASH WT (g)	TIME
1	Blank	6	1.3169	1.8100	1.3164			
2	LCS	7	1.3196	6.3251	5.8305			
3	SI4270-1	1						
4	SI4291-1	2						
5	-3	3						
6	-5	4						
7	-8	5						
8	SI4270-1 DUP	8						
9	SI4278-1	9						
10	SI4279-1	10						
11	SI4280-1	11						
12	~~SI4316-1~~ SI4288-1	12						
13	SI4316-1	13						
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

6-22-15

WL-009 – Revision 4 – 05/20/2015

Reviewed By: [illegible]
QAWL772

Reviewed Date: 06/22/15

Katahdin Analytical Services 0000341

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, Maine

CASE NO. WE15 SDG NO. S14483 SDG NOS. TO FOLLOW
SAS NO.

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. **Inventory Sheet** (Form DC-2) (Do not Number)	0000001	0000010	—	
2. **SDG Case Narrative**	0000013	0000017	✓	
3. **SDG Cover Sheet/Traffic Report**	0000011	0000012	✓	
4. **Volatiles Data**				
a. QC Summary				
System Monitoring Compound Summary (Form II	0000028	0000030	—	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	—	—	—	
Method Blank Summary (Form IV VOA)	0000031	0000032	—	
GC/MS Instrument Performance Check (Form V VOA)	0000045	0000047	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	0000048	0000051	—	
b. Sample Data	0000052	0000075		
TCL Results - (Form I VOA-1, VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			—	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	0000076	0000091		
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB	—	—	—	
Blank Data	0000033	0000038	—	
Martix Spike/Matrix Spike Duplicate Data	0000039	0000044	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, Maine

CASE NO. WE15 SDG NO. S121483 SDG NOS. TO FOLLOW
SAS NO.

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. **Inventory Sheet** (Form DC-2) (Do not Number)	NA	NA	NA	
2. **SDG Case Narrative**	↓	↓	↓	
3. **SDG Cover Sheet/Traffic Report**	↓	↓	↓	
4. **Volatiles Data** – SPLP				
a. QC Summary				
System Monitoring Compound Summary (Form II	0000099	0000101	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	—	—	—	
Method Blank Summary (Form IV VOA)	0000102	0000102	✓	
GC/MS Instrument Performance Check (Form V VOA)	0000109	0000110	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	0000111	0000112	✓	
b. Sample Data	0000113	0000121		
TCL Results - (Form I VOA-1, VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	0000122	0000129		
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB	—	—	✓	
Blank Data	0000103	0000106	✓	
Martix Spike/Matrix Spike Duplicate Data	0000107	0000108	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. S14463 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000137	0000139	✓	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000140	0000140	✓	
GC/MS Instrument Performance Check (Form V SV)	0000145	0000145	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000146	0000147	✓	
b. Sample Data	0000148	0000157		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000158	0000162		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000141	0000142	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000143	0000144	✓	
e. ~~Raw GPC Data~~ Logbooks	0000163	0000168	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. SL4463 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** – SIM				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000169	0000171	—	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000172	0000172	✓	
GC/MS Instrument Performance Check (Form V SV)	0000175	0000177	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000178	0000179	✓	
b. Sample Data	0000180	0000188		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000189	0000194		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000173	0000173	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000174	0000174	✓	
e. ~~Raw GPC Data~~ Logbooks	0000195	0000202	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. SH463 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** - SPLP				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000203	0000205	✓	
MS/MSD Summary (Form III SV)				
Method Blank Summary (Form IV SV)	0000206	0000206	✓	
GC/MS Instrument Performance Check (Form V SV)	0000210	0000211	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000212	0000215	✓	
b. Sample Data	0000216	0000221		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000222	0000227		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP				
Blank Data	0000207	0000208	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000209	0000209	✓	
e. ~~Raw GPC Data~~ Logbooks	0000228	0000234	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. SS14463 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** – SPLP SIM				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000235	0000237	—	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000238	0000238	—	
GC/MS Instrument Performance Check (Form V SV)	0000245	0000246	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000247	0000250	—	
b. Sample Data	0000251	0000259		
TCL Results - (Form I SV-1, SV-2)			—	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			—	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			—	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			—	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000260	0000266		
Initial Calibration Data (Form VI SV-1, SV-2)			—	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000239	0000242	—	
Matrix Spike/Matrix Spike Duplicate Data	0000243	0000244	✓	
e. ~~Raw GPC Data~~ Logbooks	0000267	0000273	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)	↓	↓	↓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. 514463 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. ~~Pesticides Data~~ (Cont.) VOA SPLP				
e. ~~Raw GPC Data~~ Logbooks	0000130	0000136	✓	
f. Raw Florisil Data	NA	NA	NA	
7. **Miscellaneous Data**				
Original preparation and analysis forms or of preparation and analysis logbook pages -VOA	0000092	0000098	✓	
Internal sample and sample extract transfer chain-of-custody records	0000024	0000027	✓	
Screening records	NA	NA	NA	
All instrument output, including strip charts from screening activities (describe or list)				
8. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments _____)	NA	NA	NA	
Chain-of-Custody Records	0000021	0000021	✓	
Sample Tags			—	
Sample Log-in Sheet (Lab & DC1)	NA	NA	NA	
Miscellaneous Shipping/Receiving Records (describe or list)				
Sample Receipt Condition Report	0000019	0000019	✓	
Login Chain of Custody	0000022	0000023	✓	
9. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
	NA	NA	NA	
10. **Other Records** (describe or list)				
Telephone Communication Log				
11. **Comments:**				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE15 SDG NO. S14463 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

	(Signature)	(Printed Name/Title)	(Date)
Completed by: (CLP Lab)	[signature]	Heather Marz/PM	7-18-15
Verified by: (CLP Lab)			
Audited by: (EPA)			

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, ME
CASE NO. WE15 SDG NO. S14463 SDG NOS. TO FOLLOW

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - ILM05.4, Exhibit B Section 2.6)

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1. Cover Page	0000011	0000012	✓	
2. SDG Narrative	0000013	0000017	✓	
3. Sample Log-In Sheet (DC-1)	—	—	—	
4. Inventory Sheet (DC-2))	0000001	0000010	✓	
5. Traffic Report/Chain of Custody Record(s)	0000021	0000021	✓	
Inorganic Analysis				
6. Data Sheet (Form I-IN)	0000279	0000284	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	NA	NA	NA	
8. CRQL Standard(Form IIB-IN)	↓	↓	↓	
9. Blanks (Form III-IN)	0000274	0000276	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	NA	NA	NA	
11. ICP-MS Interference Check Sample(Form IVB-IN)	↓	↓	↓	
12. Matrix Spike Sample Recovery(Form VA-IN)	↓	↓	↓	
13. Post-Digestion Spike Sample Recovery(Form VB-IN)	↓	↓	↓	
14. Duplicates (Form VI-IN)	0000278	0000278	✓	
15. Laboratory Control Sample(Form VII-IN)	0000277	0000277	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	NA	NA	NA	
17. Method Detection Limits (Annually) (Form IX-IN)	↓	↓	↓	
18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN)	↓	↓	↓	
19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN)	↓	↓	↓	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN)	↓	↓	↓	
21. Preparation Log (Form XII-IN)	↓	↓	↓	
22. Analysis Run Log (Form XIII-IN)				

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23. ICP-MS Tune (Form XIV-IN)	NA	NA	NA	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)				
25. ICP-AES Raw Data				
26. ICP-MS Raw Data				
27. Mercury Raw Data				
28. Cyanide Raw Data				
29. Preparation Logs Raw Data (Wet Chemistry)	0000285	0000288	✓	
30. Percent Solids Determination Log	NA	NA	NA	
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)				
Sample Tags				
Sample Log-In Sheet (Lab)				
32. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs				
Sample Receipt Condition Report	0000019	0000019	✓	
	NA	NA	NA	
33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)				
Internal Chain of Custody	0000024	0000027	✓	
Login Chain of Custody Report	0000022	0000023	✓	
34. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	NA	NA	NA	
Analysis Records				
Description Duplicate Precision Form				
35. Other Records (describe or list)				
Telephone Communications Log				
DAS Specifications				
36. Comments				

Completed by:
(CLP Lab) [signature] Heather Manz/DM 7-15-15
(Signature) (Print Name & Title) (Date)

Audited by:
(USEPA) _____ _____ _____
(Signature) (Print Name & Title) (Date)

FORM DC-2-2 M&E DAS

ENSAFE
NAVY CLEAN WE08 NWIRP
BETHPAGE, NY
SI4463

KATAHDIN ANALYTICAL SERVICES, LLC
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

0000011

SAMPLE DATA PACKAGE

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
ENSAFE
NAVY CLEAN WE15-03-06 NWIRP BETHPAGE, NY
SI4463

Sample Receipt

The following samples were received on June 24, 2015 and were logged in under Katahdin Analytical Services work order number SI4463 for a hardcopy due date of July 13, 2015.

KATAHDIN Sample No.	AECOM Sample Identification
SI4463-1	SITE 4TS-SEE1-B
SI4463-2	SITE 4TS-SEE1-B
SI4463-3	SITE 4TS-SEE2-B
SI4463-4	SITE 4TS-SEE2-B
SI4463-5	SITE 4TS-SEE1-PT
SI4463-6	SITE 4TS-SEE1-PT
SI4463-7	SITE 4TS-TB-62315

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Jennifer Obrin.** This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SI4463 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

8270D SIM Analysis

The target analyte fluoranthene was detected below ½ the reporting limit in the method blank WG165366-1. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit. Since the method blank was acceptable, no further action was taken.

Samples SI4463-1DL, 2DL, and 3DL had responses for two or more internal standards which were outside the DoD QSM acceptance limit of -50% to +100% of the responses of the internal standards of the ICAL midpoint standard. Since all three samples required analysis at a further dilution, no further action was taken.

The calibration verification standard (file N6873) had high responses for the target analytes pyrene and chrysene that resulted in %D's that exceeded the DoD QSM acceptance limits of 20%.

8260C SPLP Analysis

The independent check standard (file P1539A), associated with the initial calibration analyzed on the P instrument on 06/22/15, had a high concentration for the target analyte chloroethane, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The calibration verification standards (file P1636) had high responses for the target analytes acetone, 4-methyl-2-pentanone and 2-hexanone that resulted in %D's that exceeded the DoD QSM acceptance limits of 20%.

8260C Analysis

Samples SI4463-1, 1RA and 5 were manually integrated for one or more of the following target analytes: benzene, 2-butanone and/or methylcyclohexane. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Samples SI4463-1, 3 and 5 had low or high recoveries for one or more of the surrogates, which were outside of the acceptance limits. Some of the samples also had low responses for one or more internal standards (IS) that resulted in %D's which were outside the DoD QSM acceptance limit of -50% to +100% of the response of the internal standard of the midpoint of the ICAL. These samples were reanalyzed and had similar surrogate and IS deviations. The results from both analyses are included in the report.

Sample SI4463-7 had high recoveries for two surrogates which were outside of the acceptance limits. Since a high recovery would indicate a high bias, and there were no target analytes detected above the LOQ, no further action was taken.

The method blank WG165466-2 had a high recovery for one surrogate which was outside the DoD QSM acceptance limits. Since a high recovery would indicate a high bias, and there were

no analytes detected above the LOQ, no further action was taken.

The initial calibration analyzed on the T instrument on 6/22/15 had %RSD values for some target analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The analyte chloroethane failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990, respectively. This analyte was calibrated using the average model. The corresponding independent check standard (file T3891A) had high concentrations for the target analytes 2-hexanone and naphthalene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The independent check standard (file W3151A), associated with the initial calibration analyzed on the W instrument on 06/30/15, had high concentrations for the target analytes dichlorodifluoromethane, chloromethane, chloroethane and vinyl acetate, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The calibration verification standard (file T3909) had a low response for the target analyte chloroethane and a high response for the target analyte methylene chloride that resulted in %D's that exceeded the DoD QSM acceptance limits of 20%.

The target analyte acetone was detected below ½ the reporting limit in the method blanks WG165466-2 and WG165742-9. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit. Since the method blanks were acceptable, no further action was taken.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on DoD QSM acceptance limits for the full list of spiked compounds and laboratory established acceptance limits for all other analytes. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

<u>8270D SIM SPLP Analysis</u>

The target analyte benzo(g,h,i)perylene was detected below ½ the reporting limit in the method blank WG165446-1. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit. Since the method blank was acceptable, no further action was taken.

The initial calibration analyzed on the G instrument on 06/16/2015 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analyte 2,4-dinitrophenol failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using

the average model. The corresponding independent check standard (file G5058) had high concentrations for the target analytes 3-nitroaniline and 4-chloroanaline, and low concentrations for benzaldehyde, hexachlorocyclopentadiene, 2,4-dintrophenol, 4-nitoaniline, n-nitrosodiphenylamine, 3,3'-dichlorobenzidine, and indeno(1,2,3-cd)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The CV (file G5089) had a high response for the target analyte 2-nitroaniline and surrogate 2,4-dibromophenol, which resulted in %D's that were greater than the DoD QSM acceptance limit of 20%. The CV also had a low average response factor (RF) for the system performance check compound (SPCC) 2,4-dinitrophenol, which was outside the method acceptance limit of 0.050.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived limits for the full list of spiked compounds and are statistically derived limits for the surrogates. Although DoD QSM acceptance limits were requested for this project, laboratory established acceptance limits were used because the DoD QSM does not list acceptance limits for 8270SIM. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these statistical acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

The LCS WG165446-2 had low or high recoveries for 12 spiked target analytes that were outside of the laboratory established acceptance limits.

<u>8270D SCAN Analysis</u>

Samples SI4463-1, 3, and 5 were concentrated to a final volume of 2mL instead of the laboratory procedure of 1mL and were analyzed at a dilution of 1:2 due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQLs were elevated by a factor of 4.

Samples SI4463-1DL, 3DL, and 5DL had high recoveries for one or more surrogates that were outside of the DoD QSM acceptance limits. These samples also had low responses for three internal standards which were outside the DoD QSM acceptance limit of -50% to +100% of the responses of the internal standards of the ICAL midpoint standard. Based on the sample chromatogram, the deviations are likely matrix-related. Therefore, no further action was taken.

The initial calibration analyzed on the U instrument on 06/25/2015 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analytes 4-chlorophenyl-phenylether and di-n-butylphthalate failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. These compounds were calibrated using the average model. The corresponding independent check standard (file U0835) had high concentrations for the target analytes

nitrobenzene, 2,6-dichlorophenol, 2,4,5-trichlorophenol, 1,1'-biphenyl, 4-nitrophenol, pentachlorophenol, and di-n-octylphthalate which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

8270C SPLP Analysis

The CV (file U0864) had a low response for the surrogate terphenyl-d14, which resulted in a %D that was greater than the DoD QSM acceptance limit of 20%.

The independent check standard (file U0835), associated with the initial calibration analyzed on the U instrument on 06/25/15, had no response for the target analyte benzaldehyde. The analyte benzaldehyde is an EPA CLP compound that is very sensitive to the condition of the injection port of the GC/MS instrument. Consequently, the response of this analyte may fluctuate from one analysis to another which may result in high %RSD's for initial calibrations, high %D's for CV's, and low or high recoveries for LCS's.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Wet Chemistry Analysis

The samples of Work Order SI4463 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times. All quality control criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Leslie Dimond 07.15.15

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: Ensafe		KAS PM: JG		Sampled By: Client	
Project:		KIMS Entry By: DW		Delivered By: FedEx	
KAS Work Order#: S14463		KIMS Review By: JO		Received By: AP	
SDG #:	Cooler: 1 of 1			Date/Time Rec.: 6/24/15 0926	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.					Temp (°C): ~~3.8~~ 1.9
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?	✓				
Received in methanol?	✓				
Methanol covering soil?	✓				
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved?					
Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Jennifer Obrin

From: Jeff Parillo [jparillo@Ensafe.com]
Sent: Wednesday, July 01, 2015 1:30 PM
To: Jennifer Obrin
Subject: RE: Login COC for the samples received 06/24 - Bethpage WE08 _SI4463

Confirmed and thank you.

Jeff Parillo, PE
Environmental Engineer
ENSAFE
1233 Silas Deane Highway
Wethersfield, CT 06109
Office – 860.665.1140 Ext. 6002
Cell – 203.915.0566

From: Jennifer Obrin [mailto:jobrin@katahdinlab.com]
Sent: Wednesday, July 1, 2015 1:03 PM
To: Jeff Parillo
Subject: RE: Login COC for the samples received 06/24 - Bethpage WE08 _SI4463

Jeff,

Can you please confirm that you want to cancel the Metals for:
SITE4TS-HWF1-PT
SITE4TS-HWF2-PT
SITE4TS-SEE1-PT

Thank you,

Jennifer Obrin
Federal Programs Project Manager
Katahdin Analytical Services
A Small Business Enterprise
DoD ELAP Accredited
600 Technology Way
Scarborough, Maine 04074
Office - 207.874.2400 x17
Mobile - 207.333.7469
Fax - 207.775.4029
www.katahdinlab.com

Katahdin Analytical Services
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client: Ensafe	Contact: Jeff Parillo	Phone #: 860-665-1140	Fax #: ( )
Address: 1233 Silas Dean Hwy	City: Westerfield	State: CT	Zip Code: 06109
Purchase Order #: NWIRP Belth	Proj. Name/No.:		Katahdin Quote #:
Bill (if different than above):		Address:	
Sampler (Print/Sign): James Moyer James Moyer			Copies To: tjordan@kemron.com afortune@terratherm.com

LAB USE ONLY
Work Order #: 5144 03
Katahdin Project Number
Remarks:
Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C Temp Blank Intact Not Intact

Analysis and Container Type Preservatives

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Filt. Y / N VOC 8260	Filt. Y / N SVOC 8270	Filt. Y / N TAL Metals 6010/7471	Filt. Y / N SPLP VOC 1312/8260	Filt. Y / N SPLP SVOC 1312/8270	Filt. Y / N SPLP Metals 1312/7470A	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N
	Stie 4TS-SEE1-B	6/22/2023 12:05	S	r	X	X		X	X					
	Stie 4TS-SEE2-B	6/22/2015 1300	S		X	X		X	X					
	Stie 4TS-SEE1-PT	6/23/2015 15:05	S		X	X	X**	X	X					
	Site 4TS-TB-62315	5/29/2015 11:15			X									

COMMENTS: ** Hold Metals analysis unitl instructed by client to analyze.

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
James Moyer	6/23/1545	09:00 6-24-15			
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jul. 01, 2015
02:04 PM

Login Number: SI4463

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Quote/Incoming: ENSAFE-BETHPAGI

Primary Report Address:
Dana Miller
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134
dmiller@Ensafe.com

Primary Invoice Address:
Accounts Payable
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134

Report CC Addresses:
Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	Samples 5&6 on a quicker TAT for verbals. Follow DoD QSM Version 4.2 using DoD limits. "U" LOD. "J" flag between DL and LOQ. VOA soils are NaHSO4 and MeOH pres.
CHECK NO.	:	
CLIENT PO#	:	18884
CLIENT PROJECT MANAGE	:	Brian Caldwell
CONTRACT	:	
COOLER TEMPERATURE	:	1.9
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	KAS135QC-CSV & KAS062-CSV
LOGIN INITIALS	:	DEW
PM	:	JO
PROJECT NAME	:	Navy Clean WE08 NWIRP Bethpage, NY
QC LEVEL	:	III
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	Send CD only to Dana. Upload to SDS folder. Email PDF to afortune@terratherm.com. Email invoice to purchasing@ensafe.com.
SDG ID	:	
SDG STATUS	:	

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI4463-5	SITE 4TS-SEE1-PT	23-JUN-15 15:05	24-JUN-15		**29-JUN-15**	13-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	07-JUL-15	40 mL Vial+DI+MEOH		
Solid	S	SW8270-S	07-JUL-15	1L N-Amber Glass		
Solid	S	SW8270SIM-S	07-JUL-15	100g Glass		
Solid	S	TS	23-JUL-15			

SI4463-6	SITE 4TS-SEE1-PT	23-JUN-15 15:05	24-JUN-15		**29-JUN-15**	13-JUL-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	P	SPLP-SVOA				
SPLP-SW8270		SW1312-EXT-SVOA				
Aqueous	S	SPLP-SW8270SIM	30-JUN-15	1L N-Amber Glass		
Solid	P	SPLP-VOA				
SPLP-SW8260		SW1312-EXT-VOA				

Total Samples: ***7*** ***Total Analyses:*** ***23***

gp
07.01.15

0000022

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (Ino1)

Jul. 01, 2015
02:04 PM

Login Number: SI4463

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Quote/Incoming: ENSAFE-BETHPAGI

Primary Report Address:
Dana Miller
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134
dmiller@Ensafe.com

Primary Invoice Address:
Accounts Payable
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134

Report CC Addresses:
Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	Samples 5&6 on a quicker TAT for verbals. Follow DoD QSM Version 4.2 using DoD limits. "U" LOD. "J" flag between DL and LOQ. VOA soils are NaHSO4 and MeOH pres.
CHECK NO.	:	
CLIENT PO#	:	18884
CLIENT PROJECT MANAGE	:	Brian Caldwell
CONTRACT	:	
COOLER TEMPERATURE	:	1.9
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	KAS135QC-CSV & KAS062-CSV
LOGIN INITIALS	:	DEW
PM	:	JO
PROJECT NAME	:	Navy Clean WE08 NWIRP Bethpage, NY
QC LEVEL	:	III
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	Send CD only to Dana. Upload to SDS folder. Email PDF to afortune@terratherm.com. Email invoice to purchasing@ensafe.com.
SDG ID	:	
SDG STATUS	:	

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI4463-1	SITE 4TS-SEE1-B	22-JUN-15 12:05	24-JUN-15		**01-JUL-15**	13-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	06-JUL-15	40 mL Vial+DI+MEOH		
Solid	S	SW8270-S	06-JUL-15	1L N-Amber Glass		
Solid	S	SW8270SIM-S	06-JUL-15	100g Glass		
Solid	S	TS	22-JUL-15			

SI4463-2	SITE 4TS-SEE1-B	22-JUN-15 12:05	24-JUN-15		**01-JUL-15**	13-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	P	SPLP-SVOA				
SPLP-SW8270		SW1312-EXT-SVOA				
Aqueous	S	SPLP-SW8270SIM	29-JUN-15	1L N-Amber Glass		
Solid	P	SPLP-VOA				
SPLP-SW8260		SW1312-EXT-VOA				

SI4463-3	SITE 4TS-SEE2-B	22-JUN-15 13:00	24-JUN-15		**01-JUL-15**	13-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	06-JUL-15	40 mL Vial+DI+MEOH		
Solid	S	SW8270-S	06-JUL-15	1L N-Amber Glass		
Solid	S	SW8270SIM-S	06-JUL-15	100g Glass		
Solid	S	TS	22-JUL-15			

SI4463-4	SITE 4TS-SEE2-B	22-JUN-15 13:00	24-JUN-15		**01-JUL-15**	13-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	P	SPLP-SVOA				
SPLP-SW8270		SW1312-EXT-SVOA				
Aqueous	S	SPLP-SW8270SIM	29-JUN-15	1L N-Amber Glass		
Solid	P	SPLP-VOA				
SPLP-SW8260		SW1312-EXT-VOA				

SI4463-7	SITE 4TS-TB-62315	23-JUN-15 00:00	24-JUN-15		**01-JUL-15**	13-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	07-JUL-15	40 mL Vial+DI+MEOH		**Trip Blank, no TS jar**
Solid	S	TS	23-JUL-15			

QP 07.01.15

Total Samples: *7* ***Total Analyses:*** *23*

0000023

Katahdin Analytical Services, Inc.

Container Transfer History for SI4463

Samplenum SI4463-1

Container Id SI4463-1A **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	

Container Id SI4463-1B **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	
26-JUN-15 14:26	VOA_WALK-IN	VOA_FREEZER1	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to JSPEARIN for department CUSTODY on 06/24/15 12:51 .
26-JUN-15 14:28	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/26/15 14:26 .

Container Id SI4463-1C **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	
26-JUN-15 14:26	VOA_WALK-IN	VOA_FREEZER1	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to JSPEARIN for department CUSTODY on 06/24/15 12:51 .
26-JUN-15 14:28	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/26/15 14:26 .

Container Id SI4463-1D **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	

Container Id SI4463-1E **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	

Container Id SI4463-1F **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	
25-JUN-15 15:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
25-JUN-15 17:08	WET CHEMISTRY	WALK-IN	AZAZZARA	N	

Samplenum SI4463-2

Container Id SI4463-2A **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	
24-JUN-15 14:10	ORGANIC PREP	WALK-IN	HGOULD	Y	This container has not been properly returned to CUSTODY! It was last assigned to JSPEARIN for department CUSTODY on 06/24/15 13:11 .
24-JUN-15 14:46	WALK-IN	METALS PREP	ELITTLEFIELD	N	
24-JUN-15 15:39	METALS PREP	WALK-IN	GJOHNSON	N	

Container Id SI4463-2B **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	

Samplenum SI4463-3

0000024

Katahdin Analytical Services, Inc.

Container Transfer History for SI4463

Samplenum SI4463-3

Container Id SI4463-3A **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	

Container Id SI4463-3B **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	
26-JUN-15 14:26	VOA_WALK-IN	VOA_FREEZER1	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to JSPEARIN for department CUSTODY on 06/24/15 12:51 .
26-JUN-15 14:28	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/26/15 14:26 .

Container Id SI4463-3C **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	
26-JUN-15 14:26	VOA_WALK-IN	VOA_FREEZER1	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to JSPEARIN for department CUSTODY on 06/24/15 12:51 .
26-JUN-15 14:28	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/26/15 14:26 .

Container Id SI4463-3D **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	

Container Id SI4463-3E **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	

Container Id SI4463-3F **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	
25-JUN-15 15:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
25-JUN-15 17:08	WET CHEMISTRY	WALK-IN	AZAZZARA	N	

Samplenum SI4463-4

Container Id SI4463-4A **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	
24-JUN-15 14:10	ORGANIC PREP	WALK-IN	HGOULD	Y	This container has not been properly returned to CUSTODY! It was last assigned to JSPEARIN for department CUSTODY on 06/24/15 13:11 .
24-JUN-15 14:46	WALK-IN	METALS PREP	ELITTLEFIELD	N	
24-JUN-15 15:39	METALS PREP	WALK-IN	GJOHNSON	N	

Container Id SI4463-4B **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	

Samplenum SI4463-5

0000025

Katahdin Analytical Services, Inc.

Container Transfer History for SI4463

Samplenum SI4463-5

Container Id SI4463-5A **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	

Container Id SI4463-5B **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	
26-JUN-15 14:26	VOA_WALK-IN	VOA_FREEZER1	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to JSPEARIN for department CUSTODY on 06/24/15 12:51 .
26-JUN-15 14:28	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/26/15 14:26 .

Container Id SI4463-5C **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	
26-JUN-15 14:26	VOA_WALK-IN	VOA_FREEZER1	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to JSPEARIN for department CUSTODY on 06/24/15 12:51 .
26-JUN-15 14:28	VOA_FREEZER1	VOA_WALK-IN	EEVERETT	Y	This container has not been properly returned to CUSTODY! It was last assigned to EEVERETT for department CUSTODY on 06/26/15 14:26 .

Container Id SI4463-5D **Containertype** **40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	
30-JUN-15 13:57	VOA_WALK-IN	GC/MS	RCROCKER	N	
01-JUL-15 14:21	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI4463-5E **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	
25-JUN-15 15:32	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
25-JUN-15 17:08	WET CHEMISTRY	WALK-IN	AZAZZARA	N	
26-JUN-15 12:55	WALK-IN	METALS PREP	ELITTLEFIELD	N	
29-JUN-15 08:44	METALS PREP	WALK-IN	ELITTLEFIELD	N	
01-JUL-15 09:02	WALK-IN	METALS PREP	ELITTLEFIELD	N	
01-JUL-15 11:43	METALS PREP	WALK-IN	ELITTLEFIELD	N	
02-JUL-15 08:26	WALK-IN	METALS PREP	ELITTLEFIELD	N	
02-JUL-15 11:38	METALS PREP	WALK-IN	ELITTLEFIELD	N	

Container Id SI4463-5F **Containertype** **1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	
26-JUN-15 09:02	WALK-IN	METALS PREP	ELITTLEFIELD	N	
26-JUN-15 10:58	METALS PREP	WALK-IN	ELITTLEFIELD	N	

Samplenum SI4463-6

Container Id SI4463-6A **Containertype** **1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	
24-JUN-15 14:10	ORGANIC PREP	WALK-IN	HGOULD	Y	

000006

Katahdin Analytical Services, Inc.

Container Transfer History for SI4463

Samplenum SI4463-6

Container Id SI4463-6A **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
					This container has not been properly returned to CUSTODY! It was last assigned to JSPEARIN for department CUSTODY on 06/24/15 13:11 .
24-JUN-15 14:46	WALK-IN	METALS PREP	ELITTLEFIELD	N	
24-JUN-15 15:39	METALS PREP	WALK-IN	GJOHNSON	N	

Container Id SI4463-6B **Containertype 1L N-Amber Glass** **Matrix AQ**

Product *SPLP-SW8270*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 13:11	LOGIN	WALK-IN	JSPEARIN	N	

Samplenum SI4463-7

Container Id SI4463-7A **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	

Container Id SI4463-7B **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	

Container Id SI4463-7C **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
24-JUN-15 12:51	LOGIN	VOA_WALK-IN	JSPEARIN	N	

0000027

VOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI4463

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SITE 4TS-SEE1-B	SI4463-1		69.8	*	134.	*	169.	*	79.6	*
SITE 4TS-SEE1-B	SI4463-1RA		134.	*	142.	*	156.	*	77.7	*
SITE 4TS-SEE2-B	SI4463-3		95.0		40.0	*	57.1	*	4.43	*
SITE 4TS-SEE2-B	SI4463-3RA		164.	*	183.	*	143.	*	87.5	
SITE 4TS-SEE1-PT	SI4463-5		31.6	*	111.		137.	*	63.6	*
SITE 4TS-SEE1-PT	SI4463-5RA2		28.2	*	190.	*	221.	*	76.9	*
SITE 4TS-TB-62315	SI4463-7		121.	*	121.		127.		126.	*
Laboratory Control S	WG165466-1		105.		111.		110.		103.	
Method Blank Sample	WG165466-2		114.		113.		108.		121.	*
Laboratory Control S	WG165742-8		107.		108.		108.		107.	
Method Blank Sample	WG165742-9		108.		112.		117.		114.	

		QC Limits
DBF	DIBROMOFLUOROMETHANE	64-130
TOL	TOLUENE-D8	85-115
BFB	P-BROMOFLUOROBENZENE	85-120
DCA	1,2-DICHLOROETHANE-D4	58-134

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : T3912.D
Instrument ID : GCMS-T
Heated Purge : Yes

SDG : SI4463
Lab Sample ID : WG165466-2
Date Analyzed : 25-JUN-15
Time Analyzed : 13:04

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165466-1	T3910.D	06/25/15	11:40
SITE 4TS-TB-62315	SI4463-7	T3913.D	06/25/15	13:42
SITE 4TS-SEE1-B	SI4463-1	T3914.D	06/25/15	14:19
SITE 4TS-SEE1-B	SI4463-1RA	T3915.D	06/25/15	14:57
SITE 4TS-SEE2-B	SI4463-3	T3916.D	06/25/15	15:34
SITE 4TS-SEE2-B	SI4463-3RA	T3917.D	06/25/15	16:12
SITE 4TS-SEE1-PT	SI4463-5	T3918.D	06/25/15	16:49

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : W3153.D
Instrument ID : GCMS-W
Heated Purge : Yes

SDG : SI4463
Lab Sample ID : WG165742-9
Date Analyzed : 30-JUN-15
Time Analyzed : 14:37

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165742-8	W3151.D	06/30/15	13:20
SITE 4TS-SEE1-PT	SI4463-5RA2	W3155.D	06/30/15	15:41

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165466-2
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: T3912.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	U	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	U	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
Methylene Chloride	U	12	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone	J	5.6	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165466-2
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: T3912.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylenes	U	2.5	ug/Kgdrywt	1	10	10.	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Xylenes (Total)	U	7.5	ug/Kgdrywt	1	15	15.	1.3	7.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
1,1-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
1,2,3-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,2,3-Trichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
2,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.50	2.5
Bromobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
Bromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Dibromomethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Hexachlorobutadiene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
n-Propylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.83	2.5
p-Isopropyltoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,3-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
2-Hexanone	U	12	ug/Kgdrywt	1	25	25.	4.8	12.
4-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.49	2.5
1,2-Dichloroethylene (Total)	U	5.0	ug/Kgdrywt	1	10	10.	0.71	5.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165466-2
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: T3912.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,3,5-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Diethyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	0.80	2.5
Di-Isopropyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Tetrahydrofuran	U	25	ug/Kgdrywt	1	50	50.	4.5	25.
Vinyl Acetate	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
p-Bromofluorobenzene		114.	%					
Toluene-D8	*	121.	%					
1,2-Dichloroethane-D4		108.	%					
Dibromofluoromethane		113.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165742-9
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: W3153.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	U	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	U	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
Methylene Chloride	U	12	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone	J	5.6	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165742-9
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: W3153.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylenes	U	2.5	ug/Kgdrywt	1	10	10.	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Xylenes (Total)	U	7.5	ug/Kgdrywt	1	15	15.	1.3	7.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
1,1-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
1,2,3-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,2,3-Trichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
2,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.50	2.5
Bromobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
Bromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Dibromomethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Hexachlorobutadiene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
n-Propylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.83	2.5
p-Isopropyltoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,3-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
2-Hexanone	U	12	ug/Kgdrywt	1	25	25.	4.8	12.
4-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.49	2.5
1,2-Dichloroethylene (Total)	U	5.0	ug/Kgdrywt	1	10	10.	0.71	5.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165742-9
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: W3153.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,3,5-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Diethyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	0.80	2.5
Di-Isopropyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Tetrahydrofuran	U	25	ug/Kgdrywt	1	50	50.	4.5	25.
Vinyl Acetate	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
p-Bromofluorobenzene		108.	%					
Toluene-D8		114.	%					
1,2-Dichloroethane-D4		117.	%					
Dibromofluoromethane		112.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165466-1
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: T3910.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	104.	50.0	52.2	ug/Kgdrywt	35-135
Chloromethane	105.	50.0	52.4	ug/Kgdrywt	50-130
Vinyl Chloride	109.	50.0	54.7	ug/Kgdrywt	60-125
Bromomethane	125.	50.0	62.5	ug/Kgdrywt	30-160
Chloroethane	120.	50.0	60.1	ug/Kgdrywt	40-155
Trichlorofluoromethane	112.	50.0	56.1	ug/Kgdrywt	25-185
1,1-Dichloroethene	115.	50.0	57.5	ug/Kgdrywt	65-135
Carbon Disulfide	110.	50.0	55.1	ug/Kgdrywt	45-160
Methylene Chloride	127.	50.0	63.7	ug/Kgdrywt	55-140
Acetone	106.	50.0	52.9	ug/Kgdrywt	20-160
trans-1,2-Dichloroethene	119.	50.0	59.3	ug/Kgdrywt	65-135
Methyl tert-butyl Ether	* 73.7	100.	73.7	ug/Kgdrywt	81-125
1,1-Dichloroethane	119.	50.0	59.5	ug/Kgdrywt	75-125
cis-1,2-Dichloroethene	109.	50.0	54.4	ug/Kgdrywt	65-125
Chloroform	113.	50.0	56.3	ug/Kgdrywt	70-125
Carbon Tetrachloride	108.	50.0	54.2	ug/Kgdrywt	65-135
1,1,1-Trichloroethane	106.	50.0	53.2	ug/Kgdrywt	70-135
2-Butanone	82.8	50.0	41.4	ug/Kgdrywt	30-160
Benzene	104.	50.0	52.2	ug/Kgdrywt	75-125
1,2-Dichloroethane	111.	50.0	55.4	ug/Kgdrywt	70-135
Trichloroethene	102.	50.0	51.1	ug/Kgdrywt	75-125
1,2-Dichloropropane	106.	50.0	53.1	ug/Kgdrywt	70-120
Bromodichloromethane	114.	50.0	57.1	ug/Kgdrywt	70-130
cis-1,3-Dichloropropene	108.	50.0	54.2	ug/Kgdrywt	70-125
Toluene	104.	50.0	52.2	ug/Kgdrywt	70-125
4-Methyl-2-Pentanone	88.4	50.0	44.2	ug/Kgdrywt	45-145
Tetrachloroethene	94.4	50.0	47.2	ug/Kgdrywt	65-140
trans-1,3-Dichloropropene	113.	50.0	56.5	ug/Kgdrywt	65-125
1,1,2-Trichloroethane	97.6	50.0	48.8	ug/Kgdrywt	60-125
Dibromochloromethane	90.4	50.0	45.2	ug/Kgdrywt	65-130
1,2-Dibromoethane	104.	50.0	52.1	ug/Kgdrywt	70-125
Chlorobenzene	103.	50.0	51.7	ug/Kgdrywt	75-125
Ethylbenzene	99.8	50.0	49.9	ug/Kgdrywt	75-125
Styrene	106.	50.0	53.0	ug/Kgdrywt	75-125
Bromoform	103.	50.0	51.5	ug/Kgdrywt	55-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165466-1
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: T3910.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Isopropylbenzene	103.	50.0	51.4	ug/Kgdrywt	75-130
1,1,2,2-Tetrachloroethane	92.0	50.0	46.0	ug/Kgdrywt	55-130
1,3-Dichlorobenzene	104.	50.0	52.1	ug/Kgdrywt	70-125
1,4-Dichlorobenzene	102.	50.0	50.9	ug/Kgdrywt	70-125
1,2-Dichlorobenzene	106.	50.0	53.1	ug/Kgdrywt	75-120
1,2-Dibromo-3-Chloropropane	96.8	50.0	48.4	ug/Kgdrywt	40-135
1,2,4-Trichlorobenzene	104.	50.0	52.1	ug/Kgdrywt	65-130
1,2,4-Trimethylbenzene	93.6	50.0	46.8	ug/Kgdrywt	65-135
1,3,5-Trimethylbenzene	103.	50.0	51.4	ug/Kgdrywt	65-135
n-Butylbenzene	101.	50.0	50.5	ug/Kgdrywt	65-140
sec-Butylbenzene	104.	50.0	52.0	ug/Kgdrywt	65-130
tert-Butylbenzene	104.	50.0	52.2	ug/Kgdrywt	65-130
m+p-Xylenes	106.	100.	106.	ug/Kgdrywt	80-125
o-Xylene	106.	50.0	53.2	ug/Kgdrywt	75-125
Xylenes (Total)	106.	150.	159.	ug/Kgdrywt	81-114
Naphthalene	110.	50.0	55.1	ug/Kgdrywt	40-125
1,1-Dichloropropene	102.	50.0	51.2	ug/Kgdrywt	70-135
1,2,3-Trichlorobenzene	103.	50.0	51.7	ug/Kgdrywt	60-135
1,2,3-Trichloropropane	88.6	50.0	44.3	ug/Kgdrywt	65-130
2-Chlorotoluene	103.	50.0	51.5	ug/Kgdrywt	70-130
2,2-Dichloropropane	100.	50.0	50.1	ug/Kgdrywt	65-135
Bromobenzene	103.	50.0	51.7	ug/Kgdrywt	65-120
Bromochloromethane	121.	50.0	60.7	ug/Kgdrywt	70-125
Dibromomethane	110.	50.0	55.0	ug/Kgdrywt	75-130
Hexachlorobutadiene	105.	50.0	52.6	ug/Kgdrywt	55-140
n-Propylbenzene	105.	50.0	52.5	ug/Kgdrywt	65-135
p-Isopropyltoluene	101.	50.0	50.5	ug/Kgdrywt	75-135
1,3-Dichloropropane	92.2	50.0	46.1	ug/Kgdrywt	75-125
2-Hexanone	86.8	50.0	43.4	ug/Kgdrywt	45-145
4-Chlorotoluene	102.	50.0	51.2	ug/Kgdrywt	75-125
1,2-Dichloroethylene (Total)	114.	100.	114.	ug/Kgdrywt	82-120
Methylcyclohexane	82.6	50.0	41.3	ug/Kgdrywt	71-127
Freon-113	104.	50.0	52.2	ug/Kgdrywt	67-135
1,3,5-Trichlorobenzene	113.	50.0	56.4	ug/Kgdrywt	64-133
Cyclohexane	100.	50.0	50.1	ug/Kgdrywt	75-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165466-1
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: T3910.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Diethyl Ether	112.	50.0	56.0	ug/Kgdrywt	76-135
Di-Isopropyl Ether	98.0	50.0	49.0	ug/Kgdrywt	68-131
Methyl Acetate	84.2	50.0	42.1	ug/Kgdrywt	72-133
Tetrahydrofuran	97.4	50.0	48.7	ug/Kgdrywt	78-137
Vinyl Acetate	* 74.6	50.0	37.3	ug/Kgdrywt	77-119
p-Bromofluorobenzene	105.				85-120
Toluene-D8	103.				85-115
1,2-Dichloroethane-D4	110.				58-134
Dibromofluoromethane	111.				64-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165742-8
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: W3151.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	133.	50.0	66.5	ug/Kgdrywt	35-135
Chloromethane	* 131.	50.0	65.3	ug/Kgdrywt	50-130
Vinyl Chloride	115.	50.0	57.7	ug/Kgdrywt	60-125
Bromomethane	119.	50.0	59.6	ug/Kgdrywt	30-160
Chloroethane	142.	50.0	71.0	ug/Kgdrywt	40-155
Trichlorofluoromethane	120.	50.0	60.0	ug/Kgdrywt	25-185
1,1-Dichloroethene	112.	50.0	56.2	ug/Kgdrywt	65-135
Carbon Disulfide	112.	50.0	56.1	ug/Kgdrywt	45-160
Methylene Chloride	89.0	50.0	44.5	ug/Kgdrywt	55-140
Acetone	112.	50.0	56.2	ug/Kgdrywt	20-160
trans-1,2-Dichloroethene	107.	50.0	53.4	ug/Kgdrywt	65-135
Methyl tert-butyl Ether	114.	100.	114.	ug/Kgdrywt	81-125
1,1-Dichloroethane	114.	50.0	56.8	ug/Kgdrywt	75-125
cis-1,2-Dichloroethene	102.	50.0	51.1	ug/Kgdrywt	65-125
Chloroform	107.	50.0	53.5	ug/Kgdrywt	70-125
Carbon Tetrachloride	110.	50.0	55.0	ug/Kgdrywt	65-135
1,1,1-Trichloroethane	109.	50.0	54.3	ug/Kgdrywt	70-135
2-Butanone	108.	50.0	53.9	ug/Kgdrywt	30-160
Benzene	106.	50.0	52.8	ug/Kgdrywt	75-125
1,2-Dichloroethane	106.	50.0	53.0	ug/Kgdrywt	70-135
Trichloroethene	107.	50.0	53.3	ug/Kgdrywt	75-125
1,2-Dichloropropane	105.	50.0	52.4	ug/Kgdrywt	70-120
Bromodichloromethane	110.	50.0	54.9	ug/Kgdrywt	70-130
cis-1,3-Dichloropropene	112.	50.0	56.1	ug/Kgdrywt	70-125
Toluene	106.	50.0	53.2	ug/Kgdrywt	70-125
4-Methyl-2-Pentanone	113.	50.0	56.3	ug/Kgdrywt	45-145
Tetrachloroethene	108.	50.0	53.9	ug/Kgdrywt	65-140
trans-1,3-Dichloropropene	119.	50.0	59.5	ug/Kgdrywt	65-125
1,1,2-Trichloroethane	104.	50.0	52.1	ug/Kgdrywt	60-125
Dibromochloromethane	112.	50.0	55.8	ug/Kgdrywt	65-130
1,2-Dibromoethane	104.	50.0	52.1	ug/Kgdrywt	70-125
Chlorobenzene	107.	50.0	53.5	ug/Kgdrywt	75-125
Ethylbenzene	107.	50.0	53.7	ug/Kgdrywt	75-125
Styrene	111.	50.0	55.5	ug/Kgdrywt	75-125
Bromoform	111.	50.0	55.7	ug/Kgdrywt	55-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165742-8
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: W3151.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Isopropylbenzene	111.	50.0	55.4	ug/Kgdrywt	75-130
1,1,2,2-Tetrachloroethane	104.	50.0	51.8	ug/Kgdrywt	55-130
1,3-Dichlorobenzene	108.	50.0	54.0	ug/Kgdrywt	70-125
1,4-Dichlorobenzene	107.	50.0	53.3	ug/Kgdrywt	70-125
1,2-Dichlorobenzene	108.	50.0	53.9	ug/Kgdrywt	75-120
1,2-Dibromo-3-Chloropropane	114.	50.0	57.2	ug/Kgdrywt	40-135
1,2,4-Trichlorobenzene	110.	50.0	54.8	ug/Kgdrywt	65-130
1,2,4-Trimethylbenzene	110.	50.0	55.0	ug/Kgdrywt	65-135
1,3,5-Trimethylbenzene	107.	50.0	53.5	ug/Kgdrywt	65-135
n-Butylbenzene	112.	50.0	56.2	ug/Kgdrywt	65-140
sec-Butylbenzene	112.	50.0	56.0	ug/Kgdrywt	65-130
tert-Butylbenzene	111.	50.0	55.5	ug/Kgdrywt	65-130
m+p-Xylenes	108.	100.	108.	ug/Kgdrywt	80-125
o-Xylene	107.	50.0	53.5	ug/Kgdrywt	75-125
Xylenes (Total)	107.	150.	161.	ug/Kgdrywt	81-114
Naphthalene	117.	50.0	58.3	ug/Kgdrywt	40-125
1,1-Dichloropropene	110.	50.0	54.8	ug/Kgdrywt	70-135
1,2,3-Trichlorobenzene	108.	50.0	53.8	ug/Kgdrywt	60-135
1,2,3-Trichloropropane	104.	50.0	52.2	ug/Kgdrywt	65-130
2-Chlorotoluene	110.	50.0	54.9	ug/Kgdrywt	70-130
2,2-Dichloropropane	117.	50.0	58.6	ug/Kgdrywt	65-135
Bromobenzene	106.	50.0	52.9	ug/Kgdrywt	65-120
Bromochloromethane	107.	50.0	53.4	ug/Kgdrywt	70-125
Dibromomethane	104.	50.0	52.2	ug/Kgdrywt	75-130
Hexachlorobutadiene	109.	50.0	54.6	ug/Kgdrywt	55-140
n-Propylbenzene	113.	50.0	56.7	ug/Kgdrywt	65-135
p-Isopropyltoluene	112.	50.0	56.2	ug/Kgdrywt	75-135
1,3-Dichloropropane	103.	50.0	51.6	ug/Kgdrywt	75-125
2-Hexanone	115.	50.0	57.3	ug/Kgdrywt	45-145
4-Chlorotoluene	110.	50.0	54.8	ug/Kgdrywt	75-125
1,2-Dichloroethylene (Total)	104.	100.	104.	ug/Kgdrywt	82-120
Methylcyclohexane	116.	50.0	57.9	ug/Kgdrywt	71-127
Freon-113	111.	50.0	55.6	ug/Kgdrywt	67-135
1,3,5-Trichlorobenzene	110.	50.0	54.9	ug/Kgdrywt	64-133
Cyclohexane	113.	50.0	56.6	ug/Kgdrywt	75-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165742-8
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: W3151.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Diethyl Ether	105.	50.0	52.4	ug/Kgdrywt	76-135
Di-Isopropyl Ether	110.	50.0	55.1	ug/Kgdrywt	68-131
Methyl Acetate	106.	50.0	53.1	ug/Kgdrywt	72-133
Tetrahydrofuran	108.	50.0	54.1	ug/Kgdrywt	78-137
Vinyl Acetate	* 126.	50.0	63.1	ug/Kgdrywt	77-119
p-Bromofluorobenzene	107.				85-120
Toluene-D8	107.				85-115
1,2-Dichloroethane-D4	108.				58-134
Dibromofluoromethane	108.				64-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : TB916.D
Instrument ID : GCMS-T

SDG : SI4463
Date Analyzed : 22-JUN-15
Time Analyzed : 09:26
Heated Purge : Yes

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	17.2		
75	30.0 - 60.0% of mass 95	45.0		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.5		
173	Less than 2.0% of mass 174	0.3	0.38	1
174	Greater than 50.0% of mass 95	77.7		
175	5.0 - 9.0% of mass 174	5.6	7.17	1
176	95.0 - 101.0% of mass 174	77.2	99.46	1
177	5.0 - 9.0% of mass 176	5.1	6.58	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165286-4	T3885.D	06/22/15	10:03
Initial Calibration	WG165286-3	T3886.D	06/22/15	10:41
Initial Calibration	WG165286-2	T3887.D	06/22/15	11:19
Initial Calibration	WG165286-1	T3888.D	06/22/15	11:57
Initial Calibration	WG165286-6	T3889.D	06/22/15	12:34
Initial Calibration	WG165286-5	T3890.D	06/22/15	13:12
Independent Source	WG165286-7	T3891A.D	06/22/15	13:59

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : TB918.D
Instrument ID : GCMS-T

SDG : SI4463
Date Analyzed : 25-JUN-15
Time Analyzed : 08:43
Heated Purge : Yes

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	17.0		
75	30.0 - 60.0% of mass 95	42.8		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.7		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	74.8		
175	5.0 - 9.0% of mass 174	4.3	5.69	1
176	95.0 - 101.0% of mass 174	74.5	99.62	1
177	5.0 - 9.0% of mass 176	5.2	6.94	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165466-4	T3909.D	06/25/15	10:55
Laboratory Control S	WG165466-1	T3910.D	06/25/15	11:40
Method Blank Sample	WG165466-2	T3912.D	06/25/15	13:04
SITE 4TS-TB-62315	SI4463-7	T3913.D	06/25/15	13:42
SITE 4TS-SEE1-B	SI4463-1	T3914.D	06/25/15	14:19
SITE 4TS-SEE1-B	SI4463-1RA	T3915.D	06/25/15	14:57
SITE 4TS-SEE2-B	SI4463-3	T3916.D	06/25/15	15:34
SITE 4TS-SEE2-B	SI4463-3RA	T3917.D	06/25/15	16:12
SITE 4TS-SEE1-PT	SI4463-5	T3918.D	06/25/15	16:49

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : WB190.D
Instrument ID : GCMS-W

SDG : SI4463
Date Analyzed : 30-JUN-15
Time Analyzed : 09:30
Heated Purge : Yes

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	20.8		
75	30.0 - 60.0% of mass 95	58.4		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.0		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	75.8		
175	5.0 - 9.0% of mass 174	5.5	7.31	1
176	95.0 - 101.0% of mass 174	74.5	98.22	1
177	5.0 - 9.0% of mass 176	5.3	7.15	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165742-4	W3145.D	06/30/15	09:53
Initial Calibration	WG165742-3	W3146.D	06/30/15	10:25
Initial Calibration	WG165742-2	W3147.D	06/30/15	10:57
Initial Calibration	WG165742-1	W3148.D	06/30/15	11:30
Initial Calibration	WG165742-6	W3149.D	06/30/15	12:02
Initial Calibration	WG165742-5	W3150.D	06/30/15	12:34
Laboratory Control S	WG165742-8	W3151.D	06/30/15	13:20
Independent Source	WG165742-7	W3151A.D	06/30/15	13:20
Method Blank Sample	WG165742-9	W3153.D	06/30/15	14:37
SITE 4TS-SEE1-PT	SI4463-5RA2	W3155.D	06/30/15	15:41

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165286-4
Lab File ID : T3885.D

SDG: SI4463
Analytical Date: 06/22/15 10:03
Instrument ID: GCMS-T

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	372145		7.99		643114		8.75		586699		12.82	
	Upper Limit	744290		8.49		1286228		9.25		1173398		13.32	
	Lower Limit	186072.5		7.49		321557		8.25		293349.5		12.32	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165466-4	291260		7.99		488939		8.75		488231		12.82	
Laboratory Control S	WG165466-1	279001		7.99		458051		8.75		466334		12.82	
Method Blank Sample	WG165466-2	332446		7.99		517096		8.75		533471		12.82	
SITE 4TS-TB-62315	SI4463-7	310536		7.99		494203		8.75		499161		12.82	
SITE 4TS-SEE1-B	SI4463-1	10910	*	7.98		24085	*	8.76		14716	*	12.82	
SITE 4TS-SEE1-B	SI4463-1RA	198101		7.99		413497		8.75		229738	*	12.82	
SITE 4TS-SEE2-B	SI4463-3	167911	*	8.35		272050	*	9.05		174850	*	12.90	
SITE 4TS-SEE2-B	SI4463-3RA	156106	*	8.01		275517	*	8.76		163012	*	12.87	
SITE 4TS-SEE1-PT	SI4463-5	9341	*	7.99		18380	*	8.75		10948	*	12.82	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165286-4
Lab File ID : T3885.D

SDG: SI4463
Analytical Date: 06/22/15 10:03
Instrument ID: GCMS-T

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	334473		15.96	
	Upper Limit	668946		16.46	
	Lower Limit	167236.5		15.46	
Client Sample ID	Lab Sample ID				
Continuing Calibrati	WG165466-4	287559		15.95	
Laboratory Control S	WG165466-1	268278		15.95	
Method Blank Sample	WG165466-2	289091		15.95	
SITE 4TS-TB-62315	SI4463-7	275382		15.95	
SITE 4TS-SEE1-B	SI4463-1	5459	*	15.96	
SITE 4TS-SEE1-B	SI4463-1RA	52733	*	15.96	
SITE 4TS-SEE2-B	SI4463-3	40607	*	15.98	
SITE 4TS-SEE2-B	SI4463-3RA	40451	*	15.97	
SITE 4TS-SEE1-PT	SI4463-5	1569	*	15.95	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165742-4
Lab File ID : W3145.D

SDG: SI4463
Analytical Date: 06/30/15 09:53
Instrument ID: GCMS-W

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	1229962		8.17		2007471		9.19		1853199		14.02	
	Upper Limit	2459924		8.67		4014942		9.69		3706398		14.52	
	Lower Limit	614981		7.67		1003735.5		8.69		926599.5		13.52	
Client Sample ID	Lab Sample ID												
Laboratory Control S	WG165742-8	1177952		8.16		1989675		9.19		1857411		14.01	
Method Blank Sample	WG165742-9	1107726		8.15		1872118		9.18		1759736		14.01	
SITE 4TS-SEE1-PT	SI4463-5RA2	471116	*	8.15		1015588		9.18		415560	*	14.02	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165742-4
Lab File ID : W3145.D

SDG: SI4463
Analytical Date: 06/30/15 09:53
Instrument ID: GCMS-W

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	998310		17.80	
	Upper Limit	1996620		18.30	
	Lower Limit	499155		17.30	
Client Sample ID	Lab Sample ID				
Laboratory Control S	WG165742-8	1013813		17.80	
Method Blank Sample	WG165742-9	920673		17.80	
SITE 4TS-SEE1-PT	SI4463-5RA2	59281	*	17.81	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-1
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3914.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	12	ug/Kgdrywt	1	10	24.	2.2	12.
Chloromethane	U	12	ug/Kgdrywt	1	10	24.	3.4	12.
Vinyl Chloride	U	12	ug/Kgdrywt	1	10	24.	2.1	12.
Bromomethane	U	12	ug/Kgdrywt	1	10	24.	2.6	12.
Chloroethane	U	12	ug/Kgdrywt	1	10	24.	3.1	12.
Trichlorofluoromethane	U	12	ug/Kgdrywt	1	10	24.	2.2	12.
1,1-Dichloroethene	U	6.0	ug/Kgdrywt	1	5	12.	2.2	6.0
Carbon Disulfide	U	6.0	ug/Kgdrywt	1	5	12.	1.9	6.0
Methylene Chloride	U	30	ug/Kgdrywt	1	25	60.	19.	30.
Acetone		1300	ug/Kgdrywt	1	25	60.	12.	30.
trans-1,2-Dichloroethene	U	6.0	ug/Kgdrywt	1	5	12.	1.7	6.0
Methyl tert-butyl Ether	UL	6.0	ug/Kgdrywt	1	5	12.	2.6	6.0
1,1-Dichloroethane	U	6.0	ug/Kgdrywt	1	5	12.	4.1	6.0
cis-1,2-Dichloroethene	U	6.0	ug/Kgdrywt	1	5	12.	2.2	6.0
Chloroform	U	6.0	ug/Kgdrywt	1	5	12.	0.84	6.0
Carbon Tetrachloride	U	6.0	ug/Kgdrywt	1	5	12.	3.1	6.0
1,1,1-Trichloroethane	U	6.0	ug/Kgdrywt	1	5	12.	1.0	6.0
2-Butanone	U	30	ug/Kgdrywt	1	25	60.	14.	30.
Benzene	J	10	ug/Kgdrywt	1	5	12.	2.2	6.0
1,2-Dichloroethane	U	6.0	ug/Kgdrywt	1	5	12.	2.4	6.0
Trichloroethene	U	6.0	ug/Kgdrywt	1	5	12.	1.4	6.0
1,2-Dichloropropane	U	6.0	ug/Kgdrywt	1	5	12.	3.4	6.0
Bromodichloromethane	U	6.0	ug/Kgdrywt	1	5	12.	1.4	6.0
cis-1,3-Dichloropropene	U	6.0	ug/Kgdrywt	1	5	12.	1.7	6.0
Toluene		13	ug/Kgdrywt	1	5	12.	3.4	6.0
4-Methyl-2-Pentanone	U	30	ug/Kgdrywt	1	25	60.	14.	30.
Tetrachloroethene		27	ug/Kgdrywt	1	5	12.	2.9	6.0
trans-1,3-Dichloropropene	U	6.0	ug/Kgdrywt	1	5	12.	2.1	6.0
1,1,2-Trichloroethane	U	6.0	ug/Kgdrywt	1	5	12.	2.3	6.0
Dibromochloromethane	U	6.0	ug/Kgdrywt	1	5	12.	2.4	6.0
1,2-Dibromoethane	U	6.0	ug/Kgdrywt	1	5	12.	2.9	6.0
Chlorobenzene	U	6.0	ug/Kgdrywt	1	5	12.	1.2	6.0
Ethylbenzene		96	ug/Kgdrywt	1	5	12.	1.6	6.0
Styrene	U	6.0	ug/Kgdrywt	1	5	12.	1.2	6.0
Bromoform	U	6.0	ug/Kgdrywt	1	5	12.	1.7	6.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-1
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3914.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		72	ug/Kgdrywt	1	5	12.	2.2	6.0
1,1,2,2-Tetrachloroethane	U	6.0	ug/Kgdrywt	1	5	12.	2.0	6.0
1,3-Dichlorobenzene	U	6.0	ug/Kgdrywt	1	5	12.	1.5	6.0
1,4-Dichlorobenzene	U	6.0	ug/Kgdrywt	1	5	12.	1.0	6.0
1,2-Dichlorobenzene	U	6.0	ug/Kgdrywt	1	5	12.	1.9	6.0
1,2-Dibromo-3-Chloropropane	U	6.0	ug/Kgdrywt	1	5	12.	3.6	6.0
1,2,4-Trichlorobenzene	U	6.0	ug/Kgdrywt	1	5	12.	1.9	6.0
1,2,4-Trimethylbenzene	U	6.0	ug/Kgdrywt	1	5	12.	2.1	6.0
1,3,5-Trimethylbenzene		72	ug/Kgdrywt	1	5	12.	1.6	6.0
n-Butylbenzene	U	6.0	ug/Kgdrywt	1	5	12.	2.2	6.0
sec-Butylbenzene		70	ug/Kgdrywt	1	5	12.	2.2	6.0
tert-Butylbenzene	U	6.0	ug/Kgdrywt	1	5	12.	2.2	6.0
m+p-Xylenes		36	ug/Kgdrywt	1	10	24.	4.1	6.0
o-Xylene		25	ug/Kgdrywt	1	5	12.	3.1	6.0
Xylenes (Total)		61	ug/Kgdrywt	1	15	36.	3.1	18.
Naphthalene		35	ug/Kgdrywt	1	5	12.	2.1	6.0
1,1-Dichloropropene	U	6.0	ug/Kgdrywt	1	5	12.	2.2	6.0
1,2,3-Trichlorobenzene	U	6.0	ug/Kgdrywt	1	5	12.	1.8	6.0
1,2,3-Trichloropropane	U	6.0	ug/Kgdrywt	1	5	12.	2.9	6.0
2-Chlorotoluene	U	6.0	ug/Kgdrywt	1	5	12.	2.6	6.0
2,2-Dichloropropane	U	6.0	ug/Kgdrywt	1	5	12.	1.2	6.0
Bromobenzene	U	6.0	ug/Kgdrywt	1	5	12.	1.8	6.0
Bromochloromethane	U	6.0	ug/Kgdrywt	1	5	12.	2.2	6.0
Dibromomethane	U	6.0	ug/Kgdrywt	1	5	12.	1.2	6.0
Hexachlorobutadiene	U	6.0	ug/Kgdrywt	1	5	12.	1.8	6.0
n-Propylbenzene	U	6.0	ug/Kgdrywt	1	5	12.	2.0	6.0
p-Isopropyltoluene		93	ug/Kgdrywt	1	5	12.	1.8	6.0
1,3-Dichloropropane	U	6.0	ug/Kgdrywt	1	5	12.	2.2	6.0
2-Hexanone	U	30	ug/Kgdrywt	1	25	60.	12.	30.
4-Chlorotoluene	U	6.0	ug/Kgdrywt	1	5	12.	1.2	6.0
1,2-Dichloroethylene (Total)	U	12	ug/Kgdrywt	1	10	24.	1.7	12.
Methylcyclohexane		290	ug/Kgdrywt	1	5	12.	2.3	6.0
Freon-113	U	6.0	ug/Kgdrywt	1	5	12.	2.2	6.0
1,3,5-Trichlorobenzene	U	6.0	ug/Kgdrywt	1	5	12.	2.1	6.0
Cyclohexane		77	ug/Kgdrywt	1	5	12.	3.4	6.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-1
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3914.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	6.0	ug/Kgdrywt	1	5	12.	1.9	6.0
Di-Isopropyl Ether	U	6.0	ug/Kgdrywt	1	5	12.	5.0	6.0
Methyl Acetate	U	7.2	ug/Kgdrywt	1	5	12.	6.5	7.2
Tetrahydrofuran	U	60	ug/Kgdrywt	1	50	120	11.	60.
Vinyl Acetate	UL	6.0	ug/Kgdrywt	1	5	12.	2.2	6.0
p-Bromofluorobenzene	*	69.8	%					
Toluene-D8	*	79.6	%					
1,2-Dichloroethane-D4	*	169.	%					
Dibromofluoromethane	*	134.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-1RA
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3915.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.4	ug/Kgdrywt	1	10	8.8	0.81	4.4
Chloromethane	U	4.4	ug/Kgdrywt	1	10	8.8	1.2	4.4
Vinyl Chloride	U	4.4	ug/Kgdrywt	1	10	8.8	0.76	4.4
Bromomethane	U	4.4	ug/Kgdrywt	1	10	8.8	0.97	4.4
Chloroethane	U	4.4	ug/Kgdrywt	1	10	8.8	1.1	4.4
Trichlorofluoromethane	J	1.0	ug/Kgdrywt	1	10	8.8	0.80	4.4
1,1-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.82	2.2
Carbon Disulfide	J	3.2	ug/Kgdrywt	1	5	4.4	0.69	2.2
Methylene Chloride	J	8.8	ug/Kgdrywt	1	25	22.	7.0	11.
Acetone		210	ug/Kgdrywt	1	25	22.	4.5	11.
trans-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.62	2.2
Methyl tert-butyl Ether	UL	2.2	ug/Kgdrywt	1	5	4.4	0.97	2.2
1,1-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	1.5	2.2
cis-1,2-Dichloroethene	J	1.7	ug/Kgdrywt	1	5	4.4	0.80	2.2
Chloroform	U	2.2	ug/Kgdrywt	1	5	4.4	0.31	2.2
Carbon Tetrachloride	U	2.2	ug/Kgdrywt	1	5	4.4	1.1	2.2
1,1,1-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.37	2.2
2-Butanone		47	ug/Kgdrywt	1	25	22.	5.2	11.
Benzene	J	3.0	ug/Kgdrywt	1	5	4.4	0.81	2.2
1,2-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.88	2.2
Trichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.52	2.2
1,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.2	2.2
Bromodichloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.53	2.2
cis-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.63	2.2
Toluene	J	3.6	ug/Kgdrywt	1	5	4.4	1.2	2.2
4-Methyl-2-Pentanone	U	11	ug/Kgdrywt	1	25	22.	5.2	11.
Tetrachloroethene		9.4	ug/Kgdrywt	1	5	4.4	1.0	2.2
trans-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.76	2.2
1,1,2-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.85	2.2
Dibromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.88	2.2
1,2-Dibromoethane	U	2.2	ug/Kgdrywt	1	5	4.4	1.0	2.2
Chlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Ethylbenzene		27	ug/Kgdrywt	1	5	4.4	0.57	2.2
Styrene	U	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Bromoform	U	2.2	ug/Kgdrywt	1	5	4.4	0.62	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-1RA
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3915.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		30	ug/Kgdrywt	1	5	4.4	0.81	2.2
1,1,2,2-Tetrachloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.74	2.2
1,3-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.54	2.2
1,4-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.39	2.2
1,2-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.69	2.2
1,2-Dibromo-3-Chloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.3	2.2
1,2,4-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.70	2.2
1,2,4-Trimethylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.76	2.2
1,3,5-Trimethylbenzene		30	ug/Kgdrywt	1	5	4.4	0.59	2.2
n-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.81	2.2
sec-Butylbenzene		33	ug/Kgdrywt	1	5	4.4	0.80	2.2
tert-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.79	2.2
m+p-Xylenes	J	8.4	ug/Kgdrywt	1	10	8.8	1.5	2.2
o-Xylene		7.5	ug/Kgdrywt	1	5	4.4	1.1	2.2
Xylenes (Total)		16	ug/Kgdrywt	1	15	13.	1.1	6.6
Naphthalene		56	ug/Kgdrywt	1	5	4.4	0.77	2.2
1,1-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
1,2,3-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.67	2.2
1,2,3-Trichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.0	2.2
2-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.4	0.97	2.2
2,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
Bromobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.65	2.2
Bromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
Dibromomethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Hexachlorobutadiene	U	2.2	ug/Kgdrywt	1	5	4.4	0.65	2.2
n-Propylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.73	2.2
p-Isopropyltoluene		45	ug/Kgdrywt	1	5	4.4	0.67	2.2
1,3-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	0.83	2.2
2-Hexanone	U	11	ug/Kgdrywt	1	25	22.	4.2	11.
4-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.4	0.43	2.2
1,2-Dichloroethylene (Total)	J	1.7	ug/Kgdrywt	1	10	8.8	0.62	4.4
Methylcyclohexane		110	ug/Kgdrywt	1	5	4.4	0.84	2.2
Freon-113	U	2.2	ug/Kgdrywt	1	5	4.4	0.79	2.2
1,3,5-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.76	2.2
Cyclohexane		29	ug/Kgdrywt	1	5	4.4	1.2	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-1RA
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3915.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.2	ug/Kgdrywt	1	5	4.4	0.70	2.2
Di-Isopropyl Ether	U	2.2	ug/Kgdrywt	1	5	4.4	1.8	2.2
Methyl Acetate	U	2.6	ug/Kgdrywt	1	5	4.4	2.4	2.6
Tetrahydrofuran	U	22	ug/Kgdrywt	1	50	44.	4.0	22.
Vinyl Acetate	UL	2.2	ug/Kgdrywt	1	5	4.4	0.83	2.2
p-Bromofluorobenzene	*	134.	%					
Toluene-D8	*	77.7	%					
1,2-Dichloroethane-D4	*	156.	%					
Dibromofluoromethane	*	142.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-3
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3916.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.4	ug/Kgdrywt	1	10	8.9	0.82	4.4
Chloromethane	U	4.4	ug/Kgdrywt	1	10	8.9	1.2	4.4
Vinyl Chloride	U	4.4	ug/Kgdrywt	1	10	8.9	0.77	4.4
Bromomethane	U	4.4	ug/Kgdrywt	1	10	8.9	0.98	4.4
Chloroethane	U	4.4	ug/Kgdrywt	1	10	8.9	1.2	4.4
Trichlorofluoromethane	U	4.4	ug/Kgdrywt	1	10	8.9	0.81	4.4
1,1-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.83	2.2
Carbon Disulfide	U	2.2	ug/Kgdrywt	1	5	4.4	0.69	2.2
Methylene Chloride	U	11	ug/Kgdrywt	1	25	22.	7.0	11.
Acetone	U	11	ug/Kgdrywt	1	25	22.	4.5	11.
trans-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.63	2.2
Methyl tert-butyl Ether	UL	2.2	ug/Kgdrywt	1	5	4.4	0.98	2.2
1,1-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	1.5	2.2
cis-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.81	2.2
Chloroform	U	2.2	ug/Kgdrywt	1	5	4.4	0.31	2.2
Carbon Tetrachloride	U	2.2	ug/Kgdrywt	1	5	4.4	1.2	2.2
1,1,1-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.37	2.2
2-Butanone	U	11	ug/Kgdrywt	1	25	22.	5.2	11.
Benzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.82	2.2
1,2-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.89	2.2
Trichloroethene	U	2.2	ug/Kgdrywt	1	5	4.4	0.52	2.2
1,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.2	2.2
Bromodichloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.53	2.2
cis-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.64	2.2
Toluene		23	ug/Kgdrywt	1	5	4.4	1.2	2.2
4-Methyl-2-Pentanone	U	11	ug/Kgdrywt	1	25	22.	5.2	11.
Tetrachloroethene		9.3	ug/Kgdrywt	1	5	4.4	1.1	2.2
trans-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.76	2.2
1,1,2-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.86	2.2
Dibromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.89	2.2
1,2-Dibromoethane	U	2.2	ug/Kgdrywt	1	5	4.4	1.1	2.2
Chlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Ethylbenzene		27	ug/Kgdrywt	1	5	4.4	0.58	2.2
Styrene	U	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Bromoform	U	2.2	ug/Kgdrywt	1	5	4.4	0.62	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-3
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3916.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		30	ug/Kgdrywt	1	5	4.4	0.82	2.2
1,1,2,2-Tetrachloroethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.75	2.2
1,3-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.55	2.2
1,4-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.39	2.2
1,2-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.69	2.2
1,2-Dibromo-3-Chloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.3	2.2
1,2,4-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.70	2.2
1,2,4-Trimethylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.77	2.2
1,3,5-Trimethylbenzene		30	ug/Kgdrywt	1	5	4.4	0.60	2.2
n-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.82	2.2
sec-Butylbenzene		29	ug/Kgdrywt	1	5	4.4	0.81	2.2
tert-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
m+p-Xylenes		12	ug/Kgdrywt	1	10	8.9	1.5	2.2
o-Xylene	U	2.2	ug/Kgdrywt	1	5	4.4	1.2	2.2
Xylenes (Total)	J	12	ug/Kgdrywt	1	15	13.	1.2	6.7
Naphthalene		55	ug/Kgdrywt	1	5	4.4	0.78	2.2
1,1-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.4	0.81	2.2
1,2,3-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.68	2.2
1,2,3-Trichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	1.1	2.2
2-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.4	0.98	2.2
2,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
Bromobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.66	2.2
Bromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.81	2.2
Dibromomethane	U	2.2	ug/Kgdrywt	1	5	4.4	0.45	2.2
Hexachlorobutadiene	U	2.2	ug/Kgdrywt	1	5	4.4	0.66	2.2
n-Propylbenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.74	2.2
p-Isopropyltoluene		39	ug/Kgdrywt	1	5	4.4	0.68	2.2
1,3-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.4	0.84	2.2
2-Hexanone	U	11	ug/Kgdrywt	1	25	22.	4.3	11.
4-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.4	0.44	2.2
1,2-Dichloroethylene (Total)	U	4.4	ug/Kgdrywt	1	10	8.9	0.63	4.4
Methylcyclohexane		100	ug/Kgdrywt	1	5	4.4	0.85	2.2
Freon-113	U	2.2	ug/Kgdrywt	1	5	4.4	0.80	2.2
1,3,5-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.4	0.77	2.2
Cyclohexane	U	2.2	ug/Kgdrywt	1	5	4.4	1.2	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-3
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3916.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.2	ug/Kgdrywt	1	5	4.4	0.71	2.2
Di-Isopropyl Ether	U	2.2	ug/Kgdrywt	1	5	4.4	1.9	2.2
Methyl Acetate	U	2.7	ug/Kgdrywt	1	5	4.4	2.4	2.7
Tetrahydrofuran	U	22	ug/Kgdrywt	1	50	44.	4.0	22.
Vinyl Acetate	UL	2.2	ug/Kgdrywt	1	5	4.4	0.84	2.2
p-Bromofluorobenzene		95.0	%					
Toluene-D8	*	4.43	%					
1,2-Dichloroethane-D4	*	57.1	%					
Dibromofluoromethane	*	40.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-3RA
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3917.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.5	ug/Kgdrywt	1	10	9.0	0.83	4.5
Chloromethane	U	4.5	ug/Kgdrywt	1	10	9.0	1.3	4.5
Vinyl Chloride	U	4.5	ug/Kgdrywt	1	10	9.0	0.78	4.5
Bromomethane	U	4.5	ug/Kgdrywt	1	10	9.0	0.99	4.5
Chloroethane	U	4.5	ug/Kgdrywt	1	10	9.0	1.2	4.5
Trichlorofluoromethane	J	0.95	ug/Kgdrywt	1	10	9.0	0.82	4.5
1,1-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.5	0.84	2.2
Carbon Disulfide		6.4	ug/Kgdrywt	1	5	4.5	0.70	2.2
Methylene Chloride	J	11	ug/Kgdrywt	1	25	22.	7.1	11.
Acetone	U	11	ug/Kgdrywt	1	25	22.	4.6	11.
trans-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.5	0.64	2.2
Methyl tert-butyl Ether	UL	2.2	ug/Kgdrywt	1	5	4.5	0.99	2.2
1,1-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.5	1.5	2.2
cis-1,2-Dichloroethene	J	2.3	ug/Kgdrywt	1	5	4.5	0.82	2.2
Chloroform	U	2.2	ug/Kgdrywt	1	5	4.5	0.32	2.2
Carbon Tetrachloride	U	2.2	ug/Kgdrywt	1	5	4.5	1.2	2.2
1,1,1-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.38	2.2
2-Butanone	U	11	ug/Kgdrywt	1	25	22.	5.3	11.
Benzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.83	2.2
1,2-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.90	2.2
Trichloroethene	U	2.2	ug/Kgdrywt	1	5	4.5	0.53	2.2
1,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.5	1.3	2.2
Bromodichloromethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.54	2.2
cis-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.5	0.65	2.2
Toluene		61	ug/Kgdrywt	1	5	4.5	1.3	2.2
4-Methyl-2-Pentanone	U	11	ug/Kgdrywt	1	25	22.	5.3	11.
Tetrachloroethene		15	ug/Kgdrywt	1	5	4.5	1.1	2.2
trans-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.5	0.77	2.2
1,1,2-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.87	2.2
Dibromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.90	2.2
1,2-Dibromoethane	U	2.2	ug/Kgdrywt	1	5	4.5	1.1	2.2
Chlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.46	2.2
Ethylbenzene		45	ug/Kgdrywt	1	5	4.5	0.58	2.2
Styrene	U	2.2	ug/Kgdrywt	1	5	4.5	0.46	2.2
Bromoform	U	2.2	ug/Kgdrywt	1	5	4.5	0.63	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-3RA
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3917.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene		45	ug/Kgdrywt	1	5	4.5	0.83	2.2
1,1,2,2-Tetrachloroethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.76	2.2
1,3-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.56	2.2
1,4-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.40	2.2
1,2-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.70	2.2
1,2-Dibromo-3-Chloropropane	U	2.2	ug/Kgdrywt	1	5	4.5	1.4	2.2
1,2,4-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.71	2.2
1,2,4-Trimethylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.78	2.2
1,3,5-Trimethylbenzene		45	ug/Kgdrywt	1	5	4.5	0.60	2.2
n-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.83	2.2
sec-Butylbenzene		41	ug/Kgdrywt	1	5	4.5	0.82	2.2
tert-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.81	2.2
m+p-Xylenes		17	ug/Kgdrywt	1	10	9.0	1.5	2.2
o-Xylene	U	2.2	ug/Kgdrywt	1	5	4.5	1.2	2.2
Xylenes (Total)		17	ug/Kgdrywt	1	15	14.	1.2	6.8
Naphthalene		50	ug/Kgdrywt	1	5	4.5	0.79	2.2
1,1-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.5	0.82	2.2
1,2,3-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.68	2.2
1,2,3-Trichloropropane	U	2.2	ug/Kgdrywt	1	5	4.5	1.1	2.2
2-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.5	0.99	2.2
2,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.5	0.45	2.2
Bromobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.67	2.2
Bromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.82	2.2
Dibromomethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.46	2.2
Hexachlorobutadiene	U	2.2	ug/Kgdrywt	1	5	4.5	0.67	2.2
n-Propylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.75	2.2
p-Isopropyltoluene		56	ug/Kgdrywt	1	5	4.5	0.68	2.2
1,3-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.5	0.85	2.2
2-Hexanone	U	11	ug/Kgdrywt	1	25	22.	4.3	11.
4-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.5	0.44	2.2
1,2-Dichloroethylene (Total)	J	2.3	ug/Kgdrywt	1	10	9.0	0.64	4.5
Methylcyclohexane		99	ug/Kgdrywt	1	5	4.5	0.86	2.2
Freon-113	U	2.2	ug/Kgdrywt	1	5	4.5	0.81	2.2
1,3,5-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.78	2.2
Cyclohexane		25	ug/Kgdrywt	1	5	4.5	1.3	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-3RA
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3917.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 92.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.2	ug/Kgdrywt	1	5	4.5	0.72	2.2
Di-Isopropyl Ether	U	2.2	ug/Kgdrywt	1	5	4.5	1.9	2.2
Methyl Acetate	U	2.7	ug/Kgdrywt	1	5	4.5	2.4	2.7
Tetrahydrofuran	U	22	ug/Kgdrywt	1	50	45.	4.0	22.
Vinyl Acetate	UL	2.2	ug/Kgdrywt	1	5	4.5	0.85	2.2
p-Bromofluorobenzene	*	164.	%					
Toluene-D8		87.5	%					
1,2-Dichloroethane-D4	*	143.	%					
Dibromofluoromethane	*	183.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-5
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3918.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.5	ug/Kgdrywt	1	10	9.0	0.83	4.5
Chloromethane	U	4.5	ug/Kgdrywt	1	10	9.0	1.3	4.5
Vinyl Chloride	U	4.5	ug/Kgdrywt	1	10	9.0	0.78	4.5
Bromomethane	E	190	ug/Kgdrywt	1	10	9.0	0.99	4.5
Chloroethane	U	4.5	ug/Kgdrywt	1	10	9.0	1.2	4.5
Trichlorofluoromethane	U	4.5	ug/Kgdrywt	1	10	9.0	0.82	4.5
1,1-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.5	0.84	2.2
Carbon Disulfide	U	2.2	ug/Kgdrywt	1	5	4.5	0.70	2.2
Methylene Chloride	U	11	ug/Kgdrywt	1	25	22.	7.1	11.
Acetone		250	ug/Kgdrywt	1	25	22.	4.6	11.
trans-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.5	0.64	2.2
Methyl tert-butyl Ether	UL	2.2	ug/Kgdrywt	1	5	4.5	0.99	2.2
1,1-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.5	1.5	2.2
cis-1,2-Dichloroethene	U	2.2	ug/Kgdrywt	1	5	4.5	0.82	2.2
Chloroform	U	2.2	ug/Kgdrywt	1	5	4.5	0.32	2.2
Carbon Tetrachloride	U	2.2	ug/Kgdrywt	1	5	4.5	1.2	2.2
1,1,1-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.38	2.2
2-Butanone		48	ug/Kgdrywt	1	25	22.	5.3	11.
Benzene	J	3.7	ug/Kgdrywt	1	5	4.5	0.83	2.2
1,2-Dichloroethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.90	2.2
Trichloroethene	U	2.2	ug/Kgdrywt	1	5	4.5	0.53	2.2
1,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.5	1.3	2.2
Bromodichloromethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.54	2.2
cis-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.5	0.65	2.2
Toluene		6.2	ug/Kgdrywt	1	5	4.5	1.3	2.2
4-Methyl-2-Pentanone	U	11	ug/Kgdrywt	1	25	22.	5.3	11.
Tetrachloroethene	U	2.2	ug/Kgdrywt	1	5	4.5	1.1	2.2
trans-1,3-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.5	0.77	2.2
1,1,2-Trichloroethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.87	2.2
Dibromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.90	2.2
1,2-Dibromoethane	U	2.2	ug/Kgdrywt	1	5	4.5	1.1	2.2
Chlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.46	2.2
Ethylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.58	2.2
Styrene	U	2.2	ug/Kgdrywt	1	5	4.5	0.46	2.2
Bromoform	U	2.2	ug/Kgdrywt	1	5	4.5	0.63	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-5
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3918.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.83	2.2
1,1,2,2-Tetrachloroethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.76	2.2
1,3-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.56	2.2
1,4-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.40	2.2
1,2-Dichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.70	2.2
1,2-Dibromo-3-Chloropropane	U	2.2	ug/Kgdrywt	1	5	4.5	1.4	2.2
1,2,4-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.71	2.2
1,2,4-Trimethylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.78	2.2
1,3,5-Trimethylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.60	2.2
n-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.83	2.2
sec-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.82	2.2
tert-Butylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.81	2.2
m+p-Xylenes	J	3.7	ug/Kgdrywt	1	10	9.0	1.5	2.2
o-Xylene	J	2.1	ug/Kgdrywt	1	5	4.5	1.2	2.2
Xylenes (Total)	J	5.8	ug/Kgdrywt	1	15	14.	1.2	6.8
Naphthalene	U	2.2	ug/Kgdrywt	1	5	4.5	0.79	2.2
1,1-Dichloropropene	U	2.2	ug/Kgdrywt	1	5	4.5	0.82	2.2
1,2,3-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.68	2.2
1,2,3-Trichloropropane	U	2.2	ug/Kgdrywt	1	5	4.5	1.1	2.2
2-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.5	0.99	2.2
2,2-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.5	0.45	2.2
Bromobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.67	2.2
Bromochloromethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.82	2.2
Dibromomethane	U	2.2	ug/Kgdrywt	1	5	4.5	0.46	2.2
Hexachlorobutadiene	U	2.2	ug/Kgdrywt	1	5	4.5	0.67	2.2
n-Propylbenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.75	2.2
p-Isopropyltoluene	U	2.2	ug/Kgdrywt	1	5	4.5	0.68	2.2
1,3-Dichloropropane	U	2.2	ug/Kgdrywt	1	5	4.5	0.85	2.2
2-Hexanone	U	11	ug/Kgdrywt	1	25	22.	4.3	11.
4-Chlorotoluene	U	2.2	ug/Kgdrywt	1	5	4.5	0.44	2.2
1,2-Dichloroethylene (Total)	U	4.5	ug/Kgdrywt	1	10	9.0	0.64	4.5
Methylcyclohexane		8.9	ug/Kgdrywt	1	5	4.5	0.86	2.2
Freon-113	U	2.2	ug/Kgdrywt	1	5	4.5	0.81	2.2
1,3,5-Trichlorobenzene	U	2.2	ug/Kgdrywt	1	5	4.5	0.78	2.2
Cyclohexane	U	2.2	ug/Kgdrywt	1	5	4.5	1.3	2.2

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-5
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3918.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.2	ug/Kgdrywt	1	5	4.5	0.72	2.2
Di-Isopropyl Ether	U	2.2	ug/Kgdrywt	1	5	4.5	1.9	2.2
Methyl Acetate	U	2.7	ug/Kgdrywt	1	5	4.5	2.4	2.7
Tetrahydrofuran	U	22	ug/Kgdrywt	1	50	45.	4.0	22.
Vinyl Acetate	UL	2.2	ug/Kgdrywt	1	5	4.5	0.85	2.2
p-Bromofluorobenzene	*	31.6	%					
Toluene-D8	*	63.6	%					
1,2-Dichloroethane-D4	*	137.	%					
Dibromofluoromethane		111.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-5RA2
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: W3155.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.0	ug/Kgdrywt	1	10	7.9	0.73	4.0
Chloromethane	UL	4.0	ug/Kgdrywt	1	10	7.9	1.1	4.0
Vinyl Chloride	U	4.0	ug/Kgdrywt	1	10	7.9	0.69	4.0
Bromomethane	U	4.0	ug/Kgdrywt	1	10	7.9	0.87	4.0
Chloroethane	U	4.0	ug/Kgdrywt	1	10	7.9	1.0	4.0
Trichlorofluoromethane	U	4.0	ug/Kgdrywt	1	10	7.9	0.72	4.0
1,1-Dichloroethene	U	2.0	ug/Kgdrywt	1	5	4.0	0.73	2.0
Carbon Disulfide	J	3.0	ug/Kgdrywt	1	5	4.0	0.62	2.0
Methylene Chloride	J	9.9	ug/Kgdrywt	1	25	20.	6.2	9.9
Acetone		290	ug/Kgdrywt	1	25	20.	4.0	9.9
trans-1,2-Dichloroethene	U	2.0	ug/Kgdrywt	1	5	4.0	0.56	2.0
Methyl tert-butyl Ether	U	2.0	ug/Kgdrywt	1	5	4.0	0.87	2.0
1,1-Dichloroethane	U	2.0	ug/Kgdrywt	1	5	4.0	1.3	2.0
cis-1,2-Dichloroethene	U	2.0	ug/Kgdrywt	1	5	4.0	0.72	2.0
Chloroform	U	2.0	ug/Kgdrywt	1	5	4.0	0.28	2.0
Carbon Tetrachloride	U	2.0	ug/Kgdrywt	1	5	4.0	1.0	2.0
1,1,1-Trichloroethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.33	2.0
2-Butanone		63	ug/Kgdrywt	1	25	20.	4.7	9.9
Benzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.73	2.0
1,2-Dichloroethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.79	2.0
Trichloroethene	U	2.0	ug/Kgdrywt	1	5	4.0	0.47	2.0
1,2-Dichloropropane	U	2.0	ug/Kgdrywt	1	5	4.0	1.1	2.0
Bromodichloromethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.47	2.0
cis-1,3-Dichloropropene	U	2.0	ug/Kgdrywt	1	5	4.0	0.57	2.0
Toluene	J	2.4	ug/Kgdrywt	1	5	4.0	1.1	2.0
4-Methyl-2-Pentanone	U	9.9	ug/Kgdrywt	1	25	20.	4.7	9.9
Tetrachloroethene	U	2.0	ug/Kgdrywt	1	5	4.0	0.95	2.0
trans-1,3-Dichloropropene	U	2.0	ug/Kgdrywt	1	5	4.0	0.68	2.0
1,1,2-Trichloroethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.77	2.0
Dibromochloromethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.79	2.0
1,2-Dibromoethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.95	2.0
Chlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.40	2.0
Ethylbenzene	J	1.0	ug/Kgdrywt	1	5	4.0	0.51	2.0
Styrene	U	2.0	ug/Kgdrywt	1	5	4.0	0.40	2.0
Bromoform	U	2.0	ug/Kgdrywt	1	5	4.0	0.55	2.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-5RA2
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: W3155.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.73	2.0
1,1,2,2-Tetrachloroethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.66	2.0
1,3-Dichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.49	2.0
1,4-Dichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.35	2.0
1,2-Dichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.62	2.0
1,2-Dibromo-3-Chloropropane	U	2.0	ug/Kgdrywt	1	5	4.0	1.2	2.0
1,2,4-Trichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.62	2.0
1,2,4-Trimethylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.69	2.0
1,3,5-Trimethylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.53	2.0
n-Butylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.73	2.0
sec-Butylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.72	2.0
tert-Butylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.71	2.0
m+p-Xylenes	J	4.2	ug/Kgdrywt	1	10	7.9	1.3	2.0
o-Xylene	U	2.0	ug/Kgdrywt	1	5	4.0	1.0	2.0
Xylenes (Total)	J	4.2	ug/Kgdrywt	1	15	12.	1.0	5.9
Naphthalene		38	ug/Kgdrywt	1	5	4.0	0.70	2.0
1,1-Dichloropropene	U	2.0	ug/Kgdrywt	1	5	4.0	0.72	2.0
1,2,3-Trichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.60	2.0
1,2,3-Trichloropropane	U	2.0	ug/Kgdrywt	1	5	4.0	0.95	2.0
2-Chlorotoluene	U	2.0	ug/Kgdrywt	1	5	4.0	0.87	2.0
2,2-Dichloropropane	U	2.0	ug/Kgdrywt	1	5	4.0	0.40	2.0
Bromobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.58	2.0
Bromochloromethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.72	2.0
Dibromomethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.40	2.0
Hexachlorobutadiene	U	2.0	ug/Kgdrywt	1	5	4.0	0.58	2.0
n-Propylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.66	2.0
p-Isopropyltoluene		13	ug/Kgdrywt	1	5	4.0	0.60	2.0
1,3-Dichloropropane	U	2.0	ug/Kgdrywt	1	5	4.0	0.74	2.0
2-Hexanone	U	9.9	ug/Kgdrywt	1	25	20.	3.8	9.9
4-Chlorotoluene	U	2.0	ug/Kgdrywt	1	5	4.0	0.39	2.0
1,2-Dichloroethylene (Total)	U	4.0	ug/Kgdrywt	1	10	7.9	0.56	4.0
Methylcyclohexane		5.2	ug/Kgdrywt	1	5	4.0	0.76	2.0
Freon-113	U	2.0	ug/Kgdrywt	1	5	4.0	0.71	2.0
1,3,5-Trichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.69	2.0
Cyclohexane	U	2.0	ug/Kgdrywt	1	5	4.0	1.1	2.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-5RA2
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: W3155.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.0	ug/Kgdrywt	1	5	4.0	0.63	2.0
Di-Isopropyl Ether	U	2.0	ug/Kgdrywt	1	5	4.0	1.6	2.0
Methyl Acetate	U	2.4	ug/Kgdrywt	1	5	4.0	2.1	2.4
Tetrahydrofuran	U	20	ug/Kgdrywt	1	50	40.	3.6	20.
Vinyl Acetate	UL	2.0	ug/Kgdrywt	1	5	4.0	0.74	2.0
p-Bromofluorobenzene	*	28.2	%					
Toluene-D8	*	76.9	%					
1,2-Dichloroethane-D4	*	221.	%					
Dibromofluoromethane	*	190.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-7
Client ID: SITE 4TS-TB-62315
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3913.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 100
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	U	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	U	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
Methylene Chloride	J	12	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone	J	14	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	UL	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-7
Client ID: SITE 4TS-TB-62315
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3913.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 100
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylenes	U	2.5	ug/Kgdrywt	1	10	10.	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Xylenes (Total)	U	7.5	ug/Kgdrywt	1	15	15.	1.3	7.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
1,1-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
1,2,3-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,2,3-Trichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
2,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.50	2.5
Bromobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
Bromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Dibromomethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Hexachlorobutadiene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
n-Propylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.83	2.5
p-Isopropyltoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,3-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
2-Hexanone	U	12	ug/Kgdrywt	1	25	25.	4.8	12.
4-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.49	2.5
1,2-Dichloroethylene (Total)	U	5.0	ug/Kgdrywt	1	10	10.	0.71	5.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
1,3,5-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-7
Client ID: SITE 4TS-TB-62315
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: T3913.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165466

Analysis Date: 25-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 100
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	0.80	2.5
Di-Isopropyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Tetrahydrofuran	U	25	ug/Kgdrywt	1	50	50.	4.5	25.
Vinyl Acetate	UL	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
p-Bromofluorobenzene	*	121.	%					
Toluene-D8	*	126.	%					
1,2-Dichloroethane-D4		127.	%					
Dibromofluoromethane		121.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-T
Lab File IDs : T3888.D T3887.D T3886.D T3885.D T3890.D T3889.D **Column ID:**
Calibration Date(s): 22-JUN-15 10:03 22-JUN-15 13:12

	5.0000 Level 1	10.0000 Level 2	20.0000 Level 3	50.0000 Level 4	100.0000 Level 5	200.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.61683	0.61279	0.57176	0.62357	0.68444	0.57864	AVG		0.61467		6.54594	15.00000	O
Chloromethane	0.98086	0.90269	0.87802	0.96959	0.84662	0.95328	AVG		0.92185		5.88139	15.00000	O
Vinyl chloride	0.80633	0.77839	0.79143	0.86767	0.91333	0.81006	AVG		0.82787		6.26382	15.00000	O
Bromomethane	0.43543	0.46519	0.45164	0.49981	0.58655	0.48150	AVG		0.48669		11.06102	15.00000	O
Chloroethane	0.52576	0.49114	0.47099	0.50551	0.45824	0.28107	AVG		0.45545		19.48559	15.00000	W(
Trichlorofluoromethane	0.94745	0.94647	0.90589	1.00410	1.05315	0.82291	AVG		0.94666		8.40013	15.00000	O
Diethyl Ether	0.52988	0.56818	0.53549	0.61442	0.64820	0.59119	AVG		0.58123		7.91610	15.00000	O
1,1-Dichloroethene	0.57103	0.57600	0.56717	0.63363	0.67172	0.61409	AVG		0.60561		6.91834	15.00000	O
Carbon Disulfide	2.00612	2.06720	2.07583	2.34103	2.33959	2.08770	AVG		2.15291		6.86831	15.00000	O
Freon-113	0.42488	0.45176	0.41649	0.45296	0.51086	0.44701	AVG		0.45066		7.34378	15.00000	O
Methylene Chloride	0.95115	0.83168	0.71754	0.80939	0.83186	0.75173	AVG		0.81556		9.90515	15.00000	O
Acetone	0.19808	0.18771	0.17137	0.20187	0.19430	0.17822	AVG		0.18859		6.29055	15.00000	O
trans-1,2-Dichloroethene	0.62773	0.63362	0.62425	0.69479	0.72527	0.65619	AVG		0.66031		6.24443	15.00000	O
Methyl tert-butyl ether	39738	90598	212078	606525	1329960	3066574	LNR	0.22180	0.97946		0.99879	0.99000	O
Di-isopropyl ether	1.71205	1.86489	1.92834	2.30633	2.53080	2.30836	AVG		2.10846		15.09372	15.00000	W(
1,1-Dichloroethane	1.11305	1.16750	1.16728	1.31179	1.36941	1.24860	AVG		1.22961		7.96722	15.00000	O
Vinyl Acetate	21946	58800	156344	487437	823302	1791990	LNR	0.01309	0.67509		0.99798	0.99000	O
cis-1,2-Dichloroethene	0.75832	0.75939	0.76932	0.87594	0.90480	0.82369	AVG		0.81524		7.80490	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
2,2-Dichloropropane	21553	50756	115606	319043	655058	1329419	LNR	0.02202	0.85054		0.99844	0.99000	O
Bromochloromethane	0.32044	0.32263	0.31165	0.37097	0.37562	0.33393	AVG		0.33921		8.07272	15.00000	O
Chloroform	1.12379	1.12850	1.09786	1.26488	1.31167	1.15178	AVG		1.17975		7.37959	15.00000	O
Carbon Tetrachloride	0.41684	0.44610	0.46457	0.49420	0.54228	0.48344	AVG		0.47457		9.08370	15.00000	O
Tetrahydrofuran	0.19009	0.20681	0.20414	0.25026	0.24610	0.22640	AVG		0.22063		11.01997	15.00000	O
1,1,1-Trichloroethane	0.81430	0.89226	0.91650	1.01585	1.08905	0.99600	AVG		0.95399		10.33029	15.00000	O
1,1-Dichloropropene	0.43574	0.50016	0.53824	0.60084	0.63793	0.57201	AVG		0.54749		13.28219	15.00000	O
2-Butanone	43501	97570	231617	657503	1284546	2524845	LNR	-0.02363	0.32380		0.99630	0.99000	O
Benzene	1.51139	1.54204	1.60137	1.71762	1.88109	1.59210	AVG		1.64093		8.35875	15.00000	O
Cyclohexane	0.86438	1.06533	1.03914	1.19613	1.32000	1.12354	AVG		1.10142		13.98336	15.00000	O
1,2-Dichloroethane	0.51302	0.49872	0.49483	0.50472	0.55262	0.49044	AVG		0.50906		4.46922	15.00000	O
Trichloroethene	0.35028	0.36123	0.39468	0.43362	0.46543	0.41957	AVG		0.40414		10.89642	15.00000	O
Dibromomethane	0.24692	0.22984	0.23624	0.25181	0.26730	0.24012	AVG		0.24537		5.39681	15.00000	O
1,2-Dichloropropane	0.38402	0.39693	0.41034	0.44922	0.50752	0.45149	AVG		0.43325		10.51170	15.00000	O
Bromodichloromethane	0.46944	0.49384	0.50029	0.53251	0.60372	0.53574	AVG		0.52259		8.97587	15.00000	O
cis-1,3-dichloropropene	0.47915	0.53841	0.56620	0.64015	0.73424	0.66360	AVG		0.60362		15.38801	15.00000	W(
Toluene	0.98103	1.01062	1.01525	1.03850	1.13490	0.98788	AVG		1.02803		5.47119	15.00000	O
4-methyl-2-pentanone	0.35874	0.37768	0.38977	0.43089	0.42984	0.36185	AVG		0.39146		8.21239	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-T
Lab File IDs : T3888.D T3887.D T3886.D T3885.D T3890.D T3889.D **Column ID:**
Calibration Date(s): 22-JUN-15 10:03 22-JUN-15 13:12

Tetrachloroethene	0.30655	0.31201	0.33367	0.36677	0.39979	0.37275	AVG		0.34859		10.6284	15.00000	O
trans-1,3-Dichloropropene	0.39537	0.42297	0.45608	0.52308	0.58894	0.54422	AVG		0.48845		15.4314	15.00000	W
1,1,2-Trichloroethane	0.27442	0.29910	0.28892	0.31428	0.35458	0.32262	AVG		0.30899		9.13966	15.00000	O
Dibromochloromethane	20079	42692	98082	265529	568684	1143785	LNR	0.03216	0.47968		0.99722	0.99000	O
1,3-Dichloropropane	0.58375	0.60023	0.66373	0.72933	0.81516	0.72722	AVG		0.68657		12.7912	15.00000	O
1,2-Dibromoethane	0.30173	0.30273	0.30704	0.36054	0.37662	0.35743	AVG		0.33435		10.1993	15.00000	O
2-Hexanone	0.26863	0.28948	0.30410	0.34681	0.34870	0.29374	AVG		0.30857		10.5231	15.00000	O
Chlorobenzene	1.14318	1.15984	1.17708	1.27712	1.37564	1.18922	AVG		1.22035		7.31050	15.00000	O
Ethylbenzene	0.59847	0.61294	0.64818	0.70214	0.76342	0.67717	AVG		0.66705		9.14545	15.00000	O
Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+	15.00000	M
m+p-Xylenes	0.72775	0.75934	0.79408	0.85378	0.89905	0.75530	AVG		0.79822		8.23227	15.00000	O
o-Xylene	0.67773	0.72268	0.76272	0.82506	0.90005	0.79357	AVG		0.78030		10.0370	15.00000	O
Styrene	1.22627	1.28717	1.28455	1.40221	1.51785	1.28588	AVG		1.33399		8.00478	15.00000	O
Bromoform	0.23642	0.25251	0.27115	0.30834	0.34729	0.33102	AVG		0.29112		15.3049	15.00000	W
Isopropylbenzene	3.04653	3.27084	3.52759	3.60955	3.86092	3.23003	AVG		3.42424		8.65949	15.00000	O
Bromobenzene	0.86753	0.89856	0.93799	0.97207	1.09182	1.00646	AVG		0.96240		8.37153	15.00000	O
N-Propylbenzene	3.93166	4.12087	4.29412	4.37480	4.55767	3.65068	AVG		4.15497		7.87413	15.00000	O
1,1,2,2-Tetrachloroethane	0.90339	1.00642	0.98276	1.05128	1.15793	1.06937	AVG		1.02852		8.38351	15.00000	O
1,3,5-Trimethylbenzene	3.04653	3.27084	3.52759	3.60955	3.86092	3.23003	AVG		3.42424		8.65949	15.00000	O
2-Chlorotoluene	2.35277	2.46503	2.53251	2.60065	2.82802	2.39634	AVG		2.52922		6.78643	15.00000	O
1,2,3-Trichloropropane	0.73429	0.76672	0.74684	0.81939	0.89473	0.83083	AVG		0.79880		7.62358	15.00000	O
4-Chlorotoluene	2.47122	2.56176	2.67090	2.77591	2.98928	2.51791	AVG		2.66450		7.26460	15.00000	O
tert-Butylbenzene	2.63625	2.90617	3.05055	3.19761	3.54723	3.02881	AVG		3.06110		9.91532	15.00000	O
1,2,4-Trimethylbenzene	2.67791	2.90624	3.04046	3.21385	3.47366	2.91202	AVG		3.03736		9.11954	15.00000	O
P-Isopropyltoluene	3.08266	3.27265	3.50221	3.58906	3.83758	3.08392	AVG		3.39468		8.87969	15.00000	O
1,3-Dichlorobenzene	1.68659	1.77327	1.78730	1.86075	2.05472	1.80157	AVG		1.82737		6.82706	15.00000	O
1,4-Dichlorobenzene	1.78048	1.84522	1.85298	1.90641	2.08120	1.83985	AVG		1.88436		5.54172	15.00000	O
N-Butylbenzene	2.97402	3.23619	3.33795	3.44786	3.64363	2.89152	AVG		3.25520		8.75969	15.00000	O
sec-Butylbenzene	3.51635	3.79914	3.97605	4.05455	4.36841	3.47267	AVG		3.86453		8.82460	15.00000	O
1,2-Dichlorobenzene	1.70375	1.67583	1.70788	1.76690	1.98500	1.74593	AVG		1.76421		6.39929	15.00000	O
1,2-Dibromo-3-Chloropropane	0.17763	0.17102	0.17945	0.20699	0.22553	0.21088	AVG		0.19525		11.3289	15.00000	O
1,3,5-Trichlorobenzene	1.31914	1.29037	1.18312	1.32908	1.35893	1.14563	AVG		1.27104		6.78968	15.00000	O
Hexachlorobutadiene	0.59750	0.64810	0.67965	0.68576	0.78641	0.66215	AVG		0.67659		9.21338	15.00000	O
1,2,4-Trichlorobenzene	1.28870	1.28425	1.30923	1.35379	1.52502	1.30097	AVG		1.34366		6.86569	15.00000	O
Naphthalene	2.72962	2.95429	2.99597	3.04556	3.36309	2.70293	AVG		2.96524		8.12357	15.00000	O
1,2,3-Trichlorobenzene	1.11739	1.20918	1.20195	1.23137	1.42743	1.20458	AVG		1.23198		8.39664	15.00000	O
Methyl Acetate	0.44979	0.48610	0.44436	0.56123	0.45174	0.43755	AVG		0.47179		9.94860	15.00000	O
Methylcyclohexane	32792	73644	158149	422862	991635	1818993	QUA	0.11472	0.59893	0.05401	0.99659	0.99000	O
Dibromofluoromethane	0.71569	0.68999	0.64805	0.71444	0.71389	0.65635	AVG		0.68974		4.45409	15.00000	

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-T
Lab File IDs : T3888.D T3887.D T3886.D T3885.D T3890.D T3889.D **Column ID:**
Calibration Date(s): 22-JUN-15 10:03 22-JUN-15 13:12

1,2-Dichloroethane-D4	0.77254	0.73673	0.64969	0.75117	0.74668	0.66782	AVG		0.72077		6.90556	15.00000	
Toluene-D8	1.56823	1.57368	1.48989	1.53450	1.54461	1.34347	AVG		1.50906		5.72943	15.00000	
P-Bromofluorobenzene	0.71598	0.65779	0.58428	0.58828	0.59504	0.52821	AVG		0.61160		10.73351	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-t.i\T062215.b\T3891A.D
Report Date: 25-Jun-2015 09:12

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: WG165286-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-t.i\T062215.b\T826SB33.m
Misc Info: WG165286,WG165286-4

Client SDG: WG165286
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	50.3	100.56	80-120
	2 Chloromethane	50.0	59.0	118.02	80-120
	3 Vinyl chloride	50.0	54.1	108.18	80-120
	4 Bromomethane	50.0	55.6	111.18	80-120
	5 Chloroethane	50.0	56.2	112.37	80-120
	6 Trichlorofluoromet	50.0	53.0	106.03	80-120
	7 Diethyl Ether	50.0	55.9	111.75	80-120
	8 Tertiary-butyl alc	250	236	94.44	80-120
	9 1,1-Dichloroethene	50.0	56.6	113.31	80-120
	10 Carbon Disulfide	50.0	55.6	111.31	80-120
	11 Freon-113	50.0	54.1	108.21	80-120
	12 Iodomethane	50.0	48.6	97.14	80-120
	13 Acrolein	250	251	100.32	80-120
	14 Methylene Chloride	50.0	51.2	102.35	80-120
	15 Acetone	50.0	59.7	119.48	80-120
	16 Isobutyl Alcohol	1000	1070	107.49	80-120
	17 trans-1,2-Dichloro	50.0	57.8	115.52	80-120
	18 Allyl Chloride	50.0	53.6	107.22	80-120
	19 Methyl tert-butyl	100	93.5	93.53	80-120
	20 Acetonitrile	500	535	107.09	80-120
	21 Di-isopropyl ether	50.0	56.7	113.35	80-120
	22 Chloroprene	50.0	57.1	114.30	80-120
	23 Propionitrile	500	554	110.88	80-120
	24 Methacrylonitrile	500	600	119.95	80-120
	25 1,1-Dichloroethane	50.0	57.0	114.10	80-120
	26 Acrylonitrile	250	282	112.81	80-120
	27 Ethyl tertiary-but	50.0	43.6	87.28	80-120
	28 Vinyl Acetate	50.0	47.8	95.55	80-120
	29 cis-1,2-Dichloroet	50.0	51.1	102.27	80-120
M	30 1,2-Dichloroethyle	100	109	108.90	80-120
	31 Methyl Methacrylat	50.0	58.8	117.61	80-120
	32 2,2-Dichloropropan	50.0	50.1	100.18	80-120
	33 Bromochloromethane	50.0	55.6	111.24	80-120
	34 Chloroform	50.0	53.9	107.72	80-120
	35 Carbon Tetrachlori	50.0	53.7	107.46	80-120
	36 Tetrahydrofuran	50.0	55.3	110.61	80-120
	38 1,1,1-Trichloroeth	50.0	54.8	109.69	80-120
	39 1,1-Dichloropropen	50.0	56.7	113.46	80-120
	40 2-Butanone	50.0	53.2	106.47	80-120
	41 Benzene	50.0	55.0	110.06	80-120

Data File: \\target_server\gg\chem\gcms-t.i\T062215.b\T3891A.D
Report Date: 25-Jun-2015 09:12

	SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
	43 Cyclohexane	50.0	51.1	102.12	80-120
	44 Ethyl Methacrylate	50.0	56.2	112.35	80-120
	46 Tertiary-amyl meth	50.0	40.7	81.41	80-120
	47 1,2-Dichloroethane	50.0	53.6	107.22	80-120
	48 Trichloroethene	50.0	54.0	107.92	80-120
	50 Dibromomethane	50.0	53.0	106.02	80-120
	51 1,2-Dichloropropan	50.0	55.0	110.00	80-120
	52 Bromodichlorometha	50.0	54.6	109.29	80-120
	53 cis-1,3-dichloropr	50.0	56.9	113.89	80-120
	54 1,4-Dioxane	1000	1090	109.42	80-120
	56 2-Chloroethylviny	50.0	0.00	*	80-120
	57 Toluene	50.0	52.4	104.83	80-120
	58 4-methyl-2-pentano	50.0	58.9	117.75	80-120
	59 Tetrachloroethene	50.0	52.1	104.24	80-120
	60 trans-1,3-Dichloro	50.0	58.6	117.25	80-120
	61 1,1,2-Trichloroeth	50.0	55.1	110.22	80-120
	62 Dibromochlorometha	50.0	51.5	103.09	80-120
	63 1,3-Dichloropropan	50.0	54.6	109.16	80-120
	64 1,2-Dibromoethane	50.0	53.2	106.43	80-120
	65 2-Hexanone	50.0	63.3	126.57*	80-120
	67 Chlorobenzene	50.0	53.2	106.51	80-120
	152 1-Chlorohexane	50.0	48.0	96.11	80-120
	68 Ethylbenzene	50.0	52.0	104.07	80-120
	69 1,1,1,2-Tetrachlor	50.0	49.4	98.74	80-120
M	70 Xylenes (total)	150	161	107.48	80-120
	71 m+p-Xylenes	100	107	107.12	80-120
	72 o-Xylene	50.0	54.1	108.20	80-120
	73 Styrene	50.0	52.9	105.74	80-120
	74 Bromoform	50.0	55.8	111.67	80-120
	75 Isopropylbenzene	50.0	55.6	111.31	80-120
	77 cis-1,4-Dichloro-2	50.0	49.6	99.20	80-120
	78 trans-1,4-Dichloro	50.0	56.6	113.30	80-120
	79 Bromobenzene	50.0	53.3	106.60	80-120
	80 N-Propylbenzene	50.0	55.3	110.53	80-120
	81 1,1,2,2-Tetrachlor	50.0	54.6	109.14	80-120
	82 1,3,5-Trimethylben	50.0	55.6	111.31	80-120
	83 2-Chlorotoluene	50.0	53.9	107.72	80-120
	84 1,2,3-Trichloropro	50.0	55.6	111.31	80-120
	85 4-Chlorotoluene	50.0	53.2	106.40	80-120
	86 tert-Butylbenzene	50.0	54.6	109.17	80-120
	87 Pentachloroethane	50.0	53.8	107.71	80-120
	88 1,2,4-Trimethylben	50.0	52.3	104.57	80-120
	89 P-Isopropyltoluene	50.0	53.4	106.82	80-120
	90 1,3-Dichlorobenzen	50.0	51.8	103.67	80-120
	92 1,4-Dichlorobenzen	50.0	50.8	101.67	80-120
	93 N-Butylbenzene	50.0	52.4	104.72	80-120
	94 sec-Butylbenzene	50.0	55.4	110.79	80-120
	95 1,2-Dichlorobenzen	50.0	52.5	105.00	80-120
	96 1,2-Dibromo-3-Chlo	50.0	58.8	117.65	80-120
	97 1,3,5-Trichloroben	50.0	48.3	96.53	80-120
	98 Hexachlorobutadien	50.0	49.9	99.74	80-120
	99 1,2,4-Trichloroben	50.0	51.6	103.23	80-120
	100 1,2,3-Trimethylben	50.0	52.5	105.09	80-120
	101 Naphthalene	50.0	61.2	122.32*	80-120

Data File: \\target_server\gg\chem\gcms-t.i\T062215.b\T3891A.D
Report Date: 25-Jun-2015 09:12

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	52.6	105.18	80-120
103 Methyl Acetate	50.0	51.2	102.49	80-120
104 Methylcyclohexane	50.0	45.4	90.74	80-120
M 153 Total Alkylbenzene	350	379	108.27	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/kg	AMOUNT RECOVERED ug/kg	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	57.1	114.12	64-130
$ 45 1,2-Dichloroethane	50.0	57.5	115.08	58-134
$ 55 Toluene-D8	50.0	56.7	113.41	67-118
$ 76 P-Bromofluorobenze	50.0	52.2	104.48	47-119

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-W
Lab File IDs : W3148.D W3147.D W3146.D W3145.D W3150.D W3149.D **Column ID:**
Calibration Date(s): 30-JUN-15 09:53 30-JUN-15 12:34

	Level 1 5.0000	Level 2 10.0000	Level 3 20.0000	Level 4 50.0000	Level 5 100.0000	Level 6 200.0000	Crv New	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.29168	0.26581	0.29320	0.31626	0.31554	0.32101	AVG		0.30058		7.02530	15.00000	O
Chloromethane	0.43317	0.41062	0.41690	0.41427	0.44329	0.43691	AVG		0.42586		3.19566	15.00000	O
Vinyl chloride	0.41921	0.38932	0.39856	0.39520	0.42170	0.42857	AVG		0.40876		3.99752	15.00000	O
Bromomethane	0.15619	0.15414	0.15050	0.13486	0.16750	0.15504	AVG		0.15304		6.92151	15.00000	O
Chloroethane	27356	54104	99999	226785	373771	672360	LNR	-0.19945	0.13555		0.99357	0.99000	O
Trichlorofluoromethane	0.45916	0.40919	0.43393	0.44373	0.44804	0.32247	AVG		0.41942		12.01774	15.00000	O
Diethyl Ether	0.26349	0.25831	0.27416	0.26272	0.27613	0.27106	AVG		0.26765		2.66677	15.00000	O
1,1-Dichloroethene	0.27534	0.23859	0.25296	0.25587	0.25854	0.26843	AVG		0.25829		4.94599	15.00000	O
Carbon Disulfide	0.91180	0.83874	0.90907	0.88851	0.90640	0.88888	AVG		0.89056		3.06989	15.00000	O
Freon-113	0.17078	0.17164	0.18357	0.18748	0.18746	0.19075	AVG		0.18195		4.74167	15.00000	O
Methylene Chloride	88232	121727	215232	443711	930594	1921204	LNR	-0.03973	0.38871		0.99835	0.99000	O
Acetone	0.11811	0.10517	0.10576	0.09884	0.09469	0.10389	AVG		0.10441		7.61187	15.00000	O
trans-1,2-Dichloroethene	0.30181	0.28648	0.31776	0.31984	0.28847	0.31981	AVG		0.30569		5.12201	15.00000	O
Methyl tert-butyl ether	0.93159	0.95768	1.02874	0.99962	1.03232	0.97147	AVG		0.98690		4.08505	15.00000	O
Di-isopropyl ether	1.11825	1.14988	1.22287	1.15936	1.22593	1.22138	AVG		1.18294		3.92033	15.00000	O
1,1-Dichloroethane	0.61844	0.59193	0.63456	0.61541	0.64163	0.64080	AVG		0.62379		3.07308	15.00000	O
Vinyl Acetate	0.33297	0.38846	0.42056	0.42311	0.40213	0.44604	AVG		0.40221		9.74304	15.00000	O
cis-1,2-Dichloroethene	0.37484	0.36048	0.38954	0.37954	0.40173	0.40205	AVG		0.38470		4.23173	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+0	15.00000	M
2,2-Dichloropropane	0.45941	0.43414	0.48169	0.48520	0.52104	0.53415	AVG		0.48594		7.67907	15.00000	O
Bromochloromethane	0.14156	0.14331	0.14950	0.14449	0.15376	0.14712	AVG		0.14662		3.06162	15.00000	O
Chloroform	0.56976	0.55376	0.58406	0.58396	0.59743	0.61278	AVG		0.58362		3.53270	15.00000	O
Carbon Tetrachloride	0.23752	0.21227	0.24329	0.24639	0.26180	0.27143	AVG		0.24545		8.37321	15.00000	O
Tetrahydrofuran	0.10462	0.10587	0.11742	0.11068	0.11642	0.12603	AVG		0.11350		7.11366	15.00000	O
1,1,1-Trichloroethane	0.51231	0.47072	0.52373	0.50798	0.53167	0.54344	AVG		0.51497		4.89749	15.00000	O
1,1-Dichloropropene	0.29409	0.25798	0.28958	0.28767	0.29093	0.30406	AVG		0.28739		5.40238	15.00000	O
2-Butanone	0.15658	0.16488	0.17522	0.16592	0.17395	0.18974	AVG		0.17105		6.66075	15.00000	O
Benzene	0.87868	0.83178	0.86327	0.87663	0.89450	0.88219	AVG		0.87117		2.49683	15.00000	O
Cyclohexane	0.54912	0.47336	0.55750	0.55415	0.59186	0.59486	AVG		0.55348		7.93373	15.00000	O
1,2-Dichloroethane	0.26401	0.26796	0.28161	0.28678	0.28786	0.29390	AVG		0.28035		4.23010	15.00000	O
Trichloroethene	0.19678	0.18869	0.20376	0.19821	0.20554	0.21026	AVG		0.20054		3.79661	15.00000	O
Dibromomethane	0.11499	0.10869	0.11864	0.11654	0.12097	0.12621	AVG		0.11767		5.01148	15.00000	O
1,2-Dichloropropane	0.20597	0.19726	0.21129	0.21897	0.22579	0.23144	AVG		0.21512		5.92477	15.00000	O
Bromodichloromethane	0.24492	0.24155	0.26053	0.27331	0.28300	0.29888	AVG		0.26703		8.35633	15.00000	O
cis-1,3-dichloropropene	0.28808	0.29805	0.33180	0.34550	0.36616	0.37921	AVG		0.33480		10.86216	15.00000	O
Toluene	0.54229	0.51843	0.55691	0.55946	0.56243	0.57395	AVG		0.55224		3.52190	15.00000	O
4-methyl-2-pentanone	0.20576	0.21721	0.23739	0.22806	0.22835	0.21953	AVG		0.22272		4.93350	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-W
Lab File IDs : W3148.D W3147.D W3146.D W3145.D W3150.D W3149.D **Column ID:**
Calibration Date(s): 30-JUN-15 09:53 30-JUN-15 12:34

Tetrachloroethene	0.17457	0.16372	0.18203	0.17655	0.17807	0.17924	AVG		0.17570		3.63335	15.00000	O
trans-1,3-Dichloropropene	0.25023	0.25548	0.28220	0.29875	0.31741	0.33552	AVG		0.28993		11.6807	15.00000	O
1,1,2-Trichloroethane	0.12615	0.14802	0.14478	0.15043	0.15689	0.16599	AVG		0.14871		8.98744	15.00000	O
Dibromochloromethane	0.16283	0.17300	0.19448	0.20568	0.20881	0.21879	AVG		0.19393		11.2566	15.00000	O
1,3-Dichloropropane	0.36180	0.38194	0.38910	0.39054	0.39952	0.39912	AVG		0.38700		3.61959	15.00000	O
1,2-Dibromoethane	0.16449	0.16465	0.17517	0.17963	0.18555	0.19906	AVG		0.17809		7.41415	15.00000	O
2-Hexanone	0.15493	0.17228	0.18669	0.17883	0.17863	0.17707	AVG		0.17474		6.15523	15.00000	O
Chlorobenzene	0.59006	0.59477	0.61066	0.61843	0.60985	0.59163	AVG		0.60257		1.97376	15.00000	O
Ethylbenzene	0.34630	0.33743	0.36808	0.36843	0.36576	0.36749	AVG		0.35891		3.77036	15.00000	O
Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.44583	0.43015	0.45371	0.44434	0.43235	0.39783	AVG		0.43404		4.56347	15.00000	O
o-Xylene	0.40766	0.40829	0.43677	0.43336	0.44149	0.44327	AVG		0.42847		3.79449	15.00000	O
Styrene	0.67847	0.66187	0.72511	0.73467	0.73790	0.69955	AVG		0.70626		4.45580	15.00000	O
Bromoform	0.10753	0.12054	0.13059	0.13975	0.14916	0.16043	AVG		0.13467		14.2926	15.00000	O
Isopropylbenzene	2.06255	1.96718	2.06812	2.02880	1.89041	1.66388	AVG		1.94682		7.90704	15.00000	O
Bromobenzene	0.48100	0.47550	0.50025	0.49503	0.48431	0.48446	AVG		0.48676		1.88618	15.00000	O
N-Propylbenzene	2.55991	2.43164	2.58121	2.46531	2.26507	1.88739	AVG		2.36509		10.9824	15.00000	O
1,1,2,2-Tetrachloroethane	0.50707	0.51049	0.54291	0.53537	0.52643	0.56404	AVG		0.53105		4.00971	15.00000	O
1,3,5-Trimethylbenzene	1.78511	1.71397	1.85083	1.83176	1.75367	1.56727	AVG		1.75044		5.86975	15.00000	O
2-Chlorotoluene	1.46431	1.43003	1.52220	1.49751	1.43293	1.34408	AVG		1.44851		4.31916	15.00000	O
1,2,3-Trichloropropane	0.42668	0.44586	0.45533	0.45139	0.44145	0.46830	AVG		0.44817		3.12255	15.00000	O
4-Chlorotoluene	1.56837	1.53212	1.63450	1.59779	1.52801	1.42547	AVG		1.54771		4.66284	15.00000	O
tert-Butylbenzene	1.60781	1.55659	1.68770	1.67870	1.63991	1.53486	AVG		1.61759		3.89112	15.00000	O
1,2,4-Trimethylbenzene	1.81232	1.80089	1.88760	1.85931	1.78662	1.63191	AVG		1.79644		4.96017	15.00000	O
P-Isopropyltoluene	1.82125	1.84341	1.94913	1.93066	1.86558	1.71080	AVG		1.85347		4.62550	15.00000	O
1,3-Dichlorobenzene	0.96646	0.95072	0.98396	0.99425	0.98117	0.95300	AVG		0.97159		1.82144	15.00000	O
1,4-Dichlorobenzene	1.03099	0.97442	1.02183	1.00796	0.99500	0.95950	AVG		0.99828		2.76231	15.00000	O
N-Butylbenzene	2.03224	1.91092	2.03730	1.99227	1.89906	1.69307	AVG		1.92748		6.69508	15.00000	O
sec-Butylbenzene	2.35725	2.25542	2.40114	2.32631	2.24630	1.98457	AVG		2.26183		6.55252	15.00000	O
1,2-Dichlorobenzene	0.91975	0.90998	0.94890	0.95103	0.95226	0.91691	AVG		0.93314		2.09629	15.00000	O
1,2-Dibromo-3-Chloropropane	0.10633	0.10330	0.12199	0.12600	0.12802	0.13731	AVG		0.12049		10.9366	15.00000	O
1,3,5-Trichlorobenzene	0.64550	0.63924	0.68555	0.65499	0.68423	0.67808	AVG		0.66460		3.08791	15.00000	O
Hexachlorobutadiene	0.42273	0.40119	0.41814	0.42368	0.38782	0.37102	AVG		0.40410		5.30288	15.00000	O
1,2,4-Trichlorobenzene	0.76253	0.76505	0.81865	0.78058	0.72970	0.66816	AVG		0.75411		6.77187	15.00000	O
Naphthalene	1.87773	1.89681	1.97382	1.87830	1.70684	1.44936	AVG		1.79714		10.6551	15.00000	O
1,2,3-Trichlorobenzene	0.72062	0.73695	0.76092	0.74114	0.69336	0.63785	AVG		0.71514		6.16709	15.00000	O
Methyl Acetate	0.25863	0.25516	0.27599	0.23933	0.21357	0.24791	AVG		0.24843		8.45746	15.00000	O
Methylcyclohexane	0.49886	0.51736	0.55756	0.59664	0.60469	0.61043	AVG		0.56426		8.43846	15.00000	O
Dibromofluoromethane	0.25991	0.24312	0.26883	0.30556	0.29647	0.29284	AVG		0.27779		8.74216	15.00000	

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-W
Lab File IDs : W3148.D W3147.D W3146.D W3145.D W3150.D W3149.D **Column ID:**
Calibration Date(s): 30-JUN-15 09:53 30-JUN-15 12:34

1,2-Dichloroethane-D4	0.37054	0.33612	0.37232	0.40711	0.40688	0.39460	AVG		0.38126		7.16902	15.00000	
Toluene-D8	0.66908	0.61838	0.66885	0.77273	0.73262	0.68985	AVG		0.69192		7.82373	15.00000	
P-Bromofluorobenzene	0.26894	0.25127	0.26941	0.31179	0.31689	0.32275	AVG		0.29018		10.49584	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-w.i\W063015.b\W3151A.D
Report Date: 01-Jul-2015 11:54

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: WG165742-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-w.i\W063015.b\W826SB05.m
Misc Info: WG165742,WG165742-4

Client SDG: WG165742
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: LCS
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	66.5	132.95*	80-120
	2 Chloromethane	50.0	65.3	130.69*	80-120
	3 Vinyl chloride	50.0	57.7	115.38	80-120
	4 Bromomethane	50.0	59.6	119.12	80-120
	5 Chloroethane	50.0	71.0	141.92*	80-120
	6 Trichlorofluoromet	50.0	60.0	119.92	80-120
	7 Diethyl Ether	50.0	52.4	104.85	80-120
	8 Tertiary-butyl alc	250	265	105.93	80-120
	9 1,1-Dichloroethene	50.0	56.2	112.49	80-120
	10 Carbon Disulfide	50.0	56.1	112.28	80-120
	11 Freon-113	50.0	55.6	111.15	80-120
	12 Iodomethane	50.0	45.6	91.17	80-120
	13 Acrolein	250	286	114.45	80-120
	14 Methylene Chloride	50.0	44.5	89.06	80-120
	15 Acetone	50.0	56.2	112.48	80-120
	16 Isobutyl Alcohol	1000	1020	101.73	80-120
	17 trans-1,2-Dichloro	50.0	53.4	106.91	80-120
	18 Allyl Chloride	50.0	52.0	104.02	80-120
	19 Methyl tert-butyl	100	114	113.60	80-120
	20 Acetonitrile	500	530	105.92	80-120
	21 Di-isopropyl ether	50.0	55.1	110.16	80-120
	22 Chloroprene	50.0	53.4	106.82	80-120
	23 Propionitrile	500	542	108.44	80-120
	24 Methacrylonitrile	500	541	108.21	80-120
	25 1,1-Dichloroethane	50.0	56.8	113.67	80-120
	26 Acrylonitrile	250	271	108.52	80-120
	27 Ethyl tertiary-but	50.0	54.2	108.31	80-120
	28 Vinyl Acetate	50.0	63.1	126.14*	80-120
	29 cis-1,2-Dichloroet	50.0	51.1	102.17	80-120
M	30 1,2-Dichloroethyle	100	104	104.54	80-120
	31 Methyl Methacrylat	50.0	49.8	99.56	80-120
	32 2,2-Dichloropropan	50.0	58.6	117.27	80-120
	33 Bromochloromethane	50.0	53.4	106.74	80-120
	34 Chloroform	50.0	53.5	106.96	80-120
	35 Carbon Tetrachlori	50.0	55.0	110.08	80-120
	36 Tetrahydrofuran	50.0	54.1	108.17	80-120
	38 1,1,1-Trichloroeth	50.0	54.3	108.61	80-120
	39 1,1-Dichloropropen	50.0	54.8	109.56	80-120
	40 2-Butanone	50.0	53.9	107.72	80-120
	41 Benzene	50.0	52.8	105.64	80-120

Data File: \\target_server\gg\chem\gcms-w.i\W063015.b\W3151A.D
Report Date: 01-Jul-2015 11:54

	SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
	43 Cyclohexane	50.0	56.6	113.28	80-120
	44 Ethyl Methacrylate	50.0	50.4	100.89	80-120
	46 Tertiary-amyl meth	50.0	55.7	111.39	80-120
	47 1,2-Dichloroethane	50.0	53.0	105.98	80-120
	48 Trichloroethene	50.0	53.3	106.64	80-120
	50 Dibromomethane	50.0	52.2	104.43	80-120
	51 1,2-Dichloropropan	50.0	52.4	104.85	80-120
	52 Bromodichlorometha	50.0	54.9	109.89	80-120
	53 cis-1,3-dichloropr	50.0	56.1	112.14	80-120
	54 1,4-Dioxane	1000	1090	109.41	80-120
	56 2-Chloroethylviny	50.0	0.00	*	80-120
	57 Toluene	50.0	53.2	106.35	80-120
	58 4-methyl-2-pentano	50.0	56.3	112.68	80-120
	59 Tetrachloroethene	50.0	53.9	107.75	80-120
	60 trans-1,3-Dichloro	50.0	59.5	119.10	80-120
	61 1,1,2-Trichloroeth	50.0	52.1	104.14	80-120
	62 Dibromochlorometha	50.0	55.8	111.64	80-120
	63 1,3-Dichloropropan	50.0	51.6	103.25	80-120
	64 1,2-Dibromoethane	50.0	52.1	104.26	80-120
	65 2-Hexanone	50.0	57.3	114.53	80-120
	67 Chlorobenzene	50.0	53.5	106.93	80-120
	152 1-Chlorohexane	50.0	56.6	113.27	80-120
	68 Ethylbenzene	50.0	53.7	107.38	80-120
	69 1,1,1,2-Tetrachlor	50.0	52.8	105.67	80-120
M	70 Xylenes (total)	150	161	107.46	80-120
	71 m+p-Xylenes	100	108	107.66	80-120
	72 o-Xylene	50.0	53.5	107.05	80-120
	73 Styrene	50.0	55.5	111.06	80-120
	74 Bromoform	50.0	55.7	111.38	80-120
	75 Isopropylbenzene	50.0	55.4	110.77	80-120
	77 cis-1,4-Dichloro-2	50.0	54.1	108.18	80-120
	78 trans-1,4-Dichloro	50.0	54.3	108.56	80-120
	79 Bromobenzene	50.0	52.9	105.81	80-120
	80 N-Propylbenzene	50.0	56.7	113.36	80-120
	81 1,1,2,2-Tetrachlor	50.0	51.8	103.63	80-120
	82 1,3,5-Trimethylben	50.0	53.5	106.92	80-120
	83 2-Chlorotoluene	50.0	54.9	109.84	80-120
	84 1,2,3-Trichloropro	50.0	52.2	104.38	80-120
	85 4-Chlorotoluene	50.0	54.8	109.56	80-120
	86 tert-Butylbenzene	50.0	55.5	110.93	80-120
	87 Pentachloroethane	50.0	53.8	107.58	80-120
	88 1,2,4-Trimethylben	50.0	55.0	110.03	80-120
	89 P-Isopropyltoluene	50.0	56.2	112.42	80-120
	90 1,3-Dichlorobenzen	50.0	54.0	108.08	80-120
	92 1,4-Dichlorobenzen	50.0	53.3	106.66	80-120
	93 N-Butylbenzene	50.0	56.2	112.33	80-120
	94 sec-Butylbenzene	50.0	56.0	111.92	80-120
	95 1,2-Dichlorobenzen	50.0	53.9	107.85	80-120
	96 1,2-Dibromo-3-Chlo	50.0	57.2	114.41	80-120
	97 1,3,5-Trichloroben	50.0	54.9	109.86	80-120
	98 Hexachlorobutadien	50.0	54.6	109.23	80-120
	99 1,2,4-Trichloroben	50.0	54.8	109.71	80-120
	100 1,2,3-Trimethylben	50.0	54.7	109.46	80-120
	101 Naphthalene	50.0	58.3	116.63	80-120

Data File: \\target_server\gg\chem\gcms-w.i\W063015.b\W3151A.D
Report Date: 01-Jul-2015 11:54

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	53.8	107.58	80-120
103 Methyl Acetate	50.0	53.1	106.21	80-120
104 Methylcyclohexane	50.0	57.9	115.85	80-120
M 153 Total Alkylbenzene	350	389	111.13	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/kg	AMOUNT RECOVERED ug/kg	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	54.0	108.04	64-130
$ 45 1,2-Dichloroethane	50.0	54.0	108.01	58-134
$ 55 Toluene-D8	50.0	53.4	106.85	67-118
$ 76 P-Bromofluorobenze	50.0	53.6	107.27	47-119

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4463
Lab ID : WG165466-4
Analytical Date: 06/25/15 10:55
Lab File ID : T3909.D
Instrument ID: GCMS-T
Initial Calibration Date(s): 06/22/15 10:03 06/22/15 13:12
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1 Dichlorodifluoromethane	0.61467	0.54719	0.54719	0.010	-10.97743	20.00000	Averaged	
2 Chloromethane	0.92185	0.79848	0.79848	0.100	-13.38252	20.00000	Averaged	
3 Vinyl chloride	0.82787	0.83713	0.83713	0.010	1.11896	20.00000	Averaged	
4 Bromomethane	0.48669	0.57470	0.57470	0.010	18.08313	20.00000	Averaged	
5 Chloroethane	0.45545	0.31305	0.31305	0.010	-31.26518	20.00000	Averaged	*
6 Trichlorofluoromethane	0.94666	0.98387	0.98387	0.010	3.93058	20.00000	Averaged	
7 Diethyl Ether	0.58123	0.62322	0.62322	0.010	7.22495	20.00000	Averaged	
9 1,1-Dichloroethene	0.60561	0.66620	0.66620	0.010	10.00522	20.00000	Averaged	
10 Carbon Disulfide	2.15291	2.30398	2.30398	0.010	7.01707	20.00000	Averaged	
11 Freon-113	0.45066	0.47745	0.47745	0.010	5.94346	20.00000	Averaged	
14 Methylene Chloride	0.81556	1.06272	1.06272	0.010	30.30644	20.00000	Averaged	*
15 Acetone	0.18859	0.17791	0.17791	0.010	-5.66666	20.00000	Averaged	
17 trans-1,2-Dichloroethene	0.66031	0.72241	0.72241	0.010	9.40550	20.00000	Averaged	
19 Methyl tert-butyl ether	100	84.40663	0.71811	0.010	-15.59337	20.00000	Linear	
21 Di-isopropyl ether	2.10846	1.99330	1.99330	0.010	-5.46180	20.00000	Averaged	
25 1,1-Dichloroethane	1.22961	1.38459	1.38459	0.100	12.60402	20.00000	Averaged	
28 Vinyl Acetate	50.00000	49.60015	0.66086	0.010	-0.79971	20.00000	Linear	
29 cis-1,2-Dichloroethene	0.81524	0.92497	0.92497	0.010	13.45946	20.00000	Averaged	
30 1,2-Dichloroethylene (total	++++	0.82369	0.82369	0.010	++++	20.00000	Averaged	*
32 2,2-Dichloropropane	50.00000	54.67762	0.91139	0.010	9.35523	20.00000	Linear	
33 Bromochloromethane	0.33921	0.39299	0.39299	0.010	15.85561	20.00000	Averaged	
34 Chloroform	1.17975	1.31730	1.31730	0.010	11.65989	20.00000	Averaged	
35 Carbon Tetrachloride	0.47457	0.49612	0.49612	0.010	4.54092	20.00000	Averaged	
36 Tetrahydrofuran	0.22063	0.21482	0.21482	0.010	-2.63655	20.00000	Averaged	
38 1,1,1-Trichloroethane	0.95399	0.99658	0.99658	0.010	4.46387	20.00000	Averaged	
39 1,1-Dichloropropene	0.54749	0.54530	0.54530	0.010	-0.40041	20.00000	Averaged	
40 2-Butanone	250	217	0.28266	0.010	-13.17767	20.00000	Linear	
41 Benzene	1.64093	1.67550	1.67550	0.010	2.10628	20.00000	Averaged	
43 Cyclohexane	1.10142	1.17937	1.17937	0.010	7.07675	20.00000	Averaged	
47 1,2-Dichloroethane	0.50906	0.52316	0.52316	0.010	2.77058	20.00000	Averaged	
48 Trichloroethene	0.40414	0.38909	0.38909	0.010	-3.72212	20.00000	Averaged	
50 Dibromomethane	0.24537	0.26008	0.26008	0.010	5.99507	20.00000	Averaged	
51 1,2-Dichloropropane	0.43325	0.42147	0.42147	0.010	-2.71894	20.00000	Averaged	
52 Bromodichloromethane	0.52259	0.55687	0.55687	0.010	6.55915	20.00000	Averaged	
53 cis-1,3-dichloropropene	0.60362	0.62591	0.62591	0.010	3.69208	20.00000	Averaged	
57 Toluene	1.02803	1.06183	1.06183	0.010	3.28834	20.00000	Averaged	
58 4-methyl-2-pentanone	0.39146	0.33604	0.33604	0.010	-14.15699	20.00000	Averaged	
59 Tetrachloroethene	0.34859	0.32156	0.32156	0.010	-7.75312	20.00000	Averaged	
60 trans-1,3-Dichloropropene	0.48845	0.49055	0.49055	0.010	0.43135	20.00000	Averaged	
61 1,1,2-Trichloroethane	0.30899	0.28881	0.28881	0.010	-6.53070	20.00000	Averaged	
62 Dibromochloromethane	50.00000	43.66786	0.40351	0.010	-12.66428	20.00000	Linear	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4463
Lab ID : WG165466-4
Analytical Date: 06/25/15 10:55
Lab File ID : T3909.D
Instrument ID: GCMS-T
Initial Calibration Date(s): 06/22/15 10:03 06/22/15 13:12
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
63 1,3-Dichloropropane	0.68657	0.62576	0.62576	0.010	-8.85777	20.00000	Averaged	
64 1,2-Dibromoethane	0.33435	0.34175	0.34175	0.010	2.21478	20.00000	Averaged	
65 2-Hexanone	0.30857	0.25573	0.25573	0.010	-17.12376	20.00000	Averaged	
67 Chlorobenzene	1.22035	1.22702	1.22702	0.300	0.54690	20.00000	Averaged	
68 Ethylbenzene	0.66705	0.67918	0.67918	0.010	1.81826	20.00000	Averaged	
70 Xylenes (total)	++++	0.82094	0.82094	0.010	++++	20.00000	Averaged	*
71 m+p-Xylenes	0.79822	0.82893	0.82893	0.010	3.84725	20.00000	Averaged	
72 o-Xylene	0.78030	0.80496	0.80496	0.010	3.15976	20.00000	Averaged	
73 Styrene	1.33399	1.41556	1.41556	0.010	6.11517	20.00000	Averaged	
74 Bromoform	0.29112	0.27635	0.27635	0.100	-5.07373	20.00000	Averaged	
75 Isopropylbenzene	3.42424	3.39101	3.39101	0.010	-0.97047	20.00000	Averaged	
79 Bromobenzene	0.96240	0.94241	0.94241	0.010	-2.07749	20.00000	Averaged	
80 N-Propylbenzene	4.15497	4.10027	4.10027	0.010	-1.31645	20.00000	Averaged	
81 1,1,2,2-Tetrachloroethane	1.02852	0.90254	0.90254	0.300	-12.24918	20.00000	Averaged	
82 1,3,5-Trimethylbenzene	3.42424	3.39101	3.39101	0.010	-0.97047	20.00000	Averaged	
83 2-Chlorotoluene	2.52922	2.46797	2.46797	0.010	-2.42194	20.00000	Averaged	
84 1,2,3-Trichloropropane	0.79880	0.66738	0.66738	0.010	-16.45213	20.00000	Averaged	
85 4-Chlorotoluene	2.66450	2.65482	2.65482	0.010	-0.36328	20.00000	Averaged	
86 tert-Butylbenzene	3.06110	3.03709	3.03709	0.010	-0.78453	20.00000	Averaged	
88 1,2,4-Trimethylbenzene	3.03736	2.85439	2.85439	0.010	-6.02401	20.00000	Averaged	
89 P-Isopropyltoluene	3.39468	3.37055	3.37055	0.010	-0.71078	20.00000	Averaged	
90 1,3-Dichlorobenzene	1.82737	1.86035	1.86035	0.010	1.80491	20.00000	Averaged	
92 1,4-Dichlorobenzene	1.88436	1.87298	1.87298	0.010	-0.60374	20.00000	Averaged	
93 N-Butylbenzene	3.25520	3.25239	3.25239	0.010	-0.08609	20.00000	Averaged	
94 sec-Butylbenzene	3.86453	3.87184	3.87184	0.010	0.18919	20.00000	Averaged	
95 1,2-Dichlorobenzene	1.76421	1.79074	1.79074	0.010	1.50323	20.00000	Averaged	
96 1,2-Dibromo-3-Chloropropane	0.19525	0.16670	0.16670	0.010	-14.62000	20.00000	Averaged	
97 1,3,5-Trichlorobenzene	1.27104	1.44824	1.44824	0.010	13.94083	20.00000	Averaged	
98 Hexachlorobutadiene	0.67659	0.68746	0.68746	0.010	1.60652	20.00000	Averaged	
99 1,2,4-Trichlorobenzene	1.34366	1.38225	1.38225	0.010	2.87150	20.00000	Averaged	
101 Naphthalene	2.96524	2.81299	2.81299	0.010	-5.13456	20.00000	Averaged	
102 1,2,3-Trichlorobenzene	1.23198	1.21466	1.21466	0.010	-1.40608	20.00000	Averaged	
103 Methyl Acetate	0.47179	0.50431	0.50431	0.010	6.89153	20.00000	Averaged	
104 Methylcyclohexane	50.00000	41.81759	1.09645	0.010	-16.36483	20.00000	Quadratic	
37 Dibromofluoromethane	0.68974	0.71543	0.71543	0.010	3.72500	20.00000	Averaged	
45 1,2-Dichloroethane-D4	0.72077	0.73382	0.73382	0.010	1.81015	20.00000	Averaged	
55 Toluene-D8	1.50906	1.46416	1.46416	0.010	-2.97524	20.00000	Averaged	
76 P-Bromofluorobenzene	0.61160	0.60844	0.60844	0.010	-0.51624	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab ID : WG165466-4
Lab File ID : T3909.D
Initial Calibration Date(s): 06/22/15 10:03 06/22/15 13:12

SDG: SI4463
Analytical Date: 06/25/15 10:55
Instrument ID: GCMS-T
Column ID:

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

Organics Vial Prep Log

Methods: SW8260 SW8015 ME DEP 4.2.17 MA DEP VPH

Date	Analyst	Vial Number	Vial + Preservative (g)	Vial + Preservative + Sample (g)	Sample Weight (g)	Preservative	Preservative Volume (mL)	Sample Name	Comments
52815	DEW	88740	34.93			DI / MEOH / NaHSO4	5 / 10		
		88741	34.93			DI / MEOH / NaHSO4	5 / 10		
		88742	34.69			DI / MEOH / NaHSO4	5 / 10		
		88743	34.83			DI / MEOH / NaHSO4	5 / 10		
		88744	34.16			DI / MEOH / NaHSO4	5 / 10		
		88745	33.28			DI / MEOH / NaHSO4	5 / 10		
52915	DEW	88746	34.75			DI / MEOH / NaHSO4	5 / 10		
		88747	34.96	41.14	6.18	DI / MEOH / NaHSO4	5 / 10	SI4291-5 B	
		88748	34.89	41.21	6.32	DI / MEOH / NaHSO4	5 / 10	SI4291-5 C	
		88749	34.63	40.66	6.03	DI / MEOH / NaHSO4	5 / 10	SI4463-3 C	
		88750	35.02			DI / MEOH / NaHSO4	5 / 10		
		88751	35.09	41.22	6.13	DI / MEOH / NaHSO4	5 / 10	SI4463-3B	
		88752	34.83			DI / MEOH / NaHSO4	5 / 10		
		88753	35.20			DI / MEOH / NaHSO4	5 / 10		
		88754	35.19			DI / MEOH / NaHSO4	5 / 10		
		88755	36.97			DI / MEOH / NaHSO4	5 / 10		
		88756	34.15	39.34	5.19	DI / MEOH / NaHSO4	5 / 10	SI4110-1 B	
		88757	34.92	40.15	5.23	DI / MEOH / NaHSO4	5 / 10	SI4110-1 C	
		88758	34.95			DI / MEOH / NaHSO4	5 / 10		
		88759	35.25	41.47	6.22	DI / MEOH / NaHSO4	5 / 10	SI4291-1 B	

40 mL Vial Lot # 121514 3AVF
MeOH Lot #: DM027
NaSO4 Lot #: BCBH6672V

DI Preservative = Deionized Water +Stirbar
NaHSO4 Preservative = 20% NaSO4 Solution + stirbar

KATAHDIN ANALYTICAL SERVICES

Organics Vial Prep Log

Methods: SW8260 SW8015 ME DEP 4.2.17 MA DEP VPH

Date	Analyst	Vial Number	Vial + Preservative (g)	Vial + Preservative + Sample (g)	Sample Weight (g)	Preservative		Preservative Volume (mL)		Sample Name	Comments
5/29/15	DEN	88760	34.93	40.44	5.51	DI / MEOH	NaHSO4	5	10	SI4291-1 D	
		88761	35.26			DI / MEOH	NaHSO4	5	10		
		88762	34.66	40.77	6.11 ✓	DI / MEOH	NaHSO4	5	10	SI4463-1 C	
		88763	35.16	37.44	2.28 ✓	DI / MEOH	NaHSO4	5	10	SI4463-1 B	
		88764	34.91			DI / MEOH	NaHSO4	5	10		
		88765	34.92	41.90	6.98	DI / MEOH	NaHSO4	5	10	SI4291-8 B	
		88766	34.58			DI / MEOH	NaHSO4	5	10		
		88767	35.03			DI / MEOH	NaHSO4	5	10		
		88768	35.30	41.56	6.26	DI / MEOH	NaHSO4	5	10	SI4615-1 C	
		88769	34.83	41.55	6.72	DI / MEOH	NaHSO4	5	10	SI4615-1 B	
		88770	35.24	42.01	6.77	DI / MEOH	NaHSO4	5	10	SI4463-5 D	
		88771	35.26	43.39	8.13	DI / MEOH	NaHSO4	5	10	SI4463-5C	
		88772	35.28	41.24	5.96	DI / MEOH	NaHSO4	5	10	SI4463-5 B	
		88773	34.69	38.88	4.19	DI / MEOH	NaHSO4	5	10	SI4291-3 B	
		88774	35.[illegible]16			DI / MEOH	NaHSO4	5	10		
		88775	35.12	40.57	5.45	DI / MEOH	NaHSO4	5	10	SI4291-3 C	
		88776	35.15	35.33	0.18	DI / MEOH	NaHSO4	5	10	SI4110-3 A	TB
		88777	35.32			DI / MEOH	NaHSO4	5	10		
		88778	35.22			DI / MEOH	NaHSO4	5	10		
		88779	35.25			DI / MEOH	NaHSO4	5	10		

40 mL Vial Lot # 032315-3AVF
MeOH Lot #:
NaSO4 Lot #: BCB H606,22 ✓

DI Preservative = Deionized Water +Stirbar
NaHSO4 Preservative = 20% NaSO4 Solution + stirbar

Katahdin Analytical Services 0000094

KATAHDIN ANALYTICAL SERVICES

Organics Vial Prep Log

Methods: SW8260 SW8015 ME DEP 4.2.17 MA DEP VPH

Date	Analyst	Vial Number	Vial + Preservative (g)	Vial + Preservative + Sample (g)	Sample Weight (g)	Preservative	Preservative Volume (mL)	Sample Name	Comments
5.29.15	DEW	88780	35.13			DI / MEOH / NaHSO4	5 / 10		
		88781	34.83			DI / MEOH / NaHSO4	5 / 10		
		88782	35.39	35.61	0.22	DI / MEOH / NaHSO4	5 / 10	SI4463-7B	
		88783	35.25			DI / MEOH / NaHSO4	5 / 10		
		88784	35.18			DI / MEOH / NaHSO4	5 / 10		
		88785	32.72			DI / MEOH / NaHSO4	5 / 10		
		88786	33.22			DI / MEOH / NaHSO4	5 / 10		
		88787	32.98			DI / MEOH / NaHSO4	5 / 10		
		88788	32.85			DI / MEOH / NaHSO4	5 / 10		
		88789	32.93			DI / MEOH / NaHSO4	5 / 10		
		88790	33.25			DI / MEOH / NaHSO4	5 / 10		
		88791	32.87			DI / MEOH / NaHSO4	5 / 10		
		88792	33.15			DI / MEOH / NaHSO4	5 / 10		
		88793	32.62			DI / MEOH / NaHSO4	5 / 10		
		88794	32.77			DI / MEOH / NaHSO4	5 / 10		
		88795	33.35			DI / MEOH / NaHSO4	5 / 10		
		88796	32.93			DI / MEOH / NaHSO4	5 / 10		
		88797	31.80			DI / MEOH / NaHSO4	5 / 10		
6.1.15	DEW	88798	40.83			DI / MEOH / NaHSO4	5 / 10		
↓	↓	88799	40.51			DI / MEOH / NaHSO4	5 / 10		

40 mL Vial Lot # 032315-3AVF
MeOH Lot #: DM027
NaSO4 Lot #: BCBH6622V

DI Preservative = Deionized Water +Stirbar
NaHSO4 Preservative = 20% NaSO4 Solution + stirbar

KATAHDIN ANALYTICAL SERVICES

GCMS-T INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06-22-15 / 9:26

SAMPLE NAME		DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB	10	TB916	1	-1	VOABFB5L							Y	EME		
VSTD050T22A	4	T3885	1	1	T8265B33							Y			
020	3	86	1	2								Y			
010	2	87	1	3								Y			
~~200~~ 005	1	88	1	4								Y			
200	6	89	1	5								Y			
100	5	90	1	6								Y			
LCS A [illegible]	8	91	1	7								Y			IND (7)
VBLK A		92	1	8								N			
B	9	93	1	9								Y			1SST (DoD) no hits
SI4291-1	B	94	1	10			X			X		Y			2ISL 2SST 1SSL
-1RA	D	95	1	11								Y			2ISL 1SST 2SSL
-3	B	96	1	12								Y			4ISL 1SSL
-3RA	C	97	1	13								Y			4ISL 2SSL
-5	B	98	1	14								Y			2ISL 1SST 2SSL
-5RA	C	99	1	15								Y			2ISL 2SST 2SSL
-8	B	T3900	1	16								Y			19:45 ← 1ISL 3SSL matrix no remaining vials
Rinse		01	1	17								N			
Rinse		02	1	18								N			
Rinse		03	1	19								N			
Rinse		04	1	20								N			

06/22/15 REC

STANDARD	CODE
BFB	V9879
CAL. STD.	V9906, V9907
LCS/MS MIX	V9900
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9893
SS MIX	V9896

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS568

VOA-009 - Revision 1 - 03/10/2010

QAMS568

Katahdin Analytical Services 0000097

0000047

KATAHDIN ANALYTICAL SERVICES

GCMS-T INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06/25/15 8:43

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ③	TB918	1	1	VOABEBAQ							Y	EME		
VSTD050T25A	T3908	1	1	TQ65B33							N			
↓ B ④	09	1	2								Y			
LCS A [WG165466] ①	10	1	3								Y			
VBLK A	11	1	4								N			
↓ B ②	12	1	5								Y			1SSP Acetone 1/2PQL
SI4463-7 B	13	1	6			X			X		Y			2SSP Acetone PQL
-1 B	14	1	7			X					Y			4IS↓ 2SSP 2SS↓
-1RA C	15	1	8			X					Y			2IS↓ 3SSP 2SS↓
-3 B	16	1	9			X					Y			4IS↓ 3SS↓
-3RA C	17	1	10			X					Y			4IS↓ 3SSP
-5 B	18	1	11			X					Y			4IS↓ 1SSP 2SS↓
-5RA C	19	1	12			X					N			17:27 4IS↓, Bad inj.
Rinse	20	1	13								N			
Rinse	21	1	14								N			
LOD @2.5	22	1	15											
LOD @2.5	23	1	16											
LOD @3.75	24	1	17											
LOD @3.75	25	1	18											
Rinse	26	1	19								N			
Rinse	27	1	20								N			
														06/29/15 RFL

STANDARD	CODE
BFB	V9879
CAL. STD.	V9910, V9907
LCS/MS MIX	V9900
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9893
SS MIX	V9896

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

KATAHDIN ANALYTICAL SERVICES

GCMS-W INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06/30/15 9:30

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB -10	WB190	1	-1	VOABFBSL							Y	~~RECEIVED~~		
VSTD050W30A	W3145	1	1	W8260SB05							Y	06/30/15 REC		W6165742-4
VSTD020W30A	46	1	2								Y			-3
VSTD010W30A	47	1	3								Y			-2
VSTD005W30A	48	1	4								Y			-1
VSTD200W30A	49	1	5								Y			-6
VSTD100W30A	50	1	6								Y			-5
LCSA -8	51	1	7								Y			-7
VBLKA	52	1	8								N			
VBLKB -9	53	1	9								Y			Acetone CX PAL
SI4615-3 B	54	1	10			X			X		Y			~~3ISL~~ 07/01/15 REC
SI4463-5RA2 D	55	1	11								Y			1ISL 2SSA 1SSL
SI4615-1 B	56	1	12								Y			3ISL 2SSA 1SSL
1 -1RA C	57	1	13								Y			4ISL 2SSA 2SSL
Rinse	58	1	14								N			
Rinse	59	1	15								N			17:49
Rinse	60	1	16								N			
Rinse	61	1	17								N			
														07/01/15 REC

STANDARD	CODE
BFB	V9879
CAL. STD.	V9910 V9911
LCS/MS MIX	V9912
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9914
SS MIX	V9915

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS562

0000084

Katahdin Analytical Services 0000098

SPLP VOLATILE DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4463

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SITE 4TS-SEE1-B	SI4463-2DL		91.9		89.5		95.4		94.2	
SITE 4TS-SEE2-B	SI4463-4DL		95.1		90.4		98.0		96.4	
SITE 4TS-SEE1-PT	SI4463-6DL		94.9		94.1		100.		96.6	
Laboratory Control S	WG165523-1		101.		99.0		99.4		103.	
Method Blank Sample	WG165523-2		96.8		94.1		98.5		98.1	
SPLP Blank	WG165523-5		94.6		90.5		97.7		96.0	

		QC Limits
DCA	1,2-DICHLOROETHANE-D4	70-120
BFB	P-BROMOFLUOROBENZENE	75-120
DBF	DIBROMOFLUOROMETHANE	85-115
TOL	TOLUENE-D8	85-120

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : P1640.D
Instrument ID : GCMS-P
Heated Purge : No

SDG : SI4463
Lab Sample ID : WG165523-2
Date Analyzed : 26-JUN-15
Time Analyzed : 11:43

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165523-1	P1637.D	06/26/15	09:52
SPLP Blank	WG165523-5	P1646.D	06/26/15	14:19
SITE 4TS-SEE1-B	SI4463-2DL	P1647.D	06/26/15	14:45
SITE 4TS-SEE2-B	SI4463-4DL	P1648.D	06/26/15	15:11
SITE 4TS-SEE1-PT	SI4463-6DL	P1649.D	06/26/15	15:37

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165523-2
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: P1640.D

Sample Date:
Received Date:
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165523-2
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: P1640.D

Sample Date:
Received Date:
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Xylenes (Total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
Bromochloromethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2,3-Trichloropropane	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,2-dibromo-3-chloropropane	U	0.50	ug/L	1	1	1.0	0.50	0.50
P-Bromofluorobenzene		96.8	%					
Toluene-d8		98.1	%					
1,2-Dichloroethane-d4		98.5	%					
Dibromofluoromethane		94.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165523-5
Client ID: SPLP Blank
Project:
SDG: SI4463
Lab File ID: P1646.D

Sample Date:
Received Date:
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	U	12.	ug/L	5	5	25.	5.6	12.
Acetone	U	12.	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12.	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12.	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12.	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165523-5
Client ID: SPLP Blank
Project:
SDG: SI4463
Lab File ID: P1646.D

Sample Date:
Received Date:
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		94.6	%					
Toluene-d8		96.0	%					
1,2-Dichloroethane-d4		97.7	%					
Dibromofluoromethane		90.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165523-1
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: P1637.D

Sample Date:
Received Date:
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	99.4	50.0	49.7	ug/L	30-155
Chloromethane	105.	50.0	52.4	ug/L	40-125
Vinyl Chloride	102.	50.0	51.0	ug/L	50-145
Bromomethane	98.0	50.0	49.0	ug/L	30-145
Chloroethane	112.	50.0	56.0	ug/L	60-135
Trichlorofluoromethane	111.	50.0	55.3	ug/L	60-145
1,1-Dichloroethene	103.	50.0	51.7	ug/L	70-130
Carbon Disulfide	104.	50.0	52.0	ug/L	35-160
Freon-113	111.	50.0	55.6	ug/L	73-126
Methylene Chloride	98.2	50.0	49.1	ug/L	55-140
Acetone	120.	50.0	59.8	ug/L	40-140
trans-1,2-Dichloroethene	108.	50.0	53.8	ug/L	60-140
Methyl tert-butyl Ether	112.	100.	112.	ug/L	65-125
1,1-Dichloroethane	109.	50.0	54.5	ug/L	70-135
cis-1,2-Dichloroethene	94.4	50.0	47.2	ug/L	70-125
Chloroform	103.	50.0	51.3	ug/L	65-135
1,1,1-Trichloroethane	108.	50.0	54.0	ug/L	65-130
2-Butanone	113.	50.0	56.6	ug/L	30-150
Cyclohexane	98.6	50.0	49.3	ug/L	71-133
Carbon Tetrachloride	115.	50.0	57.4	ug/L	65-140
Benzene	100.	50.0	50.2	ug/L	80-120
1,2-Dichloroethane	111.	50.0	55.6	ug/L	70-130
Trichloroethene	99.2	50.0	49.6	ug/L	70-125
1,2-Dichloropropane	100.	50.0	50.1	ug/L	75-125
Bromodichloromethane	107.	50.0	53.3	ug/L	75-120
cis-1,3-Dichloropropene	107.	50.0	53.7	ug/L	70-130
Toluene	101.	50.0	50.4	ug/L	75-120
4-Methyl-2-Pentanone	119.	50.0	59.7	ug/L	60-135
trans-1,3-Dichloropropene	120.	50.0	59.8	ug/L	55-140
1,1,2-Trichloroethane	102.	50.0	51.0	ug/L	75-125
Tetrachloroethene	103.	50.0	51.5	ug/L	45-150
Dibromochloromethane	110.	50.0	54.8	ug/L	60-135
2-Hexanone	118.	50.0	59.2	ug/L	55-130
Chlorobenzene	100.	50.0	50.0	ug/L	80-120
Ethylbenzene	99.0	50.0	49.5	ug/L	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165523-1
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: P1637.D

Sample Date:
Received Date:
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
1,2-Dibromoethane	108.	50.0	53.8	ug/L	80-120
M+P-Xylenes	105.	100.	105.	ug/L	75-130
o-Xylene	105.	50.0	52.4	ug/L	80-120
Xylenes (Total)	105.	150.	157.	ug/L	89-116
Styrene	106.	50.0	53.0	ug/L	65-135
Bromoform	113.	50.0	56.5	ug/L	70-130
Isopropylbenzene	102.	50.0	51.2	ug/L	75-125
1,1,2,2-Tetrachloroethane	98.6	50.0	49.3	ug/L	65-130
1,3-Dichlorobenzene	97.8	50.0	48.9	ug/L	75-125
1,4-Dichlorobenzene	98.8	50.0	49.4	ug/L	75-125
1,2-Dichlorobenzene	100.	50.0	50.1	ug/L	70-120
1,2,4-Trichlorobenzene	101.	50.0	50.4	ug/L	65-135
Methyl Acetate	117.	50.0	58.5	ug/L	70-132
Methylcyclohexane	108.	50.0	54.2	ug/L	73-125
Bromochloromethane	99.2	50.0	49.6	ug/L	65-130
1,2,3-Trichloropropane	106.	50.0	53.0	ug/L	75-125
1,2-dibromo-3-chloropropane	117.	50.0	58.6	ug/L	50-130
P-Bromofluorobenzene	101.				75-120
Toluene-d8	103.				85-120
1,2-Dichloroethane-d4	99.4				70-120
Dibromofluoromethane	99.0				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB295.D
Instrument ID : GCMS-P

SDG : SI4463
Date Analyzed : 22-JUN-15
Time Analyzed : 09:27
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	22.5		
75	30.0 - 60.0% of mass 95	50.9		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	8.0		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	65.3		
175	5.0 - 9.0% of mass 174	5.6	8.62	1
176	95.0 - 101.0% of mass 174	62.5	95.70	1
177	5.0 - 9.0% of mass 176	4.3	6.90	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165276-4	P1533.D	06/22/15	10:02
Initial Calibration	WG165276-3	P1534.D	06/22/15	10:29
Initial Calibration	WG165276-2	P1535.D	06/22/15	10:55
Initial Calibration	WG165276-1	P1536.D	06/22/15	11:21
Initial Calibration	WG165276-6	P1537.D	06/22/15	11:47
Initial Calibration	WG165276-5	P1538.D	06/22/15	12:13
Independent Source	WG165276-7	P1539A.D	06/22/15	12:59

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB299.D
Instrument ID : GCMS-P

SDG : SI4463
Date Analyzed : 26-JUN-15
Time Analyzed : 08:34
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	23.6		
75	30.0 - 60.0% of mass 95	53.0		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.7		
173	Less than 2.0% of mass 174	0.5	0.85	1
174	Greater than 50.0% of mass 95	62.9		
175	5.0 - 9.0% of mass 174	3.6	5.74	1
176	95.0 - 101.0% of mass 174	62.0	98.61	1
177	5.0 - 9.0% of mass 176	4.1	6.55	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165523-4	P1636.D	06/26/15	09:06
Laboratory Control S	WG165523-1	P1637.D	06/26/15	09:52
Method Blank Sample	WG165523-2	P1640.D	06/26/15	11:43
SPLP Blank	WG165523-5	P1646.D	06/26/15	14:19
SITE 4TS-SEE1-B	SI4463-2DL	P1647.D	06/26/15	14:45
SITE 4TS-SEE2-B	SI4463-4DL	P1648.D	06/26/15	15:11
SITE 4TS-SEE1-PT	SI4463-6DL	P1649.D	06/26/15	15:37

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165276-4
Lab File ID : P1533.D

SDG: SI4463
Analytical Date: 06/22/15 10:02
Instrument ID: GCMS-P

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	409293		8.72		766451		9.57		699533		13.93	
	Upper Limit	818586		9.22		1532902		10.07		1399066		14.43	
	Lower Limit	204646.5		8.22		383225.5		9.07		349766.5		13.43	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165523-4	356408		8.72		652241		9.58		610881		13.94	
Laboratory Control S	WG165523-1	356930		8.72		664238		9.57		604492		13.93	
Method Blank Sample	WG165523-2	372264		8.72		681559		9.58		625339		13.93	
SPLP Blank	WG165523-5	350816		8.72		646166		9.58		605230		13.93	
SITE 4TS-SEE1-B	SI4463-2DL	352606		8.72		643970		9.58		607064		13.94	
SITE 4TS-SEE2-B	SI4463-4DL	352445		8.72		650121		9.58		609257		13.93	
SITE 4TS-SEE1-PT	SI4463-6DL	350995		8.72		651387		9.58		609491		13.93	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165276-4
Lab File ID : P1533.D

SDG: SI4463
Analytical Date: 06/22/15 10:02
Instrument ID: GCMS-P

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	376902		16.92	
	Upper Limit	753804		17.42	
	Lower Limit	188451		16.42	
Client Sample ID	Lab Sample ID				
Continuing Calibrati	WG165523-4	353566		16.92	
Laboratory Control S	WG165523-1	346125		16.92	
Method Blank Sample	WG165523-2	343307		16.92	
SPLP Blank	WG165523-5	341565		16.93	
SITE 4TS-SEE1-B	SI4463-2DL	343185		16.92	
SITE 4TS-SEE2-B	SI4463-4DL	340275		16.93	
SITE 4TS-SEE1-PT	SI4463-6DL	339853		16.93	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-2DL
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: P1647.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	J	13	ug/L	5	5	25.	5.6	12.
Acetone	U	12	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-2DL
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: P1647.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		91.9	%					
Toluene-d8		94.2	%					
1,2-Dichloroethane-d4		95.4	%					
Dibromofluoromethane		89.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-4DL
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: P1648.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	U	12	ug/L	5	5	25.	5.6	12.
Acetone	U	12	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-4DL
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: P1648.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		95.1	%					
Toluene-d8		96.4	%					
1,2-Dichloroethane-d4		98.0	%					
Dibromofluoromethane		90.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-6DL
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: P1649.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	U	12	ug/L	5	5	25.	5.6	12.
Acetone	U	12	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-6DL
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: P1649.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 26-JUN-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165523

Analysis Date: 26-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		94.9	%					
Toluene-d8		96.6	%					
1,2-Dichloroethane-d4		100.	%					
Dibromofluoromethane		94.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1536.D P1535.D P1534.D P1533.D P1538.D P1537.D **Column ID:**
Calibration Date(s): 22-JUN-15 10:02 22-JUN-15 12:13

	Level 1 1.0000	Level 2 5.0000	Level 3 20.0000	Level 4 50.0000	Level 5 100.0000	Level 6 200.0000	Crv New	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.71991	0.64793	0.65273	0.68867	0.71376	0.67358	AVG		0.68276		4.43040	15.00000	O
Chloromethane	1.05365	0.91418	0.91249	0.96518	0.96130	1.04364	AVG		0.97507		6.28640	15.00000	O
Vinyl chloride	0.67640	0.69866	0.69303	0.72668	0.76449	0.73236	AVG		0.71527		4.47691	15.00000	O
Bromomethane	2161	12281	50033	141413	345778	617776	LNR	0.02370	0.38031		0.99741	0.99000	O
Chloroethane	4765	22347	93465	235608	315080	500563	QUA	0.01805	1.01089	1.91194	0.99228	0.99000	O
Trichlorofluoromethane	1.05539	0.88132	0.89902	0.95662	0.88002	1.03352	AVG		0.95098		8.19060	15.00000	O
1,1-Dichloroethene	0.48383	0.49724	0.50562	0.51835	0.52337	0.55233	AVG		0.51346		4.63801	15.00000	O
Carbon Disulfide	1.91590	1.70298	1.81864	1.96791	1.96121	1.92880	AVG		1.88257		5.47164	15.00000	O
Freon-113	0.33779	0.31231	0.31048	0.31669	0.35641	0.33078	AVG		0.32741		5.44557	15.00000	O
Methylene Chloride	10315	31973	122218	287284	603269	1149174	LNR	-0.01408	0.69234		0.99993	0.99000	O
Acetone	0.22360	0.22286	0.22696	0.23345	0.24087	0.22396	AVG		0.22862		3.13073	15.00000	O
trans-1,2-Dichloroethene	0.54343	0.52928	0.53499	0.56174	0.56553	0.54736	AVG		0.54706		2.62564	15.00000	O
Methyl tert-butyl ether	1.49918	1.68350	1.79965	1.82931	1.89366	1.57188	AVG		1.71286		9.05113	15.00000	O
1,1-Dichloroethane	1.06962	1.05046	1.06445	1.05825	1.08594	1.04684	AVG		1.06259		1.33895	15.00000	O
cis-1,2-Dichloroethene	0.67154	0.64001	0.67597	0.66289	0.69061	0.67474	AVG		0.66929		2.52869	15.00000	O
Bromochloromethane	0.24614	0.25963	0.26684	0.26946	0.26022	0.25866	AVG		0.26016		3.12325	15.00000	O
Chloroform	1.13466	1.05314	1.08559	1.08617	1.09400	1.06096	AVG		1.08575		2.64962	15.00000	O
Carbon Tetrachloride	0.32974	0.34745	0.34149	0.36054	0.37367	0.35926	AVG		0.35203		4.44040	15.00000	O
1,1,1-Trichloroethane	0.87532	0.86723	0.90337	0.92499	0.94220	0.89080	AVG		0.90065		3.21088	15.00000	O
2-Butanone	0.25440	0.29325	0.29957	0.28998	0.30535	0.26034	AVG		0.28381		7.48252	15.00000	O
Benzene	1.29935	1.27451	1.29079	1.26836	1.27648	1.14955	AVG		1.25984		4.38327	15.00000	O
Cyclohexane	0.98260	0.94842	0.95244	0.96567	1.05404	0.95588	AVG		0.97651		4.08590	15.00000	O
1,2-Dichloroethane	0.49124	0.46409	0.48123	0.47081	0.45223	0.42609	AVG		0.46428		4.96877	15.00000	O
Trichloroethene	0.34335	0.32343	0.31989	0.31552	0.31620	0.30400	AVG		0.32040		4.06165	15.00000	O
1,2-Dichloropropane	0.32962	0.30581	0.31078	0.32033	0.32915	0.31738	AVG		0.31885		3.01328	15.00000	O
Bromodichloromethane	0.44768	0.42917	0.45277	0.46246	0.47078	0.45642	AVG		0.45321		3.14144	15.00000	O
cis-1,3-dichloropropene	0.46154	0.46912	0.51024	0.52965	0.55257	0.54056	AVG		0.51061		7.40581	15.00000	O
Toluene	0.84808	0.84328	0.83629	0.82510	0.84155	0.77551	AVG		0.82830		3.26300	15.00000	O
4-methyl-2-pentanone	0.25780	0.31011	0.33323	0.32280	0.32342	0.26174	AVG		0.30152		11.00487	15.00000	O
Tetrachloroethene	0.25186	0.24707	0.24160	0.24821	0.25657	0.24433	AVG		0.24827		2.15612	15.00000	O
trans-1,3-Dichloropropene	0.35641	0.40434	0.44234	0.46434	0.48052	0.46569	AVG		0.43561		10.78859	15.00000	O
1,1,2-Trichloroethane	0.24237	0.24575	0.25185	0.25225	0.25727	0.24739	AVG		0.24948		2.14196	15.00000	O
Dibromochloromethane	0.33125	0.33355	0.34399	0.35992	0.37268	0.36521	AVG		0.35110		4.92462	15.00000	O
1,2-Dibromoethane	0.25951	0.27529	0.29079	0.29902	0.30821	0.29705	AVG		0.28831		6.18963	15.00000	O
2-Hexanone	0.19410	0.23510	0.24878	0.24944	0.25714	0.21350	AVG		0.23301		10.51204	15.00000	O
Chlorobenzene	1.02910	0.98113	0.99287	0.97261	0.97917	0.89287	AVG		0.97462		4.60027	15.00000	O
Ethylbenzene	0.53946	0.53046	0.54708	0.52878	0.54353	0.50523	AVG		0.53242		2.84106	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1536.D P1535.D P1534.D **Column ID:**
P1533.D P1538.D P1537.D **Calibration Date(s):** 22-JUN-15 10:02
22-JUN-15 12:13

Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.67642	0.64943	0.68430	0.65681	0.63621	0.53007	AVG		0.63887		8.78523	15.00000	O
o-Xylene	0.60544	0.60584	0.68090	0.66227	0.66588	0.61354	AVG		0.63898		5.37314	15.00000	O
Styrene	1.01790	1.06902	1.18056	1.16717	1.14636	0.97868	AVG		1.09328		7.68530	15.00000	O
Bromoform	0.17783	0.19657	0.21366	0.22317	0.23477	0.22730	AVG		0.21222		10.07382	15.00000	O
Isopropylbenzene	3.03478	3.08062	3.25483	3.14588	3.04527	2.48623	AVG		3.00793		8.91525	15.00000	O
1,1,2,2-Tetrachloroethane	0.87382	0.86251	0.94110	0.90988	0.94434	0.83213	AVG		0.89396		5.06015	15.00000	O
1,2,3-Trichloropropane	0.66498	0.68672	0.73087	0.68952	0.71189	0.62763	AVG		0.68527		5.27863	15.00000	O
1,3-Dichlorobenzene	1.66015	1.52884	1.60105	1.55868	1.55689	1.36006	AVG		1.54428		6.55229	15.00000	O
1,4-Dichlorobenzene	1.74242	1.57152	1.62025	1.57991	1.58478	1.36191	AVG		1.57680		7.79816	15.00000	O
1,2-Dichlorobenzene	1.50839	1.47291	1.56665	1.50778	1.51909	1.31309	AVG		1.48132		5.92465	15.00000	O
1,2-Dibromo-3-Chloropropane	0.13637	0.15390	0.16536	0.16795	0.18308	0.16183	AVG		0.16142		9.64315	15.00000	O
1,2,4-Trichlorobenzene	0.90323	0.88225	0.96724	0.96720	1.04527	0.94973	AVG		0.95249		6.01475	15.00000	O
Methyl Acetate	0.44194	0.50779	0.50859	0.51636	0.55423	0.50870	AVG		0.50627		7.15095	15.00000	O
Methylcyclohexane	0.99301	0.93852	0.89140	0.89861	1.04239	0.91594	AVG		0.94665		6.28261	15.00000	O
Dibromofluoromethane	0.54146	0.54917	0.54382	0.55211	0.53342	0.52500	AVG		0.54083		1.86986	15.00000	
1,2-Dichloroethane-D4	0.84986	0.79987	0.78528	0.75705	0.70335	0.66171	AVG		0.75952		8.96510	15.00000	
Toluene-D8	1.12857	1.15803	1.14527	1.12648	1.07876	0.99941	AVG		1.10608		5.31517	15.00000	
P-Bromofluorobenzene	0.54037	0.52383	0.51143	0.50027	0.47926	0.46366	AVG		0.50314		5.63594	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG165276-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-p.i\P062215.b\P826A09.m
Misc Info: WG165276,WG165276-4

Client SDG: WG165276
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	51.4	102.84	80-120
	2 Chloromethane	50.0	57.1	114.19	80-120
	3 Vinyl chloride	50.0	54.7	109.46	80-120
	4 Bromomethane	50.0	53.3	106.52	80-120
	5 Chloroethane	50.0	63.7	127.50*	80-120
	6 Trichlorofluoromet	50.0	52.4	104.85	80-120
	7 Diethyl Ether	50.0	55.1	110.29	80-120
	8 Tertiary-butyl alc	250	225	90.12	80-120
	9 1,1-Dichloroethene	50.0	54.8	109.53	80-120
	10 Carbon Disulfide	50.0	56.4	112.76	80-120
	11 Freon-113	50.0	53.3	106.66	80-120
	12 Iodomethane	50.0	45.6	91.19	80-120
	13 Acrolein	250	280	112.03	80-120
	14 Methylene Chloride	50.0	51.9	103.83	80-120
	15 Acetone	50.0	52.2	104.38	80-120
	16 Isobutyl Alcohol	1000	964	96.36	80-120
	17 trans-1,2-Dichloro	50.0	57.4	114.70	80-120
	18 Allyl Chloride	50.0	56.0	111.99	80-120
	19 Methyl tert-butyl	100	114	114.18	80-120
	20 Acetonitrile	500	513	102.53	80-120
	21 Di-isopropyl ether	50.0	56.2	112.38	80-120
	22 Chloroprene	50.0	55.0	109.99	80-120
	23 Propionitrile	500	555	110.99	80-120
	24 Methacrylonitrile	500	552	110.32	80-120
	25 1,1-Dichloroethane	50.0	55.0	110.01	80-120
	26 Acrylonitrile	250	275	110.14	80-120
	27 Ethyl tertiary-but	50.0	56.9	113.75	80-120
	28 Vinyl Acetate	50.0	55.0	109.90	80-120
	29 cis-1,2-Dichloroet	50.0	48.8	97.63	80-120
M	30 1,2-Dichloroethyle	100	106	106.16	80-120
	31 Methyl Methacrylat	50.0	56.3	112.64	80-120
	32 2,2-Dichloropropan	50.0	53.1	106.25	80-120
	33 Bromochloromethane	50.0	52.1	104.18	80-120
	34 Chloroform	50.0	50.9	101.74	80-120
	35 Carbon Tetrachlori	50.0	51.9	103.77	80-120
	36 Tetrahydrofuran	50.0	52.9	105.89	80-120
	38 1,1,1-Trichloroeth	50.0	52.8	105.64	80-120
	39 1,1-Dichloropropen	50.0	52.8	105.72	80-120
	40 2-Butanone	50.0	50.1	100.15	80-120
	41 Benzene	50.0	51.4	102.80	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

	SPIKE	COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	43	Cyclohexane	50.0	49.0	98.00	80-120
	44	Ethyl Methacrylate	50.0	51.6	103.13	80-120
	46	Tertiary-amyl meth	50.0	56.6	113.21	80-120
	47	1,2-Dichloroethane	50.0	50.8	101.66	80-120
	48	Trichloroethene	50.0	50.5	101.02	80-120
	50	Dibromomethane	50.0	50.8	101.54	80-120
	51	1,2-Dichloropropan	50.0	51.4	102.77	80-120
	52	Bromodichlorometha	50.0	51.0	102.09	80-120
	53	cis-1,3-dichloropr	50.0	54.0	107.92	80-120
	54	1,4-Dioxane	1000	838	83.76	80-120
	56	2-Chloroethylvinyl	50.0	43.8	87.52	80-120
	57	Toluene	50.0	51.5	103.00	80-120
	58	4-methyl-2-pentano	50.0	54.2	108.35	80-120
	59	Tetrachloroethene	50.0	52.0	103.91	80-120
	60	trans-1,3-Dichloro	50.0	57.5	115.09	80-120
	61	1,1,2-Trichloroeth	50.0	50.8	101.67	80-120
	62	Dibromochlorometha	50.0	51.3	102.56	80-120
	63	1,3-Dichloropropan	50.0	49.1	98.19	80-120
	64	1,2-Dibromoethane	50.0	51.5	103.04	80-120
	65	2-Hexanone	50.0	53.5	107.07	80-120
	67	Chlorobenzene	50.0	51.0	101.98	80-120
	152	1-Chlorohexane	50.0	46.8	93.62	80-120
	68	Ethylbenzene	50.0	51.0	102.00	80-120
	69	1,1,1,2-Tetrachlor	50.0	52.8	105.71	80-120
M	70	Xylenes (total)	150	159	106.02	80-120
	71	m+p-Xylenes	100	106	106.27	80-120
	72	o-Xylene	50.0	52.8	105.53	80-120
	73	Styrene	50.0	54.0	107.97	80-120
	74	Bromoform	50.0	52.7	105.45	80-120
	75	Isopropylbenzene	50.0	53.9	107.85	80-120
	77	cis-1,4-Dichloro-2	50.0	49.2	98.43	80-120
	78	trans-1,4-Dichloro	50.0	54.1	108.29	80-120
	79	Bromobenzene	50.0	50.8	101.58	80-120
	80	N-Propylbenzene	50.0	55.7	111.37	80-120
	81	1,1,2,2-Tetrachlor	50.0	50.1	100.23	80-120
	82	1,3,5-Trimethylben	50.0	53.3	106.63	80-120
	83	2-Chlorotoluene	50.0	53.7	107.41	80-120
	84	1,2,3-Trichloropro	50.0	51.7	103.45	80-120
	85	4-Chlorotoluene	50.0	53.1	106.18	80-120
	86	tert-Butylbenzene	50.0	55.4	110.74	80-120
	87	Pentachloroethane	50.0	54.2	108.48	80-120
	88	1,2,4-Trimethylben	50.0	55.3	110.66	80-120
	89	P-Isopropyltoluene	50.0	53.8	107.64	80-120
	90	1,3-Dichlorobenzen	50.0	51.1	102.28	80-120
	92	1,4-Dichlorobenzen	50.0	50.5	101.04	80-120
	93	N-Butylbenzene	50.0	54.4	108.80	80-120
	94	sec-Butylbenzene	50.0	54.3	108.61	80-120
	95	1,2-Dichlorobenzen	50.0	51.7	103.42	80-120
	96	1,2-Dibromo-3-Chlo	50.0	54.6	109.25	80-120
	97	1,3,5-Trichloroben	50.0	53.0	105.99	80-120
	98	Hexachlorobutadien	50.0	52.6	105.26	80-120
	99	1,2,4-Trichloroben	50.0	51.0	101.94	80-120
	100	1,2,3-Trimethylben	50.0	54.4	108.83	80-120
	101	Naphthalene	50.0	51.3	102.70	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	52.5	104.92	80-120
103 Methyl Acetate	50.0	54.5	108.94	80-120
104 Methylcyclohexane	50.0	54.5	108.95	80-120
M 153 Total Alkylbenzene	350	382	109.21	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	48.2	96.44	68-128
$ 45 1,2-Dichloroethane	50.0	45.8	91.66	67-135
$ 55 Toluene-D8	50.0	50.7	101.48	65-128
$ 76 P-Bromofluorobenze	50.0	49.1	98.15	56-133

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4463
Lab ID : WG165523-4
Analytical Date: 06/26/15 09:06
Lab File ID : P1636.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/22/15 10:02 06/22/15 12:13
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1 Dichlorodifluoromethane	0.68276	0.55145	0.55145	0.010	-19.23233	20.00000	Averaged	
2 Chloromethane	0.97507	0.83003	0.83003	0.100	-14.87473	20.00000	Averaged	
3 Vinyl chloride	0.71527	0.63710	0.63710	0.010	-10.92887	20.00000	Averaged	
4 Bromomethane	50.00000	43.21049	0.31965	0.010	-13.57902	20.00000	Linear	
5 Chloroethane	50.00000	52.67956	0.51763	0.010	5.35912	20.00000	Quadratic	
6 Trichlorofluoromethane	0.95098	0.99395	0.99395	0.010	4.51821	20.00000	Averaged	
9 1,1-Dichloroethene	0.51346	0.50712	0.50712	0.100	-1.23449	20.00000	Averaged	
10 Carbon Disulfide	1.88257	1.90984	1.90984	0.010	1.44839	20.00000	Averaged	
11 Freon-113	0.32741	0.35712	0.35712	0.010	9.07226	20.00000	Averaged	
14 Methylene Chloride	50.00000	49.93789	0.70123	0.010	-0.12421	20.00000	Linear	
15 Acetone	0.22862	0.28290	0.28290	0.010	23.74313	20.00000	Averaged	*
17 trans-1,2-Dichloroethene	0.54706	0.54856	0.54856	0.010	0.27547	20.00000	Averaged	
19 Methyl tert-butyl ether	1.71286	1.79848	1.79848	0.010	4.99853	20.00000	Averaged	
25 1,1-Dichloroethane	1.06259	1.09682	1.09682	0.100	3.22162	20.00000	Averaged	
29 cis-1,2-Dichloroethene	0.66929	0.66331	0.66331	0.010	-0.89402	20.00000	Averaged	
33 Bromochloromethane	0.26016	0.26365	0.26365	0.010	1.34167	20.00000	Averaged	
34 Chloroform	1.08575	1.11861	1.11861	0.010	3.02639	20.00000	Averaged	
35 Carbon Tetrachloride	0.35203	0.41332	0.41332	0.010	17.41286	20.00000	Averaged	
38 1,1,1-Trichloroethane	0.90065	0.97888	0.97888	0.010	8.68613	20.00000	Averaged	
40 2-Butanone	0.28381	0.33394	0.33394	0.010	17.66067	20.00000	Averaged	
41 Benzene	1.25984	1.28001	1.28001	0.010	1.60138	20.00000	Averaged	
43 Cyclohexane	0.97651	1.01823	1.01823	0.010	4.27275	20.00000	Averaged	
47 1,2-Dichloroethane	0.46428	0.52584	0.52584	0.010	13.25822	20.00000	Averaged	
48 Trichloroethene	0.32040	0.32342	0.32342	0.010	0.94286	20.00000	Averaged	
51 1,2-Dichloropropane	0.31885	0.31440	0.31440	0.010	-1.39493	20.00000	Averaged	
52 Bromodichloromethane	0.45321	0.48797	0.48797	0.010	7.66858	20.00000	Averaged	
53 cis-1,3-dichloropropene	0.51061	0.53258	0.53258	0.010	4.30192	20.00000	Averaged	
57 Toluene	0.82830	0.83825	0.83825	0.010	1.20114	20.00000	Averaged	
58 4-methyl-2-pentanone	0.30152	0.36883	0.36883	0.010	22.32254	20.00000	Averaged	*
59 Tetrachloroethene	0.24827	0.25658	0.25658	0.010	3.34798	20.00000	Averaged	
60 trans-1,3-Dichloropropene	0.43561	0.48079	0.48079	0.010	10.37252	20.00000	Averaged	
61 1,1,2-Trichloroethane	0.24948	0.25832	0.25832	0.010	3.54191	20.00000	Averaged	
62 Dibromochloromethane	0.35110	0.37577	0.37577	0.010	7.02509	20.00000	Averaged	
64 1,2-Dibromoethane	0.28831	0.31028	0.31028	0.010	7.61849	20.00000	Averaged	
65 2-Hexanone	0.23301	0.28462	0.28462	0.010	22.14855	20.00000	Averaged	*
67 Chlorobenzene	0.97462	0.97602	0.97602	0.300	0.14354	20.00000	Averaged	
68 Ethylbenzene	0.53242	0.53592	0.53592	0.010	0.65629	20.00000	Averaged	
70 Xylenes (total)	++++	0.65718	0.65718	0.010	++++	20.00000	Averaged	*
71 m+p-Xylenes	0.63887	0.66232	0.66232	0.010	3.66966	20.00000	Averaged	
72 o-Xylene	0.63898	0.64690	0.64690	0.010	1.23948	20.00000	Averaged	
73 Styrene	1.09328	1.14674	1.14674	0.010	4.88977	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4463
Lab ID : WG165523-4
Analytical Date: 06/26/15 09:06
Lab File ID : P1636.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/22/15 10:02 06/22/15 12:13
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
74 Bromoform	0.21222	0.23420	0.23420	0.100	10.36105	20.00000	Averaged
75 Isopropylbenzene	3.00793	3.01149	3.01149	0.010	0.11841	20.00000	Averaged
81 1,1,2,2-Tetrachloroethane	0.89396	0.88684	0.88684	0.300	-0.79715	20.00000	Averaged
84 1,2,3-Trichloropropane	0.68527	0.70583	0.70583	0.010	3.00098	20.00000	Averaged
90 1,3-Dichlorobenzene	1.54428	1.49149	1.49149	0.010	-3.41844	20.00000	Averaged
92 1,4-Dichlorobenzene	1.57680	1.51585	1.51585	0.010	-3.86548	20.00000	Averaged
95 1,2-Dichlorobenzene	1.48132	1.46712	1.46712	0.010	-0.95853	20.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.16142	0.18413	0.18413	0.010	14.07136	20.00000	Averaged
99 1,2,4-Trichlorobenzene	0.95249	0.94226	0.94226	0.010	-1.07384	20.00000	Averaged
103 Methyl Acetate	0.50627	0.53697	0.53697	0.010	6.06457	20.00000	Averaged
104 Methylcyclohexane	0.94665	0.96387	0.96387	0.010	1.81975	20.00000	Averaged
37 Dibromofluoromethane	0.54083	0.54290	0.54290	0.010	0.38272	20.00000	Averaged
45 1,2-Dichloroethane-D4	0.75952	0.77771	0.77771	0.010	2.39496	20.00000	Averaged
55 Toluene-D8	1.10608	1.15817	1.15817	0.010	4.70934	20.00000	Averaged
76 P-Bromofluorobenzene	0.50314	0.52994	0.52994	0.010	5.32698	20.00000	Averaged

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

J

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR SPLP - BLK

Dry Weight Determination 100% ✓ <0.5%_____ %Wet Solids_____

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Baked Sand Homogeneous ✓ Non-homogeneous_____

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 06JS15

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 06JS15 pH of Fluid Today 7.71 Extraction Fluid Batch # DI, H2O

Extract Use Filter Paper Lot #: 102807-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste	_____g
2)	Weight Container 1 + Residue	_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)	_____g
4)	Weight of Pre-extraction Collection Device	_____g
5)	Weight of Device and Filtrate	_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))	

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1515 Time Stopped 0915 Hours Extracted 18

Room Temp @ Start 20.3 Room Temp @ End 21.7

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 06JS15 Rev 6/08

(F)

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR SI4463 - 2 A

Dry Weight Determination 100%_____ <0.5%_____ %Wet Solids ✓

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Oiley Sand Homogeneous_____ Non-homogeneous ✓

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 062515

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 062515 pH of Fluid Today 7.71 Extraction Fluid Batch # DI/HO

Extract Use Filter Paper Lot #: 10887-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste	_____g
2)	Weight Container 1 + Residue	_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)	_____g
4)	Weight of Pre-extraction Collection Device	_____g
5)	Weight of Device and Filtrate	_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))	

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1515 Time Stopped 0915 Hours Extracted 18

Room Temp @ Start 20.3 Room Temp @ End 21.7

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 062515 Rev 6/08

(B)

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR SI4463 - 4 A

Dry Weight Determination 100%_____ <0.5%_____ %Wet Solids ✓

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: oily sand Homogeneous_____ Non-homogeneous ✓

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 06/25/15

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 06/25/15 pH of Fluid Today 7.71 Extraction Fluid Batch # DI H2O

Extract Use Filter Paper Lot #: 10807-6057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste	_____g
2)	Weight Container 1 + Residue	_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)	_____g
4)	Weight of Pre-extraction Collection Device	_____g
5)	Weight of Device and Filtrate	_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))	

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1515 Time Stopped 0915 Hours Extracted 18

Room Temp @ Start 20.3 Room Temp @ End 21.7

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 06/25/15 Rev 6/08

(6

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR SI4463-6A

Dry Weight Determination 100%_____ <0.5%_____ %Wet Solids ✓

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Oily Sand Homogeneous_____ Non-homogeneous ✓

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 06/15/15

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 06/15/15 pH of Fluid Today 7.7 Extraction Fluid Batch # DI H2O

Extract Use Filter Paper Lot #: 102807-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste		_____g
2)	Weight Container 1 + Residue		_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)		_____g
4)	Weight of Pre-extraction Collection Device		_____g
5)	Weight of Device and Filtrate		_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b	
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))		

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1515 Time Stopped 0915 Hours Extracted 18

Room Temp @ Start 20.3 Room Temp @ End 21.7

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 06/15/15 Rev 6/08

KATAHDIN ANALYTICAL SERVICES

GCMS-P INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06-22-15/ 9:27

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ⑩	PB295	1	-1	VOABFBAQ							Y	FME		
VSTD050P22A ④	P1533	1	1	P826A09							Y			
020 ③	34	1	2								Y			
005 ②	35	1	3								Y			
001 ①	36	1	4								Y			
200 ⑥	37	1	5								Y			
100 ⑤	38	1	6								Y			
LCSA[W616526] ⑧	39	1	7								Y			IND ⑦
VBLK A	40	1	8								N			
B	41	1	9								N			
C ⑨	42	1	10								Y			
SI4364-2 A	43	1	11		X		X				Y		<2	
SI4339-2 A	44	1	12					X			Y		<2	
SI4191-12RA B	45	1	13								Y		<2	
-2RA E	46	1	14								Y		<2	
-3RA D	47	1	15								Y		<2	
-6RA B	48	1	16								Y		<2	
-9RA B	49	1	17								Y		<2	
SI4336-4 A	50	1	18				X				Y		<2	
SI4339-1 A	51	1	19					X			Y		<2	
SI4364-1 A	52	1	20				X				Y		<2	19:12
Rinse	53	1	21								N			
Rinse	54	1	22								N			
Rinse	55	1	23								N			
Rinse	56	1	24								N			

06/23/15 RFL

STANDARD	CODE
BFB	V9879
CAL. STD.	V9906, V9907
LCS/MS MIX	V9900
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9901
SS MIX	V9885

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS546

VOA-024 – Revision 1 – 05/16/2014

GCMS-P INSTRUMENT RUNLOG

KATAHDIN ANALYTICAL SERVICES

DATE/TIME OF BFB INJECTION: 06-26-15 / 8:34

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ③	PB299	1	-1	VOABFBAQ							Y	EME	7	
VSTD050P26A ④	P1636	1	1	P826A09							Y			
LCSA [VG165523] ①	37	1	2								Y			
VBLK A	38	1	3								N			
B	39	1	4								N			
C ②	40	1	5								Y			
SI4496-1 A	41	1	6		X				X		Y		<2	
-2 A	42	1	7								Y		<2	
-3 A	43	1	8								Y		<2	DL 1:10
Rinse	44	1	9								N			
Rinse	45	1	10								N			
SPLP-BLK ⑤ A	46	5	11		X		1312		X		Y		7	8→40ml
SI4463-2DL A	47	5	12								Y			
-4DL A	48	5	13								Y			
-6DL A	49	5	14								Y			
SI4492-1 A	50	1	15								Y		<2	
-2 A	51	1	16								Y		<2	
SI4462-4DL B	52	10	17								Y		<2	4→40ml
-5DL B	53	10	18								Y		<2	
-6DL B	54	10	19								Y		<2	
-7DL B	55	10	20								Y		<2	
-12DL B	56	20	21								Y		<2	2→40ml
-4MS ⑥ B	57	10	22								Y		<2	4→40ml
-4MSD ⑦ B	58	10	23								Y		<2	19:38
Rinse	59	1	24								N			
Rinse	60	1	25								N			

STANDARD	CODE
BFB	V9879
CAL. STD.	V9910, V9907
LCS/MS MIX	V9900
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9901
SS MIX	V9885

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

SEMIVOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI4463

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
SITE 4TS-SEE1-B	SI4463-1DL		128.	*	72.6		111.	*	89.6		59.6		137.	*
SITE 4TS-SEE2-B	SI4463-3DL		128.	*	72.0		110.	*	90.2		55.4		162.	*
SITE 4TS-SEE1-PT	SI4463-5DL		126.	*	65.4		88.4		84.8		54.4		116.	
Method Blank Sample	WG165365-1		62.1		59.2		56.8		66.7		57.5		71.9	
Laboratory Control S	WG165365-2		74.8		65.1		66.8		70.3		76.3		77.3	
Laboratory Control S	WG165365-3		80.8		68.7		73.3		73.7		78.4		80.2	

		QC Limits
TPH	TERPHENYL-D14	30-125
NBZ	NITROBENZENE-D5	35-100
PHL	PHENOL-D6	40-100
2FP	2-FLUOROPHENOL	35-105
TBP	2,4,6-TRIBROMOPHENOL	35-125
2FBP	2-FLUOROBIPHENYL	45-105

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0836.D
Instrument ID : GCMS-U
Matrix : SL

SDG : SI4463
Lab Sample ID : WG165365-1
Date Extracted : 24-JUN-15
Date Analyzed : 25-JUN-15
Time Analyzed : 18:31

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165365-2	U0837.D	06/25/15	18:58
Laboratory Control S	WG165365-3	U0838.D	06/25/15	19:25
SITE 4TS-SEE1-B	SI4463-1DL	U0850.D	06/26/15	00:48
SITE 4TS-SEE2-B	SI4463-3DL	U0851.D	06/26/15	01:15
SITE 4TS-SEE1-PT	SI4463-5DL	U0852.D	06/26/15	01:42

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165365-1
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: U0836.D

Sample Date:
Received Date:
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165365

Analysis Date: 25-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	250	ug/Kgdrywt	1	330	330	160	250
Bis(2-Chloroethyl)Ether	U	250	ug/Kgdrywt	1	330	330	81.	250
2-Chlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
1,3-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	78.	250
1,4-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	86.	250
1,2-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	88.	250
Benzyl Alcohol	U	500	ug/Kgdrywt	1	660	660	57.	500
2-Methylphenol	U	250	ug/Kgdrywt	1	330	330	200	250
2,2'-Oxybis(1-Chloropropane)	U	250	ug/Kgdrywt	1	330	330	89.	250
3&4-Methylphenol	U	250	ug/Kgdrywt	1	330	330	190	250
N-Nitroso-Di-N-Propylamine	U	250	ug/Kgdrywt	1	330	330	83.	250
Hexachloroethane	U	250	ug/Kgdrywt	1	330	330	96.	250
Nitrobenzene	U	250	ug/Kgdrywt	1	330	330	91.	250
Isophorone	U	250	ug/Kgdrywt	1	330	330	75.	250
2-Nitrophenol	U	250	ug/Kgdrywt	1	330	330	170	250
2,4-Dimethylphenol	U	250	ug/Kgdrywt	1	330	330	160	250
Bis(2-Chloroethoxy)Methane	U	250	ug/Kgdrywt	1	330	330	96.	250
2,4-Dichlorophenol	U	250	ug/Kgdrywt	1	330	330	150	250
1,2,4-Trichlorobenzene	U	250	ug/Kgdrywt	1	330	330	81.	250
Benzoic Acid	U	620	ug/Kgdrywt	1	820	820	340	620
4-Chloroaniline	U	250	ug/Kgdrywt	1	330	330	120	250
Hexachlorobutadiene	U	250	ug/Kgdrywt	1	330	330	83.	250
4-Chloro-3-Methylphenol	U	250	ug/Kgdrywt	1	330	330	170	250
2,4,6-Trichlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
2,4,5-Trichlorophenol	U	620	ug/Kgdrywt	1	820	820	160	620
2-Chloronaphthalene	U	250	ug/Kgdrywt	1	330	330	87.	250
2-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	75.	620
Dimethyl Phthalate	U	250	ug/Kgdrywt	1	330	330	78.	250
2,6-Dinitrotoluene	U	250	ug/Kgdrywt	1	330	330	79.	250
3-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	94.	620
2,4-Dinitrophenol	U	620	ug/Kgdrywt	1	820	820	380	620
4-Nitrophenol	U	620	ug/Kgdrywt	1	820	820	310	620
Dibenzofuran	U	250	ug/Kgdrywt	1	330	330	79.	250
2,4-Dinitrotoluene	U	250	ug/Kgdrywt	1	330	330	85.	250

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165365-1
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: U0836.D

Sample Date:
Received Date:
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165365

Analysis Date: 25-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethylphthalate	U	250	ug/Kgdrywt	1	330	330	80.	250
4-Chlorophenyl-Phenylether	U	250	ug/Kgdrywt	1	330	330	78.	250
4-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	130	620
4,6-Dinitro-2-Methylphenol	U	620	ug/Kgdrywt	1	820	820	340	620
N-Nitrosodiphenylamine	U	250	ug/Kgdrywt	1	330	330	220	250
1,2-Diphenylhydrazine	U	500	ug/Kgdrywt	1	660	660	140	500
4-Bromophenyl-Phenylether	U	250	ug/Kgdrywt	1	330	330	85.	250
Hexachlorobenzene	U	250	ug/Kgdrywt	1	330	330	82.	250
Pentachlorophenol	U	620	ug/Kgdrywt	1	820	820	240	620
Carbazole	U	250	ug/Kgdrywt	1	330	330	110	250
Di-N-Butylphthalate	U	250	ug/Kgdrywt	1	330	330	100	250
Benzidine	U	1100	ug/Kgdrywt	1	1500	1500	100	1100
Butylbenzylphthalate	U	250	ug/Kgdrywt	1	330	330	93.	250
3,3'-Dichlorobenzidine	U	250	ug/Kgdrywt	1	330	330	110	250
Bis(2-Ethylhexyl)Phthalate	U	250	ug/Kgdrywt	1	330	330	98.	250
Di-N-Octylphthalate	U	250	ug/Kgdrywt	1	330	330	210	250
1,1'-biphenyl	U	250	ug/Kgdrywt	1	330	330	73.	250
2,6-Dichlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
Caprolactam	U	250	ug/Kgdrywt	1	330	330	140	250
2-Fluorophenol		59.2	%					
Phenol-D6		66.7	%					
Nitrobenzene-d5		56.8	%					
2-Fluorobiphenyl		62.1	%					
2,4,6-Tribromophenol		57.5	%					
Terphenyl-d14		71.9	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165365-2
LCSD ID: WG165365-3
Project:
SDG: SI4463
Report Date: 10-JUL-15
LCS File ID: U0837.D

Received Date:
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165365
LCSD File ID: U0838.D

Analysis Date: 25-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Phenol	3330	2160	64.9	2360	70.9	ug/Kgdrywt	9	20	40-100
Bis(2-Chloroethyl)Ether	1670	1180	70.6	1260	75.4	ug/Kgdrywt	6	20	40-105
2-Chlorophenol	3330	2130	64.0	2290	68.8	ug/Kgdrywt	7	20	45-105
1,3-Dichlorobenzene	1670	1010	60.5	1050	62.9	ug/Kgdrywt	4	20	40-100
1,4-Dichlorobenzene	1670	1010	60.5	1100	65.9	ug/Kgdrywt	8	20	35-105
1,2-Dichlorobenzene	1670	1070	64.1	1120	67.1	ug/Kgdrywt	4	20	45-100
Benzyl Alcohol	1670	961.	57.5	1060	63.5	ug/Kgdrywt	10	20	20-125
2-Methylphenol	3330	2010	60.4	2220	66.7	ug/Kgdrywt	10	20	40-105
2,2'-Oxybis(1-Chloropropane)	1670	745.	44.6	784.	46.9	ug/Kgdrywt	5	20	20-115
3&4-Methylphenol	3330	2130	64.0	2300	69.1	ug/Kgdrywt	8	20	40-105
N-Nitroso-Di-N-Propylamine	1670	1020	61.1	1090	65.3	ug/Kgdrywt	7	20	40-115
Hexachloroethane	1670	1040	62.3	1120	67.1	ug/Kgdrywt	7	20	35-110
Nitrobenzene	1670	174.	10.4*	211.	12.6*	ug/Kgdrywt	19	20	40-115
Isophorone	1670	823.	49.3	878.	52.6	ug/Kgdrywt	6	20	45-110
2-Nitrophenol	3330	1930	58.0	2130	64.0	ug/Kgdrywt	10	20	40-110
2,4-Dimethylphenol	3330	2070	62.2	2320	69.7	ug/Kgdrywt	11	20	30-105
Bis(2-Chloroethoxy)Methane	1670	1000	59.9	1110	66.5	ug/Kgdrywt	10	20	45-110
2,4-Dichlorophenol	3330	2120	63.7	2360	70.9	ug/Kgdrywt	11	20	45-110
1,2,4-Trichlorobenzene	1670	1050	62.9	1110	66.5	ug/Kgdrywt	6	20	45-110
Benzoic Acid	3330	760.	22.8	497.	14.9	ug/Kgdrywt	42*	20	0-110
4-Chloroaniline	1670	785.	47.0	819.	49.0	ug/Kgdrywt	4	20	10-100
Hexachlorobutadiene	1670	1120	67.1	1180	70.6	ug/Kgdrywt	5	20	40-115
4-Chloro-3-Methylphenol	3330	2340	70.3	2460	73.9	ug/Kgdrywt	5	20	45-115
2,4,6-Trichlorophenol	3330	2340	70.3	2480	74.5	ug/Kgdrywt	6	20	45-110
2,4,5-Trichlorophenol	3330	2470	74.2	2560	76.9	ug/Kgdrywt	4	20	50-110
2-Chloronaphthalene	1670	1010	60.5	1060	63.5	ug/Kgdrywt	5	20	45-105
2-Nitroaniline	1670	1210	72.4	1280	76.6	ug/Kgdrywt	6	20	45-120
Dimethyl Phthalate	1670	1220	73.0	1300	77.8	ug/Kgdrywt	6	20	50-110
2,6-Dinitrotoluene	1670	1220	73.0	1300	77.8	ug/Kgdrywt	6	20	50-110
3-Nitroaniline	1670	982.	58.8	1040	62.3	ug/Kgdrywt	6	20	25-110
2,4-Dinitrophenol	3330	1280	38.4	1100	33.0	ug/Kgdrywt	15	20	15-130
4-Nitrophenol	3330	2950	88.6	3090	92.8	ug/Kgdrywt	5	20	15-140
Dibenzofuran	1670	1220	73.0	1280	76.6	ug/Kgdrywt	5	20	50-105
2,4-Dinitrotoluene	1670	1310	78.4	1360	81.4	ug/Kgdrywt	4	20	50-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165365-2
LCSD ID: WG165365-3
Project:
SDG: SI4463
Report Date: 10-JUL-15
LCS File ID: U0837.D

Received Date:
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165365
LCSD File ID: U0838.D

Analysis Date: 25-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Diethylphthalate	1670	1350	80.8	1390	83.2	ug/Kgdrywt	3	20	50-115
4-Chlorophenyl-Phenylether	1670	1350	80.8	1400	83.8	ug/Kgdrywt	4	20	45-110
4-Nitroaniline	1670	1280	76.6	1350	80.8	ug/Kgdrywt	5	20	35-115
4,6-Dinitro-2-Methylphenol	3330	2150	64.6	2100	63.1	ug/Kgdrywt	2	20	30-135
N-Nitrosodiphenylamine	1670	940.	56.3	971.	58.1	ug/Kgdrywt	3	20	50-115
1,2-Diphenylhydrazine	1670	1130	67.7	1160	69.5	ug/Kgdrywt	3	20	50-110
4-Bromophenyl-Phenylether	1670	1280	76.6	1340	80.2	ug/Kgdrywt	4	20	45-115
Hexachlorobenzene	1670	1200	71.8	1240	74.2	ug/Kgdrywt	3	20	45-120
Pentachlorophenol	3330	2850	85.6	2900	87.1	ug/Kgdrywt	2	20	25-120
Carbazole	1670	1340	80.2	1400	83.8	ug/Kgdrywt	4	20	45-115
Di-N-Butylphthalate	1670	1350	80.8	1420	85.0	ug/Kgdrywt	5	20	55-110
Benzidine	3330	1140	34.2	1080	32.4	ug/Kgdrywt	5	20	10-150
Butylbenzylphthalate	1670	1230	73.6	1240	74.2	ug/Kgdrywt	1	20	50-125
3,3'-Dichlorobenzidine	3330	2290	68.8	2360	70.9	ug/Kgdrywt	3	20	10-130
Bis(2-Ethylhexyl)Phthalate	1670	1240	74.2	1310	78.4	ug/Kgdrywt	5	20	45-125
Di-N-Octylphthalate	1670	1200	71.8	1250	74.8	ug/Kgdrywt	4	20	40-130
1,1'-biphenyl	1670	1200	71.8	1270	76.0	ug/Kgdrywt	6	20	31-99
2,6-Dichlorophenol	3330	2880	86.5	3180	95.5	ug/Kgdrywt	10	20	38-98
Caprolactam	1670	667.	39.9	730.	43.7	ug/Kgdrywt	9	20	10-81
2-Fluorophenol			65.1		68.7				35-105
Phenol-D6			70.3		73.7				40-100
Nitrobenzene-d5			66.8		73.3				35-100
2-Fluorobiphenyl			74.8		80.8				45-105
2,4,6-Tribromophenol			76.3		78.4				35-125
Terphenyl-d14			77.3		80.2				30-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD394.D
Instrument ID : GCMS-U

SDG : SI4463
Date Analyzed : 25-JUN-15
Time Analyzed : 14:55

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	39.5		
68	Less than 2.0% of mass 69	0.5	1.39	1
69	Less than 100.0% of mass 198	38.7		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	51.6		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.3		
275	10.0 - 30.0% of mass 198	19.7		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	10.3	80.11	2
442	40.0 - 100.0% of mass 198	67.2		
443	17.0 - 23.0% of mass 442	12.9	19.20	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165447-4	U0829.D	06/25/15	15:14
Initial Calibration	WG165447-2	U0830.D	06/25/15	15:45
Initial Calibration	WG165447-3	U0831.D	06/25/15	16:13
Initial Calibration	WG165447-5	U0832.D	06/25/15	16:41
Initial Calibration	WG165447-6	U0833.D	06/25/15	17:08
Initial Calibration	WG165447-7	U0834.D	06/25/15	17:36
Independent Source	WG165447-8	U0835.D	06/25/15	18:03
Method Blank Sample	WG165365-1	U0836.D	06/25/15	18:31
Laboratory Control S	WG165365-2	U0837.D	06/25/15	18:58
Laboratory Control S	WG165365-3	U0838.D	06/25/15	19:25
SITE 4TS-SEE1-B	SI4463-1DL	U0850.D	06/26/15	00:48
SITE 4TS-SEE2-B	SI4463-3DL	U0851.D	06/26/15	01:15
SITE 4TS-SEE1-PT	SI4463-5DL	U0852.D	06/26/15	01:42

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165447-4
Lab File ID : U0829.D

SDG: SI4463
Analytical Date: 06/25/15 15:14
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	257303		4.52		1068463		5.91		456356		8.00	
	Upper Limit	514606		5.02		2136926		6.41		912712		8.50	
	Lower Limit	128651.5		4.02		534231.5		5.41		228178		7.50	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165365-1	236274		4.52		971855		5.91		551112		8.00	
Laboratory Control S	WG165365-2	222167		4.52		888590		5.91		488083		7.99	
Laboratory Control S	WG165365-3	221262		4.52		859126		5.91		476843		7.99	
SITE 4TS-SEE1-B	SI4463-1DL	261310		4.51		824516		5.91		325058		8.01	
SITE 4TS-SEE2-B	SI4463-3DL	259303		4.51		829575		5.91		323432		8.01	
SITE 4TS-SEE1-PT	SI4463-5DL	264563		4.51		956954		5.91		352315		8.00	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165447-4
Lab File ID : U0829.D

SDG: SI4463
Analytical Date: 06/25/15 15:14
Instrument ID: GCMS-U

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	Area	#	RT	Area	#	RT
	Std .	687611		9.80	417535		13.35	225441		16.31
	Upper Limit	1375222		10.30	835070		13.85	450882		16.81
	Lower Limit	343805.5		9.30	208767.5		12.85	112720.5		15.81
Client Sample ID	Lab Sample ID									
Method Blank Sample	WG165365-1	837925		9.80	668040		13.34	414219		16.31
Laboratory Control S	WG165365-2	759676		9.80	532596		13.35	286315		16.31
Laboratory Control S	WG165365-3	747003		9.80	537397		13.35	286410		16.31
SITE 4TS-SEE1-B	SI4463-1DL	228647	*	9.81	54404	*	13.35	24681	*	16.32
SITE 4TS-SEE2-B	SI4463-3DL	229054	*	9.81	50930	*	13.35	26138	*	16.32
SITE 4TS-SEE1-PT	SI4463-5DL	263721	*	9.81	63645	*	13.35	32593	*	16.32

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-1DL
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: U0850.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165365

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 92.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	980	ug/Kgdrywt	2	330	1300	620	980
Bis(2-Chloroethyl)Ether	U	980	ug/Kgdrywt	2	330	1300	320	980
2-Chlorophenol	U	980	ug/Kgdrywt	2	330	1300	650	980
1,3-Dichlorobenzene	U	980	ug/Kgdrywt	2	330	1300	310	980
1,4-Dichlorobenzene	U	980	ug/Kgdrywt	2	330	1300	340	980
1,2-Dichlorobenzene	U	980	ug/Kgdrywt	2	330	1300	350	980
Benzyl Alcohol	U	2000	ug/Kgdrywt	2	660	2600	220	2000
2-Methylphenol	U	980	ug/Kgdrywt	2	330	1300	790	980
2,2'-Oxybis(1-Chloropropane)	U	980	ug/Kgdrywt	2	330	1300	350	980
3&4-Methylphenol	U	980	ug/Kgdrywt	2	330	1300	740	980
N-Nitroso-Di-N-Propylamine	U	980	ug/Kgdrywt	2	330	1300	330	980
Hexachloroethane	U	980	ug/Kgdrywt	2	330	1300	380	980
Nitrobenzene	ULL	980	ug/Kgdrywt	2	330	1300	360	980
Isophorone	U	980	ug/Kgdrywt	2	330	1300	300	980
2-Nitrophenol	U	980	ug/Kgdrywt	2	330	1300	660	980
2,4-Dimethylphenol	U	980	ug/Kgdrywt	2	330	1300	650	980
Bis(2-Chloroethoxy)Methane	U	980	ug/Kgdrywt	2	330	1300	380	980
2,4-Dichlorophenol	U	980	ug/Kgdrywt	2	330	1300	590	980
1,2,4-Trichlorobenzene	U	980	ug/Kgdrywt	2	330	1300	320	980
Benzoic Acid	U	2400	ug/Kgdrywt	2	820	3200	1400	2400
4-Chloroaniline	U	980	ug/Kgdrywt	2	330	1300	470	980
Hexachlorobutadiene	U	980	ug/Kgdrywt	2	330	1300	330	980
4-Chloro-3-Methylphenol	U	980	ug/Kgdrywt	2	330	1300	660	980
2,4,6-Trichlorophenol	U	980	ug/Kgdrywt	2	330	1300	610	980
2,4,5-Trichlorophenol	U	2400	ug/Kgdrywt	2	820	3200	610	2400
2-Chloronaphthalene	U	980	ug/Kgdrywt	2	330	1300	340	980
2-Nitroaniline	U	2400	ug/Kgdrywt	2	820	3200	300	2400
Dimethyl Phthalate	U	980	ug/Kgdrywt	2	330	1300	310	980
2,6-Dinitrotoluene	U	980	ug/Kgdrywt	2	330	1300	310	980
3-Nitroaniline	U	2400	ug/Kgdrywt	2	820	3200	370	2400
2,4-Dinitrophenol	U	2400	ug/Kgdrywt	2	820	3200	1500	2400
4-Nitrophenol	U	2400	ug/Kgdrywt	2	820	3200	1200	2400
Dibenzofuran	U	980	ug/Kgdrywt	2	330	1300	310	980
2,4-Dinitrotoluene	U	980	ug/Kgdrywt	2	330	1300	340	980
Diethylphthalate	U	980	ug/Kgdrywt	2	330	1300	320	980

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-1DL
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: U0850.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165365

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 92.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Chlorophenyl-Phenylether	U	980	ug/Kgdrywt	2	330	1300	310	980
4-Nitroaniline	U	2400	ug/Kgdrywt	2	820	3200	530	2400
4,6-Dinitro-2-Methylphenol	U	2400	ug/Kgdrywt	2	820	3200	1300	2400
N-Nitrosodiphenylamine	U	980	ug/Kgdrywt	2	330	1300	860	980
1,2-Diphenylhydrazine	U	2000	ug/Kgdrywt	2	660	2600	560	2000
4-Bromophenyl-Phenylether	U	980	ug/Kgdrywt	2	330	1300	340	980
Hexachlorobenzene	U	980	ug/Kgdrywt	2	330	1300	320	980
Pentachlorophenol	U	2400	ug/Kgdrywt	2	820	3200	940	2400
Carbazole	U	980	ug/Kgdrywt	2	330	1300	440	980
Di-N-Butylphthalate	U	980	ug/Kgdrywt	2	330	1300	400	980
Benzidine	U	4400	ug/Kgdrywt	2	1500	5900	390	4400
Butylbenzylphthalate	U	980	ug/Kgdrywt	2	330	1300	370	980
3,3'-Dichlorobenzidine	U	980	ug/Kgdrywt	2	330	1300	450	980
Bis(2-Ethylhexyl)Phthalate	U	980	ug/Kgdrywt	2	330	1300	390	980
Di-N-Octylphthalate	U	980	ug/Kgdrywt	2	330	1300	830	980
1,1'-biphenyl	U	980	ug/Kgdrywt	2	330	1300	290	980
2,6-Dichlorophenol	U	980	ug/Kgdrywt	2	330	1300	650	980
Caprolactam	U	980	ug/Kgdrywt	2	330	1300	570	980
2-Fluorophenol		72.6	%					
Phenol-D6		89.6	%					
Nitrobenzene-d5	*	111.	%					
2-Fluorobiphenyl	*	128.	%					
2,4,6-Tribromophenol		59.6	%					
Terphenyl-d14	*	137.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-3DL
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: U0851.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165365

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 92.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	1000	ug/Kgdrywt	2	330	1400	660	1000
Bis(2-Chloroethyl)Ether	U	1000	ug/Kgdrywt	2	330	1400	340	1000
2-Chlorophenol	U	1000	ug/Kgdrywt	2	330	1400	700	1000
1,3-Dichlorobenzene	U	1000	ug/Kgdrywt	2	330	1400	330	1000
1,4-Dichlorobenzene	U	1000	ug/Kgdrywt	2	330	1400	370	1000
1,2-Dichlorobenzene	U	1000	ug/Kgdrywt	2	330	1400	370	1000
Benzyl Alcohol	U	2100	ug/Kgdrywt	2	660	2800	240	2100
2-Methylphenol	U	1000	ug/Kgdrywt	2	330	1400	850	1000
2,2'-Oxybis(1-Chloropropane)	U	1000	ug/Kgdrywt	2	330	1400	380	1000
3&4-Methylphenol	U	1000	ug/Kgdrywt	2	330	1400	800	1000
N-Nitroso-Di-N-Propylamine	U	1000	ug/Kgdrywt	2	330	1400	350	1000
Hexachloroethane	U	1000	ug/Kgdrywt	2	330	1400	410	1000
Nitrobenzene	ULL	1000	ug/Kgdrywt	2	330	1400	390	1000
Isophorone	U	1000	ug/Kgdrywt	2	330	1400	320	1000
2-Nitrophenol	U	1000	ug/Kgdrywt	2	330	1400	710	1000
2,4-Dimethylphenol	U	1000	ug/Kgdrywt	2	330	1400	700	1000
Bis(2-Chloroethoxy)Methane	U	1000	ug/Kgdrywt	2	330	1400	410	1000
2,4-Dichlorophenol	U	1000	ug/Kgdrywt	2	330	1400	640	1000
1,2,4-Trichlorobenzene	U	1000	ug/Kgdrywt	2	330	1400	340	1000
Benzoic Acid	U	2600	ug/Kgdrywt	2	820	3500	1500	2600
4-Chloroaniline	U	1000	ug/Kgdrywt	2	330	1400	510	1000
Hexachlorobutadiene	U	1000	ug/Kgdrywt	2	330	1400	350	1000
4-Chloro-3-Methylphenol	U	1000	ug/Kgdrywt	2	330	1400	710	1000
2,4,6-Trichlorophenol	U	1000	ug/Kgdrywt	2	330	1400	660	1000
2,4,5-Trichlorophenol	U	2600	ug/Kgdrywt	2	820	3500	660	2600
2-Chloronaphthalene	U	1000	ug/Kgdrywt	2	330	1400	370	1000
2-Nitroaniline	U	2600	ug/Kgdrywt	2	820	3500	320	2600
Dimethyl Phthalate	U	1000	ug/Kgdrywt	2	330	1400	330	1000
2,6-Dinitrotoluene	U	1000	ug/Kgdrywt	2	330	1400	340	1000
3-Nitroaniline	U	2600	ug/Kgdrywt	2	820	3500	400	2600
2,4-Dinitrophenol	U	2600	ug/Kgdrywt	2	820	3500	1600	2600
4-Nitrophenol	U	2600	ug/Kgdrywt	2	820	3500	1300	2600
Dibenzofuran	U	1000	ug/Kgdrywt	2	330	1400	340	1000
2,4-Dinitrotoluene	U	1000	ug/Kgdrywt	2	330	1400	360	1000
Diethylphthalate	U	1000	ug/Kgdrywt	2	330	1400	340	1000

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-3DL
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: U0851.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165365

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 92.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Chlorophenyl-Phenylether	U	1000	ug/Kgdrywt	2	330	1400	330	1000
4-Nitroaniline	U	2600	ug/Kgdrywt	2	820	3500	570	2600
4,6-Dinitro-2-Methylphenol	U	2600	ug/Kgdrywt	2	820	3500	1400	2600
N-Nitrosodiphenylamine	U	1000	ug/Kgdrywt	2	330	1400	930	1000
1,2-Diphenylhydrazine	U	2100	ug/Kgdrywt	2	660	2800	600	2100
4-Bromophenyl-Phenylether	U	1000	ug/Kgdrywt	2	330	1400	360	1000
Hexachlorobenzene	U	1000	ug/Kgdrywt	2	330	1400	350	1000
Pentachlorophenol	U	2600	ug/Kgdrywt	2	820	3500	1000	2600
Carbazole	U	1000	ug/Kgdrywt	2	330	1400	470	1000
Di-N-Butylphthalate	U	1000	ug/Kgdrywt	2	330	1400	430	1000
Benzidine	U	4800	ug/Kgdrywt	2	1500	6400	420	4800
Butylbenzylphthalate	U	1000	ug/Kgdrywt	2	330	1400	400	1000
3,3'-Dichlorobenzidine	U	1000	ug/Kgdrywt	2	330	1400	480	1000
Bis(2-Ethylhexyl)Phthalate	J	460	ug/Kgdrywt	2	330	1400	420	1000
Di-N-Octylphthalate	U	1000	ug/Kgdrywt	2	330	1400	900	1000
1,1'-biphenyl	U	1000	ug/Kgdrywt	2	330	1400	310	1000
2,6-Dichlorophenol	U	1000	ug/Kgdrywt	2	330	1400	700	1000
Caprolactam	U	1000	ug/Kgdrywt	2	330	1400	610	1000
2-Fluorophenol		72.0	%					
Phenol-D6		90.2	%					
Nitrobenzene-d5	*	110.	%					
2-Fluorobiphenyl	*	128.	%					
2,4,6-Tribromophenol		55.4	%					
Terphenyl-d14	*	162.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-5DL
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: U0852.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165365

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 94.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	960	ug/Kgdrywt	2	330	1300	600	960
Bis(2-Chloroethyl)Ether	U	960	ug/Kgdrywt	2	330	1300	310	960
2-Chlorophenol	U	960	ug/Kgdrywt	2	330	1300	640	960
1,3-Dichlorobenzene	U	960	ug/Kgdrywt	2	330	1300	300	960
1,4-Dichlorobenzene	U	960	ug/Kgdrywt	2	330	1300	330	960
1,2-Dichlorobenzene	U	960	ug/Kgdrywt	2	330	1300	340	960
Benzyl Alcohol	U	1900	ug/Kgdrywt	2	660	2600	220	1900
2-Methylphenol	U	960	ug/Kgdrywt	2	330	1300	780	960
2,2'-Oxybis(1-Chloropropane)	U	960	ug/Kgdrywt	2	330	1300	340	960
3&4-Methylphenol	U	960	ug/Kgdrywt	2	330	1300	730	960
N-Nitroso-Di-N-Propylamine	U	960	ug/Kgdrywt	2	330	1300	320	960
Hexachloroethane	U	960	ug/Kgdrywt	2	330	1300	370	960
Nitrobenzene	ULL	960	ug/Kgdrywt	2	330	1300	350	960
Isophorone	U	960	ug/Kgdrywt	2	330	1300	290	960
2-Nitrophenol	U	960	ug/Kgdrywt	2	330	1300	650	960
2,4-Dimethylphenol	U	960	ug/Kgdrywt	2	330	1300	640	960
Bis(2-Chloroethoxy)Methane	U	960	ug/Kgdrywt	2	330	1300	370	960
2,4-Dichlorophenol	U	960	ug/Kgdrywt	2	330	1300	580	960
1,2,4-Trichlorobenzene	U	960	ug/Kgdrywt	2	330	1300	310	960
Benzoic Acid	U	2400	ug/Kgdrywt	2	820	3200	1300	2400
4-Chloroaniline	U	960	ug/Kgdrywt	2	330	1300	460	960
Hexachlorobutadiene	U	960	ug/Kgdrywt	2	330	1300	320	960
4-Chloro-3-Methylphenol	U	960	ug/Kgdrywt	2	330	1300	640	960
2,4,6-Trichlorophenol	U	960	ug/Kgdrywt	2	330	1300	600	960
2,4,5-Trichlorophenol	U	2400	ug/Kgdrywt	2	820	3200	600	2400
2-Chloronaphthalene	U	960	ug/Kgdrywt	2	330	1300	340	960
2-Nitroaniline	U	2400	ug/Kgdrywt	2	820	3200	290	2400
Dimethyl Phthalate	U	960	ug/Kgdrywt	2	330	1300	300	960
2,6-Dinitrotoluene	U	960	ug/Kgdrywt	2	330	1300	310	960
3-Nitroaniline	U	2400	ug/Kgdrywt	2	820	3200	360	2400
2,4-Dinitrophenol	U	2400	ug/Kgdrywt	2	820	3200	1500	2400
4-Nitrophenol	U	2400	ug/Kgdrywt	2	820	3200	1200	2400
Dibenzofuran	U	960	ug/Kgdrywt	2	330	1300	310	960
2,4-Dinitrotoluene	U	960	ug/Kgdrywt	2	330	1300	330	960
Diethylphthalate	U	960	ug/Kgdrywt	2	330	1300	310	960

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-5DL
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: U0852.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165365

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 94.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Chlorophenyl-Phenylether	U	960	ug/Kgdrywt	2	330	1300	300	960
4-Nitroaniline	U	2400	ug/Kgdrywt	2	820	3200	520	2400
4,6-Dinitro-2-Methylphenol	U	2400	ug/Kgdrywt	2	820	3200	1300	2400
N-Nitrosodiphenylamine	U	960	ug/Kgdrywt	2	330	1300	850	960
1,2-Diphenylhydrazine	U	1900	ug/Kgdrywt	2	660	2600	550	1900
4-Bromophenyl-Phenylether	U	960	ug/Kgdrywt	2	330	1300	330	960
Hexachlorobenzene	U	960	ug/Kgdrywt	2	330	1300	320	960
Pentachlorophenol	U	2400	ug/Kgdrywt	2	820	3200	920	2400
Carbazole	U	960	ug/Kgdrywt	2	330	1300	430	960
Di-N-Butylphthalate	U	960	ug/Kgdrywt	2	330	1300	390	960
Benzidine	U	4400	ug/Kgdrywt	2	1500	5800	390	4400
Butylbenzylphthalate	U	960	ug/Kgdrywt	2	330	1300	360	960
3,3'-Dichlorobenzidine	U	960	ug/Kgdrywt	2	330	1300	440	960
Bis(2-Ethylhexyl)Phthalate	U	960	ug/Kgdrywt	2	330	1300	380	960
Di-N-Octylphthalate	U	960	ug/Kgdrywt	2	330	1300	820	960
1,1'-biphenyl	U	960	ug/Kgdrywt	2	330	1300	280	960
2,6-Dichlorophenol	U	960	ug/Kgdrywt	2	330	1300	640	960
Caprolactam	U	960	ug/Kgdrywt	2	330	1300	560	960
2-Fluorophenol		65.4	%					
Phenol-D6		84.8	%					
Nitrobenzene-d5		88.4	%					
2-Fluorobiphenyl	*	126.	%					
2,4,6-Tribromophenol		54.4	%					
Terphenyl-d14		116.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0830.D U0831.D U0829.D U0832.D U0833.D U0834.D **Column ID:**
Calibration Date(s): 25-JUN-15 15:14
25-JUN-15 17:36

	10.0000 Level 1	25.0000 Level 2	50.0000 Level 3	75.0000 Level 4	100.0000 Level 5	125.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Phenol	1.73565	1.66029	1.28142	1.49369	1.45863	1.48924	AVG		1.51982		10.54849	30.00000	O
Bis(2-Chloroethyl)ether	1.37833	1.22646	0.93995	1.11245	1.05805	1.01421	AVG		1.12157		14.12890	15.00000	O
2-Chlorophenol	1.43652	1.36225	1.13752	1.27639	1.23360	1.24664	AVG		1.28215		8.16617	15.00000	O
1,3-Dichlorobenzene	1.50661	1.43024	1.39594	1.35582	1.26773	1.26111	AVG		1.36958		6.96386	15.00000	O
1,4-Dichlorobenzene	1.45932	1.38990	1.33420	1.29895	1.21657	1.23672	AVG		1.32261		6.97352	30.00000	O
1,2-Dichlorobenzene	1.42821	1.33918	1.26566	1.19300	1.14842	1.09639	AVG		1.24514		9.96512	15.00000	O
Benzyl alcohol	0.91171	0.89551	0.86651	0.79621	0.69358	0.76853	AVG		0.82201		10.24323	15.00000	O
2-Methylphenol	1.31699	1.25904	1.27540	1.23267	1.13017	1.19786	AVG		1.23536		5.28420	15.00000	O
2,2'-Oxybis(1-chloropropane	167288	372227	837160	991768	1208204	1424321	QUA	0.05209	0.20832	0.05140	0.99772	0.99000	O
N-Nitroso-di-n-propylamine	0.94401	0.86044	0.84387	0.76341	0.73211	0.69984	AVG		0.80728		11.35027	15.00000	O
3&4-Methylphenol	1.35546	1.29970	1.32992	1.17377	1.16829	1.09755	AVG		1.23745		8.45724	15.00000	O
Hexachloroethane	0.68542	0.62127	0.61822	0.55581	0.51555	0.46702	AVG		0.57721		13.80207	15.00000	O
Nitrobenzene	0.28611	0.30369	0.30309	0.31215	0.25765	0.26482	AVG		0.28792		7.79552	15.00000	O
Isophorone	0.74029	0.60836	0.60909	0.59063	0.53912	0.56523	AVG		0.60879		11.46867	15.00000	O
2-Nitrophenol	0.20983	0.17564	0.16931	0.17394	0.16281	0.16917	AVG		0.17678		9.50129	30.00000	O
2,4-Dimethylphenol	0.39185	0.34073	0.32409	0.31706	0.27840	0.27901	AVG		0.32186		13.18706	15.00000	O
Bis(2-Chloroethoxy)methane	0.45767	0.36323	0.36003	0.36982	0.31805	0.33491	AVG		0.36728		13.18030	15.00000	O
Benzoic acid	11157	53900	185700	248040	329187	445643	QUA	0.12136	6.68958	-0.44176	0.99437	0.99000	O
2,4-Dichlorophenol	0.32884	0.27899	0.28943	0.27968	0.25605	0.26058	AVG		0.28226		9.23245	30.00000	O
2,6-Dichlorophenol	75201	128885	258054	321999	439286	561190	LNR	-0.08417	0.18333		0.99811	0.99000	O
1,2,4-Trichlorobenzene	0.32152	0.26904	0.25255	0.25150	0.22692	0.23408	AVG		0.25927		13.08685	15.00000	O
4-Chloroaniline	129161	224376	498329	565077	757141	947157	QUA	-0.02152	2.40442	0.81924	0.99947	0.99000	O
Hexachlorobutadiene	0.18145	0.16675	0.14730	0.14646	0.13744	0.13685	AVG		0.15271		11.62641	30.00000	O
Caprolactam	0.11210	0.09350	0.10186	0.09559	0.09087	0.09421	AVG		0.09802		7.96773	15.00000	O
4-Chloro-3-Methylphenol	0.35003	0.28974	0.29801	0.28115	0.25905	0.25661	AVG		0.28910		11.79489	30.00000	O
2,4,6-Trichlorophenol	0.37235	0.29750	0.38139	0.29015	0.31324	0.29151	AVG		0.32436		12.82351	30.00000	O
2,4,5-Trichlorophenol	0.40925	0.30889	0.37135	0.32092	0.35056	0.34513	AVG		0.35102		10.28741	15.00000	O
1,1'-Biphenyl	219013	360776	666529	1006048	1186068	1563856	QUA	-0.00889	0.88642	0.06231	0.99313	0.99000	O
2-Chloronaphthalene	1.21947	0.85276	1.13985	1.06334	1.16553	0.98577	AVG		1.07112		12.57223	15.00000	O
2-Nitroaniline	0.39529	0.28058	0.35275	0.37419	0.33428	0.32688	AVG		0.34400		11.64894	15.00000	O
Dimethyl Phthalate	1.37565	0.95180	1.15803	1.20586	1.06398	1.06930	AVG		1.13744		12.82194	15.00000	O
2,6-Dinitrotoluene	48383	112505	151293	257211	267782	344736	QUA	0.00576	2.79953	3.10305	0.99543	0.99000	O
3-Nitroaniline	0.29267	0.27653	0.26437	0.26869	0.26790	0.24366	AVG		0.26897		5.95310	15.00000	O
2,4-Dinitrophenol	0.14514	0.15944	0.15299	0.16683	0.14761	0.14729	AVG		0.15322		5.50775	15.00000	O
4-Nitrophenol	0.17082	0.20995	0.18567	0.18753	0.15409	0.14279	AVG		0.17514		13.94973	15.00000	O
Dibenzofuran	1.61251	1.35363	1.31330	1.25212	1.16038	1.28209	AVG		1.32900		11.54833	15.00000	O
2,4-Dinitrotoluene	0.39191	0.34551	0.32013	0.32539	0.28692	0.33108	AVG		0.33349		10.36672	15.00000	O

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0830.D U0831.D U0829.D U0832.D U0833.D U0834.D **Column ID:**
Calibration Date(s): 25-JUN-15 15:14 25-JUN-15 17:36

Diethylphthalate	1.02530	1.29609	1.07009	1.08663	0.98817	0.97850	AVG		1.07413		10.88548	15.00000	O
4-Chlorophenyl-phenylether	0.45563	0.49267	0.50478	0.41439	0.38807	0.31780	AVG		0.42889		16.40788	15.00000	W(
4-Nitroaniline	0.20481	0.28645	0.22393	0.25792	0.22746	0.22860	AVG		0.23820		12.23034	15.00000	O
4,6-Dinitro-2-Methylphenol	0.13560	0.13960	0.13180	0.12931	0.12214	0.11026	AVG		0.12812		8.24055	15.00000	O
N-Nitrosodiphenylamine	0.72031	0.63738	0.58965	0.56915	0.51676	0.52241	AVG		0.59261		12.97329	30.00000	O
1,2-Diphenylhydrazine	0.80099	0.84074	0.73154	0.73836	0.65606	0.68667	AVG		0.74240		9.29282	15.00000	O
4-Bromophenyl-phenylether	0.20698	0.19566	0.18052	0.16151	0.18169	0.17618	AVG		0.18376		8.59722	15.00000	O
Hexachlorobenzene	0.22078	0.20824	0.20155	0.17075	0.18796	0.17047	AVG		0.19329		10.61380	15.00000	O
Pentachlorophenol	23436	66646	89401	139931	155805	199840	QUA	-0.04729	9.56538	10.04917	0.99404	0.99000	O
Carbazole	1.01976	0.95398	0.78412	0.79398	0.81609	0.75357	AVG		0.85358		12.56132	15.00000	O
Di-n-butylphthalate	1.44180	1.26886	1.11111	0.89036	1.09904	0.91117	AVG		1.12039		18.83160	15.00000	W(
Benzidine	0.33480	0.42070	0.34461	0.33747	0.39027	0.29225	AVG		0.35335		12.84813	15.00000	O
Butylbenzylphthalate	0.70924	0.61988	0.62544	0.63318	0.75559	0.63914	AVG		0.66374		8.37101	15.00000	O
3,3'-Dichlorobenzidine	0.28161	0.25889	0.26689	0.24449	0.22885	0.22126	AVG		0.25033		9.22588	15.00000	O
bis(2-Ethylhexyl)phthalate	0.88103	0.81683	0.82969	0.83588	0.81512	0.85345	AVG		0.83867		2.98460	15.00000	O
Di-n-octylphthalate	2.12516	2.22825	2.31710	2.61803	2.47793	2.59468	AVG		2.39352		8.42165	30.00000	O
2-Fluorophenol	1.28455	1.20190	0.99638	1.22621	1.19867	1.19365	AVG		1.18356		8.25424	15.00000	
Phenol-D6	1.52566	1.44166	1.14947	1.36784	1.28712	1.31170	AVG		1.34724		9.68709	15.00000	
Nitrobenzene-D5	0.28611	0.31264	0.31612	0.32186	0.29122	0.30457	AVG		0.30542		4.65806	15.00000	
2-Fluorobiphenyl	1.21276	0.90415	1.02060	0.85790	0.98944	0.92998	AVG		0.98580		12.74103	15.00000	
2,4,6-Tribromophenol	0.13798	0.15685	0.14288	0.13370	0.12886	0.12934	AVG		0.13827		7.62358	15.00000	
Terphenyl-D14	0.83603	0.87134	0.74303	0.76197	0.83560	0.89897	AVG		0.82449		7.38609	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-u.i\U062515.b\U0835.D
Report Date: 08-Jul-2015 15:21

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: WG165447-8
Level: LOW
Data Type: MS DATA
SpikeList File: INDcheck8270.spk
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U062515.b\U8270C80.m
Misc Info: WG165447,WG165447,WG165447-4,SI4383-1

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	59.4	118.85	80-120
3 Pyridine	50.0	50.5	100.97	80-120
2 N-Nitrosodimethyla	50.0	49.7	99.41	80-120
5 2-Picoline	50.0	63.7	127.37*	80-120
6 N-Nitrosomethyleth	50.0	58.7	117.49	80-120
7 Methyl Methanesulf	50.0	48.7	97.49	80-120
9 N-Nitrosodiethylam	50.0	59.5	119.05	80-120
10 Ethyl Methanesulfo	50.0	55.9	111.73	80-120
11 Benzaldehyde	50.0	0.000	*	80-120
14 Aniline	50.0	57.5	115.05	80-120
13 Phenol	50.0	57.8	115.57	80-120
16 Bis(2-Chloroethyl)	50.0	59.9	119.73	80-120
17 2-Chlorophenol	50.0	57.6	115.26	80-120
18 1,3-Dichlorobenzen	50.0	56.8	113.52	80-120
20 1,4-Dichlorobenzen	50.0	57.0	113.92	80-120
22 Benzyl alcohol	50.0	50.8	101.71	80-120
21 1,2-Dichlorobenzen	50.0	56.1	112.24	80-120
25 2,2'-Oxybis(1-chlo	50.0	47.5	95.06	80-120
23 2-Methylphenol	50.0	56.6	113.19	80-120
26 Acetophenone	100	107	106.86	80-120
27 N-Nitrosopyrrolidi	50.0	58.0	115.97	80-120
30 N-Nitrosomorpholin	50.0	64.6	129.21*	80-120
28 N-Nitroso-di-n-pro	50.0	50.9	101.87	80-120
29 3&4-Methylphenol	50.0	57.1	114.19	80-120
32 Hexachloroethane	50.0	56.2	112.44	80-120
31 o-Toluidine	50.0	56.4	112.79	80-120
34 Nitrobenzene	50.0	63.5	126.93*	80-120
35 N-Nitrosopiperidin	50.0	59.1	118.30	80-120
36 Isophorone	50.0	54.8	109.69	80-120
37 2-Nitrophenol	50.0	54.6	109.21	80-120
38 2,4-Dimethylphenol	50.0	56.9	113.74	80-120
40 Bis(2-Chloroethoxy	50.0	47.7	95.35	80-120
39 O,O,O-Triethylphos	50.0	50.9	101.85	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	99.3	198.60*	80-120
42 2,4-Dichlorophenol	50.0	52.9	105.80	80-120
44 1,2,4-Trichloroben	50.0	55.6	111.26	80-120
46 Naphthalene	50.0	54.9	109.83	80-120
43 2,6-Dichlorophenol	50.0	69.2	138.37*	80-120
47 4-Chloroaniline	50.0	56.8	113.51	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062515.b\U0835.D
Report Date: 08-Jul-2015 15:21

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	59.6	119.29	80-120
49 Hexachlorobutadien	50.0	58.0	115.98	80-120
51 N-Nitroso-Di-N-But	50.0	56.5	113.04	80-120
53 Caprolactam	50.0	56.8	113.56	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	53.4	106.84	80-120
55 4-Chloro-3-Methylp	50.0	55.4	110.86	80-120
57 2-Methylnaphthalen	50.0	57.5	114.93	80-120
58 1-Methylnaphthalen	50.0	56.4	112.79	80-120
60 1,2,4,5-Tetrachlor	100	105	104.92	80-120
59 Hexachlorocyclopen	50.0	48.2	96.43	80-120
61 2,4,6-Trichlorophe	50.0	57.6	115.22	80-120
62 2,4,5-Trichlorophe	50.0	60.9	121.86*	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	59.8	119.61	80-120
65 1,1'-Biphenyl	50.0	65.4	130.74*	80-120
66 2-Chloronaphthalen	50.0	55.2	110.30	80-120
67 1-Chloronaphthalen	50.0	69.0	137.91*	80-120
69 2-Nitroaniline	50.0	58.5	117.06	80-120
70 1,4-Naphthoquinone	50.0	80.3	160.68*	80-120
72 Dimethyl Phthalate	50.0	56.3	112.70	80-120
73 1,3-Dinitrobenzene	50.0	52.4	104.91	80-120
75 Acenaphthylene	50.0	50.7	101.37	80-120
74 2,6-Dinitrotoluene	50.0	55.2	110.32	80-120
77 3-Nitroaniline	50.0	58.8	117.71	80-120
79 Acenaphthene	50.0	52.3	104.64	80-120
80 2,4-Dinitrophenol	50.0	57.7	115.39	80-120
83 Dibenzofuran	50.0	59.2	118.46	80-120
81 Pentachlorobenzene	50.0	57.9	115.82	80-120
82 4-Nitrophenol	50.0	62.8	125.55*	80-120
84 2,4-Dinitrotoluene	50.0	58.3	116.69	80-120
85 1-Naphthylamine	50.0	52.0	104.02	80-120
88 2-Naphthylamine	50.0	60.5	121.05*	80-120
87 2,3,4,6-Tetrachlor	50.0	55.7	111.43	80-120
89 Diethylphthalate	50.0	55.8	111.50	80-120
91 Fluorene	50.0	59.4	118.79	80-120
92 4-Chlorophenyl-phe	50.0	59.9	119.87	80-120
90 O,O-diethyl-o-2-py	50.0	64.1	128.13*	80-120
93 5-Nitro-O-Toluidin	50.0	66.4	132.78*	80-120
94 4-Nitroaniline	50.0	58.9	117.89	80-120
96 N-Nitrosodiphenyla	100	88.4	88.35	80-120
95 4,6-Dinitro-2-Meth	50.0	57.5	115.06	80-120
98 1,2-Diphenylhydraz	50.0	53.3	106.62	80-120
101 Sulfotepp	50.0	51.4	102.86	80-120
102 Diallate	50.0	54.9	109.88	80-120
103 Phorate	50.0	27.7	55.34*	80-120
105 4-Bromophenyl-phen	50.0	56.8	113.60	80-120
106 Phenacetin	50.0	54.4	108.73	80-120
104 1,3,5-Trinitrobenz	50.0	62.1	124.26*	80-120
107 Hexachlorobenzene	50.0	57.4	114.83	80-120
108 Dimethoate	50.0	59.1	118.26	80-120
109 Atrazine	50.0	21.9	43.82*	80-120
110 4-Aminobiphenyl	50.0	38.7	77.38*	80-120
111 Pentachlorophenol	50.0	70.6	141.17*	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062515.b\U0835.D
Report Date: 08-Jul-2015 15:21

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
113 Pronamide	50.0	54.6	109.12	80-120
112 Pentachloronitrobe	50.0	56.1	112.14	80-120
116 Phenanthrene	50.0	58.9	117.80	80-120
115 Disulfoton	50.0	51.2	102.40	80-120
118 Anthracene	50.0	50.6	101.15	80-120
117 Dinoseb	50.0	59.2	118.51	80-120
119 Carbazole	50.0	53.9	107.86	80-120
120 Methyl Parathion	50.0	63.8	127.63*	80-120
121 Di-n-butylphthalat	50.0	58.0	116.02	80-120
122 Ethyl Parathion	50.0	55.5	111.05	80-120
123 4-Nitroquinoline-1	50.0	69.9	139.79*	80-120
124 Methapyrilene	50.0	24.9	49.84*	80-120
125 Isodrin	50.0	53.8	107.53	80-120
126 Fluoranthene	50.0	54.8	109.54	80-120
127 Benzidine	50.0	42.0	83.99	80-120
128 Pyrene	50.0	51.2	102.43	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	54.6	109.23	80-120
133 Chlorobenzilate	50.0	53.3	106.58	80-120
134 Famphur	50.0	0.000	*	80-120
135 3,3'-Dimethylbenzi	50.0	50.4	100.75	80-120
136 Butylbenzylphthala	50.0	54.4	108.71	80-120
137 Bis(2-ethylhexyl)a	50.0	51.1	102.24	80-120
138 2-Acetylaminofluor	50.0	55.5	110.94	80-120
140 Benzo(a)anthracene	50.0	53.4	106.85	80-120
139 3,3'-Dichlorobenzi	50.0	52.8	105.66	80-120
141 Chrysene	50.0	54.6	109.25	80-120
143 bis(2-Ethylhexyl)p	50.0	57.8	115.50	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	60.3	120.66*	80-120
147 Benzo(b)fluoranthe	50.0	53.8	107.65	80-120
146 7,12-Dimethylbenz(	50.0	56.9	113.86	80-120
148 Benzo(k)fluoranthe	50.0	58.0	116.03	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	50.8	101.54	80-120
151 3-Methylcholanthre	50.0	60.2	120.35*	80-120
152 Dibenz(a,j)acridin	50.0	50.0	99.99	80-120
153 Indeno(1,2,3-cd)py	50.0	52.6	105.25	80-120
155 Dibenzo(a,h)anthra	50.0	52.7	105.43	80-120
156 Benzo(g,h,i)peryle	50.0	51.1	102.17	80-120

SURROGATE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	35-105
$ 12 Phenol-D6	100	0.000	*	40-100
$ 33 Nitrobenzene-D5	50.0	0.000	*	35-100
$ 63 2-Fluorobiphenyl	50.0	0.000	*	45-105
$ 100 2,4,6-Tribromophe	100	0.000	*	35-125
$ 129 Terphenyl-D14	50.0	0.000	*	30-125

Logbooks and Supporting Documents

S|S SON

KATAHDIN ANALYTICAL SERVICES, INC.

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method:	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)	SW846 3580 (OIL / WIPES)
Analytical Method:	SW846 8270 ✓	OTHER		

Standards	Surrogate ID (1): SV2717	Spike ID (1): SVSA SV2715	Spike ID (3): —
	Surrogate ID (2): —	Spike ID (2): SIM SV2714	
Solvents / Chemicals / Consumables	Solvent Lot # (Mecl2): DM524	Solvent Lot # (Acetone): DM524	Sodium Sulfate (granular) Lot # 27965001
	Filter Paper Lot # (SON) F009 U151401	Filter Paper Lot # (KD) 96181511	Sodium Sulfate (powder) Lot # 27975008
Misc.	Nitrogen Bath Temperature: 36° C	Sonicator Horns Tuned: 4-1	Balance ID:

Prep Start Time: 8:30	Prep Stop Time: 12:00	Sox Start Time: —	Sox End Time: —

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction NOS	Fraction MS	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. SV239	Comments
6-24-15	HK	HG165365-1 HG165364-1	30.01	1.0	NR	✓	✓	6-24-15	KF	5.0	6-25-15	HK	1.0	E6	R SVSA R323004 SIM
		HG165365-2	30.02			✓								E7	
		-3	30.05			✓								E8	
		-4	30.60											E9	MS SI4408-1L
		-5	32.04											E10	MSD
		-6	30.48			✓								SV240 A1	MS
		-7	32.45				✓							A2	MSD
		HG165364-2	30.01											A3	
		-3	30.05											A4	
		-4	30.29											A5	MS SI4408-1L
		-5	31.08				✓							A6	MSD

EX-008 – Revision 2 – 12/05/2013 QAEX287 0000034

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction NOS	Fraction MS	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
6-24-15	HK	HG165366-6	30.10	1.0	NR	✓	✓	6-24-15	KF	5.0	6-25-15	HK	1.0	A7	MS SI4408-5G
		-7	31.88											A8	MSD
		SI4408-1I	31.67											A9	MSD
		-3L	32.12											A10	
		-5I	34.77											B1	MSD
		-7D	30.88											B2	
		-9L	31.65											B3	
		-11D	32.01											B4	
		-12L	30.70											B5	
		-13D	31.37											B6	
		-15D	33.95											B7	
		-16D	31.68											B8	
		SI4463-8A	32.57										2.0	FVD2 B6	SEE1-B -1
		SI 4A	30.72											FVD2 B10	SEE2-B -3
		SI 5B	33.02											B11	SEE1-PT -5

6-25-15

Reviewed By_____ Date_____

EX-008 – Revision 2 – 12/05/2013 QAEX287 0000035

Katahdin Analytical Services
GPC03 Logbook

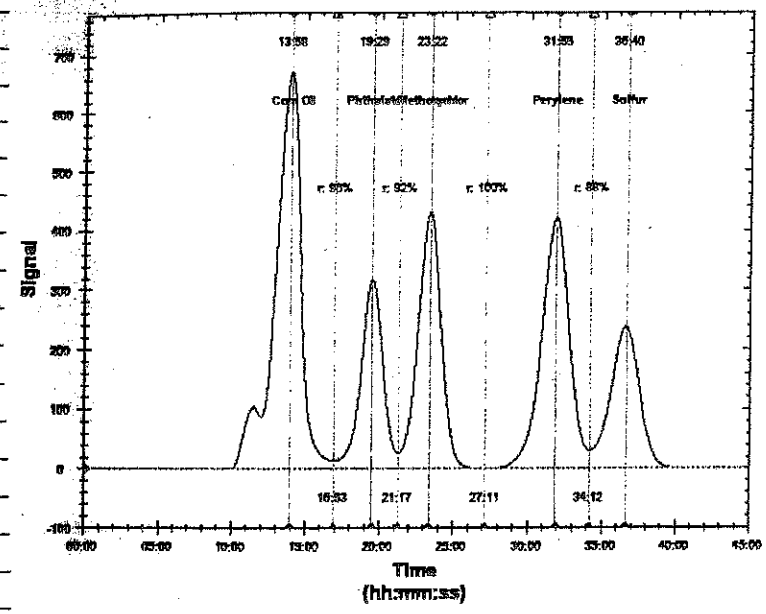
Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓		SW846 8270 ✓	
MeCl2 Lot #: DM 804	Filter Lot #: –	Room Temperature (beginning):	23.4	Room Temperature (ending):	23.8
Flow Rate: 5.0 ml/min	Flow Rate Set at: 5.47 ml/min	GPC Dump Time:	45 min	GPC Collect Time:	–

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	Dry Run	-	–	KF	6-18-15	5m	
2	Dry Run	-	–	↓	↓	↓	
3	GPC Calib STD	-	–	↓	↓	↓	
4							
5	STD 6867 + 6896						
6							
7	lot # A0106490						
8							
9	Lot → 10m in						
10	Meb lot #						
11	DM 804						
12				KF	6-18-15		
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Katahdin Analytical Services
GPC03 Logbook

Tray Pos. No.		Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
25	CALIBRATION REPORT						
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							

Sequence: CALIB081815.seq, Sample: [3] - [DT1]



P/P Dump: 21.17
collect: 12.95

S/S Dump: 16.53
collect: 23.47

Katahdin Analytical Services
GPC03 Logbook

Analytical Method: (check one)	SW846 8081	SW846 8082		SW846 8270 ✓	
MeCl2 Lot #: DM504	Filter Lot #: D041114030	Room Temperature (beginning):	24.2	Room Temperature (ending):	24.7
Flow Rate: 5.0 ml/min	Flow Rate Set at: 5.47 ml/min	GPC Dump Time:	12.95	GPC Collect Time:	23.47

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	GPC Blank	–	-	KF	6-24-15	5m	
2	WG165365-1 WG165366-1	6-24-15	5m				
3	WG165365-2						
4	-3						
5	WG165366-2						
6	-3						
7	WG165365-4						
8	-5						
9	-6						
10	-7						
11	WG165366-4						
12	-5						
13	-6						
14	-7						
15	SI 4408-1						
16	-3						
17	-5						
18	-7						
19	-9						
20	-11						
21	-12						
22	-13						
23	-15						
24	-16						

Katahdin Analytical Services
GPC03 Logbook

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
25	SI 4463-2	6-24-15	5m	KF	6-24-15	5m	
26	-4						
27	-6						
28	Fish Test -3	6-24-15	10m				
29	-4						
30	Dry Run	–	–				
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45						KF	6-25-15

Katahdin Analytical Services
GPC03 Logbook

Analytical Method: (check one)	SW846 8081	SW846 8082		SW846 8270 ✓	
MeCl2 Lot #: DM 804	Filter Lot #: 704114030	Room Temperature (beginning):	24.2	Room Temperature (ending):	24.7
Flow Rate: 5.0 ml/min	Flow Rate Set at: 5.47 ml/min	GPC Dump Time:	12.95	GPC Collect Time:	23.47

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	GPC Blank	–	–	KF	6-24-15	5m	
2	WG165365-1 WG165366-1	6-24-15	5m				
3	WG165365-2						
4	-3						
5	WG165366-2						
6	-3						
7	WG165365-4						
8	-5						
9	-6						
10	-7						
11	WG165366-4						
12	-5						
13	-6						
14	-7						
15	SI 4408-1						
16	-3						
17	-5						
18	-7						
19	-9						
20	-11						
21	-12						
22	-13						
23	-15						
24	-16						

Katahdin Analytical Services
GPC03 Logbook

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
25	SI 4463-1	6-24-15	5m	KF	6-24-15	5m	
26	-3						
27	-5						
28	Fish Test-3	6-24-15	10m				
29	-4						
30	Dry Run	–	–				
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45						KF	6-25-15

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 062575

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165447-1	50ng DFTPP	U0394	1	1	DFTPP390	2.0	~~2.0~~ JCL	OK
-4	SSTD050 U0625	U0829		2	U8270C80	1.0	~~1.0~~	✓
-2	010	30		3				✓
-3	025	31		4				✓
-5	075	32		5				✓
-6	100	33		6				✓
-7	125	34		7				✓
-8	150	35		8				OK
3550	WG165365-1	36		9				OK
	-2	37		10				OK
	-3	38		11				OK
	SI44408-15	39		12				OK
	-16	40		13				OK
	-13	41		14				1556
	-1	42		15				1556
	WG165365-4	43		16				1556 SS6T
	-5	44		17				1556 ~~DC1:2~~
	SI44408-5	45		18				1556 DC1:2
	WG165365-6	46		19				1556 SS6T
	-7	47		20				1556
	SI44408-3	48		21				1556
	-7	49		22				1556
	SI44463-1DL	50	2	23				15456 SS3,4,6T
	-3DL	51	2	24				15456 SS3,4,6T
	-5DL	52	2	25				15456 SS4T
	SI44408-9	53	1	26				1556
	-11	54		27				1556
	-12	55		28				1556 DDC
				29				

STANDARD	CODE
DFTPP	52611
CAL. STD.	52640 SJK4917
IS MIX	SJK5001

REVIEWED AND APPROVED BY: _____
DATE: _____

SIM SEMIVOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI4463

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SITE 4TS-SEE1-B	SI4463-1DL		0.00	D	0.00	D	0.00	D
SITE 4TS-SEE1-B	SI4463-1DL2		0.00	D	0.00	D	0.00	D
SITE 4TS-SEE2-B	SI4463-3DL		0.00	D	0.00	D	0.00	D
SITE 4TS-SEE2-B	SI4463-3DL2		0.00	D	0.00	D	0.00	D
SITE 4TS-SEE1-PT	SI4463-5DL		0.00	D	0.00	D	0.00	D
SITE 4TS-SEE1-PT	SI4463-5DL2		0.00	D	0.00	D	0.00	D
Method Blank Sample	WG165366-1		47.4		50.7		61.6	
Laboratory Control S	WG165366-2		83.7		69.5		76.9	
Laboratory Control S	WG165366-3		86.3		72.4		74.6	

		QC Limits
PYR	PYRENE-D10	31-128
FLO	FLUORENE-D10	20-96
2MN	2-METHYLNAPHTHALENE-D10	19-94

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : N6831.D
Instrument ID : GCMS-N
Matrix : SL

SDG : SI4463
Lab Sample ID : WG165366-1
Date Extracted : 24-JUN-15
Date Analyzed : 25-JUN-15
Time Analyzed : 14:49

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165366-2	N6834.D	06/25/15	16:14
Laboratory Control S	WG165366-3	N6835.D	06/25/15	16:43
SITE 4TS-SEE1-B	SI4463-1DL	N6852.D	06/26/15	00:38
SITE 4TS-SEE2-B	SI4463-3DL	N6853.D	06/26/15	01:05
SITE 4TS-SEE1-PT	SI4463-5DL	N6854.D	06/26/15	01:33
SITE 4TS-SEE1-B	SI4463-1DL2	N6874.D	06/26/15	15:04
SITE 4TS-SEE2-B	SI4463-3DL2	N6875.D	06/26/15	15:32
SITE 4TS-SEE1-PT	SI4463-5DL2	N6876.D	06/26/15	16:00

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165366-1
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: N6831.D

Sample Date:
Received Date:
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165366

Analysis Date: 25-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10	ug/Kgdrywt	1	20	20.	2.6	10.
Acenaphthylene	U	10	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	J	2.2	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo(a)anthracene	U	10	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo(b)Fluoranthene	U	10	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno(1,2,3-cd)pyrene	U	10	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo(a,h)anthracene	U	10	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene	U	10	ug/Kgdrywt	1	20	20.	2.2	10.
2-Methylnaphthalene-D10		47.4	%					
Fluorene-D10		50.7	%					
Pyrene-D10		61.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165366-2
LCSD ID: WG165366-3
Project:
SDG: SI4463
Report Date: 10-JUL-15
LCS File ID: N6834.D

Received Date:
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165366
LCSD File ID: N6835.D

Analysis Date: 25-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	66.7	45.2	67.8	50.4	75.6	ug/Kgdrywt	11	30	10-129
Acenaphthylene	66.7	39.8	59.7	43.0	64.5	ug/Kgdrywt	8	30	25-94
Acenaphthene	66.7	42.4	63.6	45.4	68.1	ug/Kgdrywt	7	30	33-98
Fluorene	66.7	43.0	64.5	46.5	69.7	ug/Kgdrywt	8	30	40-92
Phenanthrene	66.7	38.1	57.1	40.4	60.6	ug/Kgdrywt	6	30	46-96
Anthracene	66.7	44.8	67.2	47.0	70.5	ug/Kgdrywt	5	30	34-96
Fluoranthene	66.7	46.0	69.0	47.8	71.7	ug/Kgdrywt	4	30	38-116
Pyrene	66.7	41.1	61.6	41.6	62.4	ug/Kgdrywt	1	30	35-111
Benzo(a)anthracene	66.7	44.6	66.9	44.8	67.2	ug/Kgdrywt	0	30	48-100
Chrysene	66.7	61.8	92.6	65.8	98.6	ug/Kgdrywt	6	30	46-101
Benzo(b)Fluoranthene	66.7	33.5	50.2*	40.2	60.3	ug/Kgdrywt	18	30	53-100
Benzo(k)fluoranthene	66.7	60.6	90.8	59.2	88.8	ug/Kgdrywt	2	30	49-96
Benzo(a)pyrene	66.7	46.0	69.0	47.3	70.9	ug/Kgdrywt	3	30	61-101
Indeno(1,2,3-cd)pyrene	66.7	49.4	74.1	48.6	72.9	ug/Kgdrywt	2	30	50-105
Dibenzo(a,h)anthracene	66.7	50.6	75.9	49.5	74.2	ug/Kgdrywt	2	30	55-105
Benzo(g,h,i)perylene	66.7	52.7	79.0	52.7	79.0	ug/Kgdrywt	0	30	53-103
2-Methylnaphthalene	66.7	48.5	72.7	54.0	81.0	ug/Kgdrywt	11	30	10-152
2-Methylnaphthalene-D10			83.7		86.3				19-94
Fluorene-D10			69.5		72.4				20-96
Pyrene-D10			76.9		74.6				31-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND958.D
Instrument ID : GCMS-N

SDG : SI4463
Date Analyzed : 23-JUN-15
Time Analyzed : 12:11

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.1		
68	Less than 2.0% of mass 69	0.7	1.60	1
69	Less than 100.0% of mass 198	40.7		
70	Less than 2.0% of mass 69	0.2	0.55	1
127	40.0 - 60.0% of mass 198	60.0		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	22.8		
365	1.0 - 100.0% of mass 198	2.3		
441	0.0 - 100.0% of mass 443	11.0	73.31	2
442	40.0 - 100.0% of mass 198	78.5		
443	17.0 - 23.0% of mass 442	15.0	19.11	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165324-4	N6778.D	06/23/15	13:03
Initial Calibration	WG165324-2	N6779.D	06/23/15	13:31
Initial Calibration	WG165324-3	N6780.D	06/23/15	13:59
Initial Calibration	WG165324-5	N6781.D	06/23/15	14:27
Initial Calibration	WG165324-6	N6782.D	06/23/15	14:55
Initial Calibration	WG165324-7	N6783.D	06/23/15	15:23
Independent Source	WG165324-8	N6784.D	06/23/15	15:51

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND960.D
Instrument ID : GCMS-N

SDG : SI4463
Date Analyzed : 25-JUN-15
Time Analyzed : 13:33

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	33.7		
68	Less than 2.0% of mass 69	0.7	1.72	1
69	Less than 100.0% of mass 198	41.4		
70	Less than 2.0% of mass 69	0.2	0.44	1
127	40.0 - 60.0% of mass 198	59.1		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.5		
275	10.0 - 30.0% of mass 198	23.0		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	12.1	72.28	2
442	40.0 - 100.0% of mass 198	86.1		
443	17.0 - 23.0% of mass 442	16.7	19.46	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165435-2	N6829.D	06/25/15	13:52
Method Blank Sample	WG165366-1	N6831.D	06/25/15	14:49
Laboratory Control S	WG165366-2	N6834.D	06/25/15	16:14
Laboratory Control S	WG165366-3	N6835.D	06/25/15	16:43
SITE 4TS-SEE1-B	SI4463-1DL	N6852.D	06/26/15	00:38
SITE 4TS-SEE2-B	SI4463-3DL	N6853.D	06/26/15	01:05
SITE 4TS-SEE1-PT	SI4463-5DL	N6854.D	06/26/15	01:33

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND961.D
Instrument ID : GCMS-N

SDG : SI4463
Date Analyzed : 26-JUN-15
Time Analyzed : 14:12

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	33.1		
68	Less than 2.0% of mass 69	0.7	1.73	1
69	Less than 100.0% of mass 198	41.1		
70	Less than 2.0% of mass 69	0.2	0.42	1
127	40.0 - 60.0% of mass 198	59.1		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	23.3		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	12.9	75.02	2
442	40.0 - 100.0% of mass 198	90.2		
443	17.0 - 23.0% of mass 442	17.1	19.01	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165522-2	N6873.D	06/26/15	14:30
SITE 4TS-SEE1-B	SI4463-1DL2	N6874.D	06/26/15	15:04
SITE 4TS-SEE2-B	SI4463-3DL2	N6875.D	06/26/15	15:32
SITE 4TS-SEE1-PT	SI4463-5DL2	N6876.D	06/26/15	16:00

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI4463
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	88250		4.40		265068		5.77		116126		7.83	
	Upper Limit	176500		4.90		530136		6.27		232252		8.33	
	Lower Limit	44125		3.90		132534		5.27		58063		7.33	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165435-2	47758		4.36		164160		5.72		67620		7.79	
Method Blank Sample	WG165366-1	49999		4.36		170203		5.76		76057		7.80	
Laboratory Control S	WG165366-2	45212		4.36		159089		5.73		72828		7.79	
Laboratory Control S	WG165366-3	45663		4.36		156103		5.73		72506		7.79	
SITE 4TS-SEE1-B	SI4463-1DL	50890		4.36		163409		5.72		57849	*	7.80	
SITE 4TS-SEE2-B	SI4463-3DL	57344		4.36		193089		5.72		71619		7.81	
SITE 4TS-SEE1-PT	SI4463-5DL	53641		4.36		198184		5.72		70132		7.80	
Continuing Calibrati	WG165522-2	67616		4.33		239423		5.71		107201		7.77	
SITE 4TS-SEE1-B	SI4463-1DL2	69078		4.34		246220		5.70		115738		7.76	
SITE 4TS-SEE2-B	SI4463-3DL2	72607		4.34		258573		5.70		127221		7.76	
SITE 4TS-SEE1-PT	SI4463-5DL2	63843		4.36		250125		5.71		122956		7.76	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI4463
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	Area	#	RT	Area	#	RT
	Std .	156981		9.62	75747		12.97	36246		15.72
	Upper Limit	313962		10.12	151494		13.47	72492		16.22
	Lower Limit	78490.5		9.12	37873.5		12.47	18123		15.22
Client Sample ID	Lab Sample ID									
Continuing Calibrati	WG165435-2	97361		9.58	57197		12.91	32761		15.64
Method Blank Sample	WG165366-1	121160		9.59	58815		12.92	27618		15.65
Laboratory Control S	WG165366-2	124919		9.58	64085		12.92	33229		15.65
Laboratory Control S	WG165366-3	123773		9.58	65235		12.92	37006		15.66
SITE 4TS-SEE1-B	SI4463-1DL	79423		9.60	17000	*	12.94	7757	*	15.66
SITE 4TS-SEE2-B	SI4463-3DL	85544		9.60	18142	*	12.94	8013	*	15.67
SITE 4TS-SEE1-PT	SI4463-5DL	83861		9.60	18817	*	12.94	9182	*	15.67
Continuing Calibrati	WG165522-2	143618		9.57	55809		12.91	32271		15.65
SITE 4TS-SEE1-B	SI4463-1DL2	158001		9.54	48031		12.88	27567		15.59
SITE 4TS-SEE2-B	SI4463-3DL2	161645		9.54	53388		12.88	29109		15.59
SITE 4TS-SEE1-PT	SI4463-5DL2	154165		9.54	52153		12.88	31161		15.59

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-1DL
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: N6852.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165366

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 92.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		390	ug/Kgdrywt	5	20	200	26.	99.
Acenaphthylene	J	130	ug/Kgdrywt	5	20	200	12.	99.
Acenaphthene		530	ug/Kgdrywt	5	20	200	15.	99.
Fluorene		760	ug/Kgdrywt	5	20	200	32.	99.
Phenanthrene		1700	ug/Kgdrywt	5	20	200	18.	99.
Anthracene		650	ug/Kgdrywt	5	20	200	12.	99.
Fluoranthene		330	ug/Kgdrywt	5	20	200	18.	99.
Pyrene	E	15000	ug/Kgdrywt	5	20	200	21.	99.
Benzo(a)anthracene		1500	ug/Kgdrywt	5	20	200	19.	99.
Chrysene		3200	ug/Kgdrywt	5	20	200	17.	99.
Benzo(b)Fluoranthene	L	1100	ug/Kgdrywt	5	20	200	24.	99.
Benzo(k)fluoranthene		300	ug/Kgdrywt	5	20	200	30.	99.
Benzo(a)pyrene		1600	ug/Kgdrywt	5	20	200	32.	99.
Indeno(1,2,3-cd)pyrene		660	ug/Kgdrywt	5	20	200	19.	99.
Dibenzo(a,h)anthracene		360	ug/Kgdrywt	5	20	200	18.	99.
Benzo(g,h,i)perylene		1600	ug/Kgdrywt	5	20	200	20.	99.
2-Methylnaphthalene		1700	ug/Kgdrywt	5	20	200	22.	99.
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-1DL2
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: N6874.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165366

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 92.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	440	ug/Kgdrywt	50	20	2000	260	990
Acenaphthylene	U	990	ug/Kgdrywt	50	20	2000	120	990
Acenaphthene	J	680	ug/Kgdrywt	50	20	2000	150	990
Fluorene	J	780	ug/Kgdrywt	50	20	2000	320	990
Phenanthrene		2400	ug/Kgdrywt	50	20	2000	180	990
Anthracene	J	980	ug/Kgdrywt	50	20	2000	120	990
Fluoranthene	J	1000	ug/Kgdrywt	50	20	2000	180	990
Pyrene		9700	ug/Kgdrywt	50	20	2000	210	990
Benzo(a)anthracene		2400	ug/Kgdrywt	50	20	2000	190	990
Chrysene		3200	ug/Kgdrywt	50	20	2000	170	990
Benzo(b)Fluoranthene	J	1400	ug/Kgdrywt	50	20	2000	240	990
Benzo(k)fluoranthene	U	990	ug/Kgdrywt	50	20	2000	300	990
Benzo(a)pyrene	J	1600	ug/Kgdrywt	50	20	2000	320	990
Indeno(1,2,3-cd)pyrene	J	490	ug/Kgdrywt	50	20	2000	190	990
Dibenzo(a,h)anthracene	U	990	ug/Kgdrywt	50	20	2000	180	990
Benzo(g,h,i)perylene	J	710	ug/Kgdrywt	50	20	2000	200	990
2-Methylnaphthalene	U	990	ug/Kgdrywt	50	20	2000	220	990
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-3DL
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: N6853.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165366

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 92.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		450	ug/Kgdrywt	5	20	210	28.	110
Acenaphthylene	J	150	ug/Kgdrywt	5	20	210	13.	110
Acenaphthene		560	ug/Kgdrywt	5	20	210	16.	110
Fluorene		910	ug/Kgdrywt	5	20	210	34.	110
Phenanthrene		2000	ug/Kgdrywt	5	20	210	19.	110
Anthracene		830	ug/Kgdrywt	5	20	210	13.	110
Fluoranthene		360	ug/Kgdrywt	5	20	210	19.	110
Pyrene	E	19000	ug/Kgdrywt	5	20	210	22.	110
Benzo(a)anthracene		1800	ug/Kgdrywt	5	20	210	20.	110
Chrysene		2800	ug/Kgdrywt	5	20	210	18.	110
Benzo(b)Fluoranthene	L	970	ug/Kgdrywt	5	20	210	26.	110
Benzo(k)fluoranthene		260	ug/Kgdrywt	5	20	210	33.	110
Benzo(a)pyrene		1600	ug/Kgdrywt	5	20	210	35.	110
Indeno(1,2,3-cd)pyrene		520	ug/Kgdrywt	5	20	210	20.	110
Dibenzo(a,h)anthracene		350	ug/Kgdrywt	5	20	210	19.	110
Benzo(g,h,i)perylene		1500	ug/Kgdrywt	5	20	210	21.	110
2-Methylnaphthalene		1800	ug/Kgdrywt	5	20	210	23.	110
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-3DL2
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: N6875.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165366

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 92.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	520	ug/Kgdrywt	50	20	2100	280	1100
Acenaphthylene	U	1100	ug/Kgdrywt	50	20	2100	130	1100
Acenaphthene	J	740	ug/Kgdrywt	50	20	2100	160	1100
Fluorene	J	890	ug/Kgdrywt	50	20	2100	340	1100
Phenanthrene		2700	ug/Kgdrywt	50	20	2100	190	1100
Anthracene	J	1100	ug/Kgdrywt	50	20	2100	130	1100
Fluoranthene	J	900	ug/Kgdrywt	50	20	2100	190	1100
Pyrene		9900	ug/Kgdrywt	50	20	2100	220	1100
Benzo(a)anthracene		2200	ug/Kgdrywt	50	20	2100	200	1100
Chrysene		3000	ug/Kgdrywt	50	20	2100	180	1100
Benzo(b)Fluoranthene	U	1100	ug/Kgdrywt	50	20	2100	260	1100
Benzo(k)fluoranthene	U	1100	ug/Kgdrywt	50	20	2100	330	1100
Benzo(a)pyrene	J	1600	ug/Kgdrywt	50	20	2100	350	1100
Indeno(1,2,3-cd)pyrene	J	480	ug/Kgdrywt	50	20	2100	200	1100
Dibenzo(a,h)anthracene		2200	ug/Kgdrywt	50	20	2100	190	1100
Benzo(g,h,i)perylene	J	760	ug/Kgdrywt	50	20	2100	210	1100
2-Methylnaphthalene	U	1100	ug/Kgdrywt	50	20	2100	230	1100
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-5DL
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: N6854.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165366

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 94.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	J	110	ug/Kgdrywt	5	20	190	25.	97.
Acenaphthylene	U	97	ug/Kgdrywt	5	20	190	12.	97.
Acenaphthene		490	ug/Kgdrywt	5	20	190	14.	97.
Fluorene		660	ug/Kgdrywt	5	20	190	31.	97.
Phenanthrene		1600	ug/Kgdrywt	5	20	190	17.	97.
Anthracene		650	ug/Kgdrywt	5	20	190	12.	97.
Fluoranthene		390	ug/Kgdrywt	5	20	190	17.	97.
Pyrene	E	16000	ug/Kgdrywt	5	20	190	20.	97.
Benzo(a)anthracene		1600	ug/Kgdrywt	5	20	190	18.	97.
Chrysene		2800	ug/Kgdrywt	5	20	190	16.	97.
Benzo(b)Fluoranthene	L	780	ug/Kgdrywt	5	20	190	23.	97.
Benzo(k)fluoranthene	J	160	ug/Kgdrywt	5	20	190	30.	97.
Benzo(a)pyrene		1300	ug/Kgdrywt	5	20	190	32.	97.
Indeno(1,2,3-cd)pyrene		450	ug/Kgdrywt	5	20	190	18.	97.
Dibenzo(a,h)anthracene		300	ug/Kgdrywt	5	20	190	17.	97.
Benzo(g,h,i)perylene		1300	ug/Kgdrywt	5	20	190	19.	97.
2-Methylnaphthalene		620	ug/Kgdrywt	5	20	190	21.	97.
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-5DL2
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: N6876.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 24-JUN-15
Extracted By: HG
Extraction Method: SW846 3550
Lab Prep Batch: WG165366

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 94.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	970	ug/Kgdrywt	50	20	1900	250	970
Acenaphthylene	U	970	ug/Kgdrywt	50	20	1900	120	970
Acenaphthene	J	490	ug/Kgdrywt	50	20	1900	140	970
Fluorene	J	600	ug/Kgdrywt	50	20	1900	310	970
Phenanthrene	J	1900	ug/Kgdrywt	50	20	1900	170	970
Anthracene	J	780	ug/Kgdrywt	50	20	1900	120	970
Fluoranthene	J	740	ug/Kgdrywt	50	20	1900	170	970
Pyrene		7200	ug/Kgdrywt	50	20	1900	200	970
Benzo(a)anthracene	J	1600	ug/Kgdrywt	50	20	1900	180	970
Chrysene		2900	ug/Kgdrywt	50	20	1900	160	970
Benzo(b)Fluoranthene	J	1000	ug/Kgdrywt	50	20	1900	230	970
Benzo(k)fluoranthene	U	970	ug/Kgdrywt	50	20	1900	300	970
Benzo(a)pyrene	J	1300	ug/Kgdrywt	50	20	1900	320	970
Indeno(1,2,3-cd)pyrene	J	400	ug/Kgdrywt	50	20	1900	180	970
Dibenzo(a,h)anthracene	U	970	ug/Kgdrywt	50	20	1900	170	970
Benzo(g,h,i)perylene	J	600	ug/Kgdrywt	50	20	1900	190	970
2-Methylnaphthalene	U	970	ug/Kgdrywt	50	20	1900	210	970
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6779.D N6780.D N6778.D N6781.D N6782.D N6783.D **Column ID:**
Calibration Date(s): 23-JUN-15 13:03 23-JUN-15 15:23

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Crv					Max	
	0.200000(	0.500000(	1.0000	3.0000	7.0000	10.0000	New	b	m1	m2	%RSD	%RSD	
Naphthalene	1.14657	0.96464	1.00870	0.97468	0.94567	0.88692	AVG		0.98786		8.86019	15.00000	O
2-Methylnaphthalene	60910	143297	275312	724702	1544385	2210172	LNR	-0.25197	0.63698		0.99737	0.99000	O
Acenaphthylene	2.22876	2.37478	2.40908	2.27085	2.35204	2.20386	AVG		2.30656		3.63289	15.00000	O
Acenaphthene	1.37272	1.45465	1.47437	1.39113	1.45032	1.32283	AVG		1.41100		4.14486	15.00000	O
Fluorene	1.39907	1.50265	1.51958	1.44270	1.52562	1.40814	AVG		1.46629		3.87447	15.00000	O
Phenanthrene	1.25216	1.23333	1.28818	1.22719	1.28422	1.21678	AVG		1.25031		2.40849	15.00000	O
Anthracene	1.50554	1.61772	1.53726	1.33509	1.42329	1.27865	AVG		1.44959		8.84014	15.00000	O
Fluoranthene	1.25300	1.20210	1.24336	1.11653	1.24233	1.16556	AVG		1.20381		4.48136	15.00000	O
Pyrene	49747	118527	258919	728876	1818636	2584079	QUA	-0.03154	0.35532	0.00654	0.99994	0.99000	O
Benzo(a)anthracene	27521	56401	132357	366200	1069947	1681282	LNR	-0.04547	1.25158		0.99949	0.99000	O
Chrysene	40645	84668	138690	434554	1133242	1688346	LNR	-0.27845	1.26064		0.99861	0.99000	O
Benzo(b)fluoranthene	18197	34502	75742	213765	703846	998280	QUA	0.05333	0.59674	0.00295	0.99109	0.99000	O
Benzo(k)fluoranthene	23958	53018	104578	316787	780100	1296802	LNR	-0.15933	1.87606		0.99926	0.99000	O
Benzo(a)pyrene	1.75015	1.62696	1.30023	1.23861	1.35856	1.30267	AVG		1.42953		14.54197	15.00000	O
Indeno(1,2,3-cd)pyrene	1.16040	0.94659	0.95291	0.84337	0.88721	0.82105	AVG		0.93525		13.08892	15.00000	O
Dibenzo(a,h)anthracene	0.80886	0.66139	0.68002	0.60210	0.64051	0.60032	AVG		0.66553		11.57493	15.00000	O
Benzo(g,h,i)perylene	7694	19553	41765	129813	338222	494804	LNR	-0.18495	0.74765		0.99618	0.99000	O
2-Methylnaphthalene-D10	1.09203	1.13690	1.13834	1.07092	1.10734	1.01694	AVG		1.09374		4.18158	15.00000	
Fluorene-D10	0.89557	0.92877	0.93832	0.88861	0.91713	0.85627	AVG		0.90411		3.33644	15.00000	
Pyrene-D10	23587	66268	142886	419789	1048907	1494345	LNR	-0.29475	1.13914		0.99509	0.99000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N062315.b\N6784.D
Report Date: 24-Jun-2015 10:51

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: WG165324-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: SIM_IND_CHK.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N062315.b\NSPSIM45.m
Misc Info: WG165324,WG165324,WG164324-4

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	2.53	126.35*	80-120
3 Benzaldehyde	2.00	1.77	88.57	80-120
4 Phenol	2.00	2.25	112.68	80-120
5 Bis(2-Chloroethyl)	2.00	2.14	107.22	80-120
6 2-Chlorophenol	2.00	2.13	106.73	80-120
7 1,3-Dichlorobenzen	2.00	1.84	92.21	80-120
9 1,4-Dichlorobenzen	2.00	2.26	113.04	80-120
10 1,2-Dichlorobenzen	2.00	2.18	108.83	80-120
11 2,2'-Oxybis(1-chlo	2.00	1.95	97.30	80-120
12 2-Methylphenol	2.00	1.98	99.13	80-120
13 Acetophenone	2.00	2.09	104.41	80-120
14 N-Nitroso-di-n-pro	2.00	1.97	98.53	80-120
16 Hexachloroethane	2.00	2.04	101.82	80-120
15 3&4-Methylphenol	2.00	2.46	123.08*	80-120
17 Nitrobenzene	2.00	2.61	130.61*	80-120
18 Isophorone	2.00	2.33	116.47	80-120
19 2-Nitrophenol	2.00	2.06	102.76	80-120
20 2,4-Dimethylphenol	2.00	1.97	98.32	80-120
21 bis(2-Chloroethoxy	2.00	2.17	108.45	80-120
22 2,4-Dichlorophenol	2.00	2.08	103.83	80-120
23 1,2,4-Trichloroben	2.00	2.18	109.15	80-120
25 Naphthalene	2.00	2.14	107.06	80-120
26 4-Chloroaniline	2.00	2.10	105.16	80-120
27 Hexachlorobutadien	2.00	2.15	107.44	80-120
28 Caprolactam	2.00	2.00	100.00	80-120
29 4-Chloro-3-Methylp	2.00	2.07	103.67	80-120
31 2-Methylnaphthalen	2.00	2.19	109.72	80-120
32 1-Methylnaphthalen	2.00	2.46	122.85*	80-120
34 1,2,4,5-Tetrachlor	2.00	1.92	96.28	80-120
33 Hexachlorocyclopen	2.00	1.26	63.04*	80-120
36 2,4,6-Trichlorophe	2.00	1.84	91.86	80-120
37 2,4,5-Trichlorophe	2.00	2.08	104.07	80-120
39 2-Chloronaphthalen	2.00	1.99	99.46	80-120
38 1,1'-Biphenyl	2.00	1.98	99.12	80-120
40 2-Nitroaniline	2.00	2.03	101.59	80-120
41 Dimethyl Phthalate	2.00	2.06	102.80	80-120
43 Acenaphthylene	2.00	1.75	87.71	80-120
42 2,6-Dinitrotoluene	2.00	1.88	93.93	80-120
44 3-Nitroaniline	2.00	2.08	103.95	80-120
46 Acenaphthene	2.00	2.03	101.73	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N062315.b\N6784.D
Report Date: 24-Jun-2015 10:51

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 2,4-Dinitrophenol	2.00	1.33	66.50*	80-120
48 Dibenzofuran	2.00	2.02	101.30	80-120
49 2,4-Dinitrotoluene	2.00	1.96	97.87	80-120
50 4-Nitrophenol	2.00	1.67	83.66	80-120
51 2,3,4,6-Tetrachlor	2.00	1.57	78.72*	80-120
52 Diethylphthalate	2.00	2.16	107.99	80-120
54 Fluorene	2.00	1.98	99.24	80-120
56 4-Nitroaniline	2.00	2.49	124.55*	80-120
57 4,6-Dinitro-2-Meth	2.00	1.81	90.39	80-120
58 N-Nitrosodiphenyla	2.00	1.60	80.24	80-120
59 4-Bromophenyl-phen	2.00	1.96	98.19	80-120
60 Hexachlorobenzene	2.00	1.92	95.76	80-120
61 Atrazine	2.00	1.74	86.93	80-120
62 Pentachlorophenol	2.00	1.77	88.66	80-120
64 Phenanthrene	2.00	1.90	94.98	80-120
65 Anthracene	2.00	2.03	101.62	80-120
66 Carbazole	2.00	2.00	99.96	80-120
67 Di-n-butylphthalat	2.00	2.13	106.62	80-120
68 Fluoranthene	2.00	1.96	98.04	80-120
70 Pyrene	2.00	1.92	96.03	80-120
71 Butylbenzylphthala	2.00	1.83	91.33	80-120
72 Benzo(a)anthracene	2.00	1.92	95.98	80-120
75 Chrysene	2.00	2.13	106.34	80-120
73 3,3'-Dichlorobenzi	2.00	2.18	109.20	80-120
76 bis(2-Ethylhexyl)p	2.00	1.72	85.90	80-120
77 Di-n-octylphthalat	2.00	1.78	88.98	80-120
78 Benzo(b)fluoranthe	2.00	1.68	83.84	80-120
79 Benzo(k)fluoranthe	2.00	2.17	108.47	80-120
80 Benzo(a)pyrene	2.00	1.73	86.35	80-120
82 Indeno(1,2,3-cd)py	2.00	1.81	90.36	80-120
83 Dibenzo(a,h)anthra	2.00	1.83	91.58	80-120
84 Benzo(g,h,i)peryle	2.00	2.03	101.53	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	10-93
$ 30 2-Methylnaphthale	2.00	0.000	*	43-92
$ 35 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 53 Fluorene-D10	2.00	0.000	*	29-101
$ 69 Pyrene-D10	2.00	0.000	*	53-166

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4463
Lab ID : WG165435-2
Analytical Date: 06/25/15 13:52
Lab File ID : N6829.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/23/15 13:03 06/23/15 15:23
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
25 Naphthalene	0.98786	1.00665	1.00665	0.010	1.90197	20.00000	Averaged
31 2-Methylnaphthalene	1.00000	1.07909	0.81576	0.010	7.90873	20.00000	Linear
43 Acenaphthylene	2.30656	2.41439	2.41439	0.010	4.67476	20.00000	Averaged
46 Acenaphthene	1.41100	1.50727	1.50727	0.010	6.82261	20.01000	Averaged
54 Fluorene	1.46629	1.53789	1.53789	0.010	4.88266	20.00000	Averaged
64 Phenanthrene	1.25031	1.23160	1.23160	0.010	-1.49660	20.00000	Averaged
65 Anthracene	1.44959	1.61012	1.61012	0.010	11.07422	20.00000	Averaged
68 Fluoranthene	1.20381	1.22989	1.22989	0.010	2.16623	20.01000	Averaged
70 Pyrene	1.00000	0.80222	2.21571	0.010	-19.77777	20.00000	Quadratic
72 Benzo(a)anthracene	1.00000	1.01923	1.32117	0.010	1.92311	20.00000	Linear
75 Chrysene	1.00000	0.98197	1.51872	0.010	-1.80311	20.00000	Linear
78 Benzo(b)fluoranthene	1.00000	0.93261	1.47785	0.010	-6.73872	20.00000	Quadratic
79 Benzo(k)fluoranthene	1.00000	1.04396	2.19766	0.010	4.39603	20.00000	Linear
80 Benzo(a)pyrene	1.42953	1.45605	1.45605	0.010	1.85513	20.01000	Averaged
82 Indeno(1,2,3-cd)pyrene	0.93525	0.98949	0.98949	0.010	5.79940	20.00000	Averaged
83 Dibenzo(a,h)anthracene	0.66553	0.71290	0.71290	0.010	7.11667	20.00000	Averaged
84 Benzo(g,h,i)perylene	1.00000	1.16695	0.98310	0.010	16.69462	20.00000	Linear
30 2-Methylnaphthalene-D10	1.09374	1.15110	1.15110	0.010	5.24421	20.00000	Averaged
53 Fluorene-D10	0.90411	0.92835	0.92835	0.010	2.68121	20.00000	Averaged
69 Pyrene-D10	1.00000	0.84481	1.23097	0.010	-15.51890	20.00000	Linear

*** = Compound out of QC criteria**

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4463
Lab ID : WG165522-2
Analytical Date: 06/26/15 14:30
Lab File ID : N6873.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/23/15 13:03 06/23/15 15:23
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
25 Naphthalene	0.98786	1.14157	1.14157	0.010	15.55964	20.00000	Averaged	
31 2-Methylnaphthalene	1.00000	1.13153	0.84916	0.010	13.15319	20.00000	Linear	
43 Acenaphthylene	2.30656	2.30595	2.30595	0.010	-0.02652	20.00000	Averaged	
46 Acenaphthene	1.41100	1.41223	1.41223	0.010	0.08666	20.01000	Averaged	
54 Fluorene	1.46629	1.46941	1.46941	0.010	0.21262	20.00000	Averaged	
64 Phenanthrene	1.25031	1.21158	1.21158	0.010	-3.09757	20.00000	Averaged	
65 Anthracene	1.44959	1.63627	1.63627	0.010	12.87824	20.00000	Averaged	
68 Fluoranthene	1.20381	1.16276	1.16276	0.010	-3.41039	20.01000	Averaged	
70 Pyrene	1.00000	1.22972	3.28363	0.010	22.97189	20.00000	Quadratic	*
72 Benzo(a)anthracene	1.00000	0.90167	1.17403	0.010	-9.83332	20.00000	Linear	
75 Chrysene	1.00000	1.45112	2.11015	0.010	45.11219	20.00000	Linear	*
78 Benzo(b)fluoranthene	1.00000	0.93143	1.47590	0.010	-6.85744	20.00000	Quadratic	
79 Benzo(k)fluoranthene	1.00000	1.07223	2.25069	0.010	7.22257	20.00000	Linear	
80 Benzo(a)pyrene	1.42953	1.48185	1.48185	0.010	3.66008	20.01000	Averaged	
82 Indeno(1,2,3-cd)pyrene	0.93525	1.01830	1.01830	0.010	8.87959	20.00000	Averaged	
83 Dibenzo(a,h)anthracene	0.66553	0.72087	0.72087	0.010	8.31476	20.00000	Averaged	
84 Benzo(g,h,i)perylene	1.00000	1.14371	0.96572	0.010	14.37079	20.00000	Linear	
30 2-Methylnaphthalene-D10	1.09374	1.07871	1.07871	0.010	-1.37428	20.00000	Averaged	
53 Fluorene-D10	0.90411	0.92875	0.92875	0.010	2.72545	20.00000	Averaged	
69 Pyrene-D10	1.00000	1.05618	1.47175	0.010	5.61754	20.00000	Linear	

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

S/S son

KATAHDIN ANALYTICAL SERVICES, INC.

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method:	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)	SW846 3580 (OIL / WIPES)
Analytical Method:	SW846 8270 ✓	OTHER		
Standards	Surrogate ID (1): SV2717	Spike ID (1): SKEA SV2715	Spike ID (3): —	
	Surrogate ID (2): —	Spike ID (2): SIM SV2714		
Solvents / Chemicals / Consumables	Solvent Lot # (Mecl2): DM524	Solvent Lot # (Acetone): DM724	Sodium Sulfate (granular) Lot # 2756500l	
	Filter Paper Lot # (SON) F009U11401	Filter Paper Lot # (KD) 96181511	Sodium Sulfate (powder) Lot # 2797500D	
Misc.	Nitrogen Bath Temperature: 36°C	Sonicator Horns Tuned: 4-1	Balance ID:	
Prep Start Time: 8:30	Prep Stop Time: 12:00	Sox Start Time: —	Sox End Time: —	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SCAN	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. SV339	Comments
6-24-15	[illegible]	WG165365-1 WG165366-1	30.01	1.0	NR	✓	✓	6-24-15	KF	5.0	6-25-15	[illegible]	1.0	E6	R SKEA R323004 SIM
		WG165365-2	30.02											E7	
		-3	30.05											E8	
		-4	30.60											E9	MS SI4408-1L
		-5	32.04											E10	MSD
		-6	30.48											SV340 A1	MS
		-7	32.45											A2	MSD
		WG165366-2	30.01											A3	
		-3	30.05											A4	
		-4	30.29											A5	MS SI4408-1L
		-5	31.08											A6	MSD

EX-008 – Revision 2 – 12/05/2013

QAEX287

0000034

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SCAN	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc.	Comments
6-24-15	[illegible]	WG165366-6	30.10	1.0	NR	✓	✓	6-24-15	KF	5.0	6-25-15	[illegible]	1.0	A7	MS SI4408-5E
		-7	31.88											A8	MSD
		SI4408-1I	31.67											A9	MS/D
		-3L	32.12											A10	
		-5I	34.77											B1	MS/D
		-7D	30.85											B2	
		-9L	31.65											B3	
		-11D	32.01											B4	
		-12L	30.70											B5	
		-13D	31.37											B6	
		-15D	33.95											B7	
		-16D	31.68											B8	
		SI4463-2A	32.57										2.0	FVD2 B9	SEE1-B -1
		SI 3A	30.72											FVD2 B10	SEE2-B -3
		SI 5B	33.2											B11 FVD2 6-25-15	SEE1-PT -5

6-25-15

6-25-15

Reviewed By________________________ Date________________________

EX-008 – Revision 2 – 12/05/2013

QAEX287

0000035

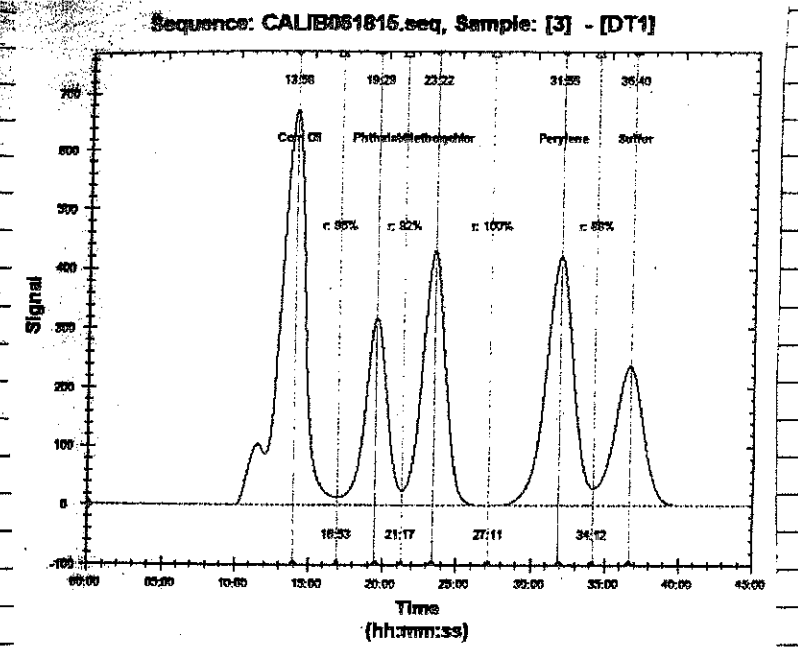
Katahdin Analytical Services
GPC03 Logbook

Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓		SW846 8270 ✓	
MeCl2 Lot #: DM 804	Filter Lot #: –	Room Temperature (beginning):	23.4	Room Temperature (ending):	23.8
Flow Rate: 5.0 mL/min	Flow Rate Set at: 5.47 mL/min	GPC Dump Time:	45 min	GPC Collect Time:	–

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	Dry Run	-	–	KF	6/18/15	5 mL	
2	Dry Run	-	–	↓	↓	↓	
3	GPC Calib STD	–	–	↓	↓	↓	
4							
5	STD 6287 + 6296						
6							
7	lot # AD106490						
8							
9	Lot → 10 in						
10	Mech lot #						
11	DM 804						
12					KF	6/18/15	
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Katahdin Analytical Services
GPC03 Logbook

Tray Pos. No.		Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
25	CALIBRATION REPORT						
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							



P/P Dump: 21.17
collect: 12.95

S/S Dump: 16.53
collect: 23.47

Katahdin Analytical Services
GPC03 Logbook

Analytical Method: (check one)	SW846 8081	SW846 8082		SW846 8270 ✓	
MeCl2 Lot #: DM 504	Filter Lot #: 104111403 10	Room Temperature (beginning):	24.2	Room Temperature (ending):	24.7
Flow Rate: 5.0 ml/min	Flow Rate Set at: 5.47 ml/min	GPC Dump Time:	12.95	GPC Collect Time:	27.47

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	GPC Blank	–	–	KF	6-24-15	5m	
2	WG165365-1 WG165366-1	6-24-15	5m				
3	WG165365-2						
4	-3						
5	WG165366-2						
6	-3						
7	WG165365-4						
8	-5						
9	-6						
10	-7						
11	WG165366-4						
12	-5						
13	-6						
14	-7						
15	SI 4408-1						
16	-3						
17	-5						
18	-7						
19	-9						
20	-11						
21	-12						
22	-13						
23	-15						
24	-16						

Katahdin Analytical Services
GPC03 Logbook

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
25	SI 4463-2	6-24-15	5m	KF	6-24-15	5m	
26	-4						
27	-6						
28	Fish Test-3	6-24-15	10m				
29	-4						
30	Dry Run	–	–				
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45						KF	6-25-15

Katahdin Analytical Services
GPC03 Logbook

Analytical Method: (check one)	SW846 8081	SW846 8082		SW846 8270 ✓	
MeCl2 Lot #: DM 404	Filter Lot #: P041114030	Room Temperature (beginning):	24.2	Room Temperature (ending):	24.7
Flow Rate: 5.0 ml/min	Flow Rate Set at: 5.47 ml/min	GPC Dump Time:	12.95	GPC Collect Time:	23.47

Tray Pos. No.	Sample Identification	Dete Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
1	GPC Blank	–	–	KF	6-24-15	5ml	
2	WG165365-1 WG165366-1	6-24-15	5ml				
3	WG165365-2						
4	-3						
5	WG165366-2						
6	-3						
7	WG165365-4						
8	-5						
9	-6						
10	-7						
11	WG165366-4						
12	-5						
13	-6						
14	-7						
15	SI 4408-1						
16	-3						
17	-5						
18	-7						
19	-9						
20	-11						
21	-12						
22	-13						
23	-15						
24	-16						

Katahdin Analytical Services
GPC03 Logbook

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	Comments
25	SI 4463-1	6-24-15	5ml	KF	6-24-15	5ml	
26	-3						
27	-5						
28	Fish Test -3	6-24-15	10ml				
29	-4						
30	Dry Run	–	–				
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45						KF	6-25-15

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 062315

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165324-1	50ng DFTPP	ND958	1	1	DFTPPSVM	2.0	JLM	OK
-4	SSTD1.00 ND623	N6778		2	NSP SVM45			✓
-2	0.2	79		3				✓
-3	0.5	80		4				✓
-5	3.0	81		5				✓
-6	7.0	82		6				✓
-7	12.	83		7				✓
-8	IND	84		8				OK
3510	WG165249-1	85		9				OK
	-4	86		10				OK SPLP PB1251A
	-~~2~~	87		11				OK
	-~~3~~	88		12				OK
	-~~5~~	89		13				OK SI3862 SPLP
	-6	90		14				OK SS94
	SI4291-2	91		15				~~OK~~ hot run; power loss SPLP
	-4	92		16				
	-6	93		17				
	-9	94		18				
	SI4332-1	95		19				
	-3	96		20				
	-5	97		21				
	-7	98		22				
	-9	99		23				
	-10	N6800		24				
	-11	01		25				
3550	SI4226-7DL	02	8	26				SI4400
	-8DL	03	7	27				SI4350
	~~SE~~ WG165008-1	04	1	28				EPH

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52637
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

cont next page

SVOA-005 – Revision 1 – 03/01/2011

QAMS570

0000031

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 062515

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165435-1	50ng DFTPP	ND960	1	1	DFTPPSIM	2.0	VCM	OK
-2	SSTD1.00 ND625	N6829		2	NSPSIM45			OK
3550	WG165227-1	30		3				OK
	WG165366-1	31		4				OK
	WG165227-2	32		5				OK
	↓ -3	33		6				OK
	WG165366-2	34		7				OK
	↓ -3	35		8				OK
	SI3897-19DL	36	2	9				OK 100/200
	SI4221-2DL	37	25	10				OK (50/250)x2
	SI4332-13DL	38	40	11				— DL1:10 50/250 → 50/400
	-15DL	39	40	12				— DL1:15 ↓
	-16DL	40	10	13				— DL1:5 50/500
	-18DL	41	75	14				— DL1:20 50/250 → 50/750
	-19DL	42	60	15				IS1↓ DL1:12 50/250 → 50/600
	-20DL	43	12	16				— DL1:6 50/600
	-21DL	44	100	17				IS1↓ DL1:2 (50/500)x2
	↓ -22DL	45	6	18				SS3↓ DL1:3 50/300
	SI4408-1	46	1	19				DL1:100
	WG165366-4	47		20				IS5↓
	↓ -5	48		21				IS5↓
	SI4408-5	49		22				IS5↓ DL1:30
	WG165366-6	50		23				IS5↓
	↓ -7	51		24				IS4-6↓
	SI4463-1DL	52	5	25				IS3,5↓ DL1:45 50/250
	-3DL	53	5	26				IS5↓ DL1:50
	↓ -5DL	54	5	27				IS5↓ DL1:50 ↓
	SI4408-3	55	1	28				OOC DL1:30

STANDARD	CODE
DFTPP	53611
CAL. STD.	52555 52639
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

Cont'd next page

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 062615

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
W4165522-1	50ng DFTPP	ND961	1	1	DFTPPSIM	2.0	sly	OK
-2	SSTDL.00 ND622	N6873	1	2	NSPSIM45			OK
3536	SI4463-1DL2	74	50	3				OK 50/250→50/500
	-3DL2	75		4				OK
	-5DL2	76		5				OK
	SI4332-13X	77	10	6				OK 50/500
	-15DL	78	15	7				OK 50/750
	-16DL	79	5	8				OK 50/250
	-18DL	80	20	9				OK 50/200→50/250
	-19DL	81	12	10				OK 50/600
	-20DL	82	6	11				SS3↓ 50/300
	-21DL	83	25	12				OK (50/250)X2
	-22DL	84	3	13				SS3↓ 50/150
	SI4408-1DL	85	10	14				– DL1:40 (50/200)X2
	-3DL	86	30	15				– DL1:220 50/250→50/300
	-5DL	87	30	16				– DL1:120 ↓
	-7DL	88	25	17				OK (50/250)X2
	-9DL	89	20	18				OK 50/200→50/250
	-11DL	90	12	19				– DL1:30 50/600
	-12DL	91	12	20				– DL1:15 ↓
	-13DL	92	3	21				OK 50/150
	SI4332-15	93	1	22				SS1,3↑ 1SS6↓
	-18	94		23				1SS6↓
	-21	95		24				1SS↓
	MeCl2	96-06	1	25				
	SI4370.3	907	1	26			AC	EPH
	SI4373.1	908	1	27				

STANDARD	CODE
DFTPP	52641
CAL. STD.	52595 52639
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

SPLP SEMIVOLATILE DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4463

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
SITE 4TS-SEE1-B	SI4463-2		84.7		49.1		76.0		36.4		91.6		81.8	
SITE 4TS-SEE2-B	SI4463-4		85.5		31.7		80.6		22.3		78.2		72.9	
SITE 4TS-SEE1-PT	SI4463-6		81.3		34.3		68.0		12.0		95.6		81.4	
SPLP Blank	WG165248-4		71.5		29.5		72.3		19.4		58.7		67.2	
Method Blank Sample	WG165445-1		83.8		44.0		77.2		29.9		87.2		80.2	
Laboratory Control S	WG165445-2		79.6		40.6		73.0		24.9		97.2		88.6	

		QC Limits
2FBP	2-FLUOROBIPHENYL	50-110
2FP	2-FLUOROPHENOL	20-110
PHL	PHENOL-D6	10-115
TPH	TERPHENYL-D14	50-135
NBZ	NITROBENZENE-D5	40-110
TBP	2,4,6-TRIBROMOPHENOL	40-125

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0865.D
Instrument ID : GCMS-U
Matrix : AQ

SDG : SI4463
Lab Sample ID : WG165445-1
Date Extracted : 25-JUN-15
Date Analyzed : 26-JUN-15
Time Analyzed : 13:29

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165445-2	U0866.D	06/26/15	13:57
SITE 4TS-SEE1-B	SI4463-2	U0868.D	06/26/15	14:51
SITE 4TS-SEE2-B	SI4463-4	U0869.D	06/26/15	15:19
SITE 4TS-SEE1-PT	SI4463-6	U0870.D	06/26/15	15:46

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165445-1
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: U0865.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165445

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	7.5	ug/L	1	10	10.	1.0	7.5
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
Acetophenone	U	7.5	ug/L	1	10	10.	3.9	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Caprolactam	U	7.5	ug/L	1	10	10.	0.40	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.8	7.5
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
2-Fluorophenol		44.0	%					
Phenol-d6		29.9	%					
Nitrobenzene-d5		77.2	%					
2-Fluorobiphenyl		83.8	%					
2,4,6-Tribromophenol		87.2	%					
Terphenyl-d14		80.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165248-4
Client ID: SPLP Blank
Project:
SDG: SI4463
Lab File ID: U0791.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG165248

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 15-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	7.4	ug/L	1	10	9.9	0.99	7.4
Phenol	U	7.4	ug/L	1	10	9.9	1.8	7.4
2-Methylphenol	U	7.4	ug/L	1	10	9.9	3.8	7.4
Acetophenone	U	7.4	ug/L	1	10	9.9	3.9	7.4
Isophorone	U	7.4	ug/L	1	10	9.9	1.7	7.4
2,4-Dimethylphenol	U	7.4	ug/L	1	10	9.9	4.4	7.4
Caprolactam	U	7.4	ug/L	1	10	9.9	0.40	7.4
4-Chloro-3-Methylphenol	U	7.4	ug/L	1	10	9.9	3.6	7.4
2-Chloronaphthalene	U	7.4	ug/L	1	10	9.9	2.8	7.4
Dimethyl Phthalate	U	7.4	ug/L	1	10	9.9	2.0	7.4
Acenaphthylene	U	7.4	ug/L	1	10	9.9	1.5	7.4
3-Nitroaniline	U	19.	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.4	ug/L	1	10	9.9	1.5	7.4
Diethylphthalate	U	7.4	ug/L	1	10	9.9	2.0	7.4
Fluorene	U	7.4	ug/L	1	10	9.9	2.1	7.4
4-Bromophenyl-Phenylether	U	7.4	ug/L	1	10	9.9	1.9	7.4
Carbazole	U	7.4	ug/L	1	10	9.9	2.1	7.4
2-Fluorophenol		29.5	%					
Phenol-d6		19.4	%					
Nitrobenzene-d5		72.3	%					
2-Fluorobiphenyl		71.5	%					
2,4,6-Tribromophenol		58.7	%					
Terphenyl-d14		67.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165445-2
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: U0866.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165445

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 29-JUN-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Benzaldehyde	74.4	50.0	37.2	ug/L	10-189
Phenol	25.4	100.	25.4	ug/L	0-115
2-Methylphenol	53.8	100.	53.8	ug/L	40-110
Acetophenone	77.4	50.0	38.7	ug/L	49-102
Isophorone	54.8	50.0	27.4	ug/L	50-110
2,4-Dimethylphenol	68.5	100.	68.5	ug/L	30-110
Caprolactam	12.2	50.0	6.08	ug/L	10-86
4-Chloro-3-Methylphenol	76.5	100.	76.5	ug/L	45-110
2-Chloronaphthalene	65.8	50.0	32.9	ug/L	50-105
Dimethyl Phthalate	89.6	50.0	44.8	ug/L	25-125
Acenaphthylene	70.4	50.0	35.2	ug/L	50-105
3-Nitroaniline	72.2	50.0	36.1	ug/L	20-125
Acenaphthene	72.0	50.0	36.0	ug/L	45-110
Diethylphthalate	96.4	50.0	48.2	ug/L	45-120
Fluorene	97.8	50.0	48.9	ug/L	50-110
4-Bromophenyl-Phenylether	84.4	50.0	42.2	ug/L	50-115
Carbazole	91.2	50.0	45.6	ug/L	50-115
2-Fluorophenol	40.6				20-110
Phenol-d6	24.9				10-115
Nitrobenzene-d5	73.0				40-110
2-Fluorobiphenyl	79.6				50-110
2,4,6-Tribromophenol	97.2				40-125
Terphenyl-d14	88.6				50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD394.D
Instrument ID : GCMS-U

SDG : SI4463
Date Analyzed : 25-JUN-15
Time Analyzed : 14:55

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	39.5		
68	Less than 2.0% of mass 69	0.5	1.39	1
69	Less than 100.0% of mass 198	38.7		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	51.6		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.3		
275	10.0 - 30.0% of mass 198	19.7		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	10.3	80.11	2
442	40.0 - 100.0% of mass 198	67.2		
443	17.0 - 23.0% of mass 442	12.9	19.20	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165447-4	U0829.D	06/25/15	15:14
Initial Calibration	WG165447-2	U0830.D	06/25/15	15:45
Initial Calibration	WG165447-3	U0831.D	06/25/15	16:13
Initial Calibration	WG165447-5	U0832.D	06/25/15	16:41
Initial Calibration	WG165447-6	U0833.D	06/25/15	17:08
Initial Calibration	WG165447-7	U0834.D	06/25/15	17:36
Independent Source	WG165447-8	U0835.D	06/25/15	18:03

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD395.D
Instrument ID : GCMS-U

SDG : SI4463
Date Analyzed : 26-JUN-15
Time Analyzed : 12:44

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	41.1		
68	Less than 2.0% of mass 69	0.5	1.39	1
69	Less than 100.0% of mass 198	37.8		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	48.7		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	19.6		
365	1.0 - 100.0% of mass 198	2.2		
441	0.0 - 100.0% of mass 443	9.4	82.42	2
442	40.0 - 100.0% of mass 198	60.3		
443	17.0 - 23.0% of mass 442	11.4	18.85	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165525-2	U0864.D	06/26/15	13:02
Method Blank Sample	WG165445-1	U0865.D	06/26/15	13:29
Laboratory Control S	WG165445-2	U0866.D	06/26/15	13:57
SITE 4TS-SEE1-B	SI4463-2	U0868.D	06/26/15	14:51
SITE 4TS-SEE2-B	SI4463-4	U0869.D	06/26/15	15:19
SITE 4TS-SEE1-PT	SI4463-6	U0870.D	06/26/15	15:46

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165447-4
Lab File ID : U0829.D

SDG: SI4463
Analytical Date: 06/25/15 15:14
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	257303		4.52		1068463		5.91		456356		8.00	
	Upper Limit	514606		5.02		2136926		6.41		912712		8.50	
	Lower Limit	128651.5		4.02		534231.5		5.41		228178		7.50	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165525-2	200857		4.51		815272		5.91		471950		8.00	
Method Blank Sample	WG165445-1	222514		4.51		913412		5.90		499300		8.00	
Laboratory Control S	WG165445-2	191892		4.51		776133		5.90		438719		7.99	
SITE 4TS-SEE1-B	SI4463-2	216161		4.51		889681		5.90		483692		8.00	
SITE 4TS-SEE2-B	SI4463-4	204748		4.51		804508		5.90		438807		7.99	
SITE 4TS-SEE1-PT	SI4463-6	206306		4.51		837129		5.90		445743		7.99	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165447-4
Lab File ID : U0829.D

SDG: SI4463
Analytical Date: 06/25/15 15:14
Instrument ID: GCMS-U

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	687611		9.80		417535		13.35		225441		16.31	
	Upper Limit	1375222		10.30		835070		13.85		450882		16.81	
	Lower Limit	343805.5		9.30		208767.5		12.85		112720.5		15.81	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165525-2	773359		9.80		592329		13.36		331034		16.32	
Method Blank Sample	WG165445-1	825030		9.80		667191		13.35		417394		16.32	
Laboratory Control S	WG165445-2	740926		9.80		522425		13.35		317418		16.32	
SITE 4TS-SEE1-B	SI4463-2	772202		9.80		665012		13.35		421420		16.32	
SITE 4TS-SEE2-B	SI4463-4	723529		9.80		638436		13.35		417413		16.32	
SITE 4TS-SEE1-PT	SI4463-6	688996		9.80		580998		13.34		351417		16.31	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165272-4
Lab File ID : U0757.D

SDG: SI4463
Analytical Date: 06/22/15 13:48
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	319771		4.53		1162914		5.92		598316		8.01	
	Upper Limit	639542		5.03		2325828		6.42		1196632		8.51	
	Lower Limit	159885.5		4.03		581457		5.42		299158		7.51	
Client Sample ID	Lab Sample ID												
SPLP Blank	WG165248-4	339529		4.52		1314201		5.91		645376		8.01	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165272-4
Lab File ID : U0757.D

SDG: SI4463
Analytical Date: 06/22/15 13:48
Instrument ID: GCMS-U

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	926799		9.82		468408		13.38		194522		16.34	
	Upper Limit	1853598		10.32		936816		13.88		389044		16.84	
	Lower Limit	463399.5		9.32		234204		12.88		97261		15.84	
Client Sample ID	Lab Sample ID												
SPLP Blank	WG165248-4	872372		9.81		533781		13.36		284374		16.32	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-2
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: U0868.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165445

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	12	ug/L	1	10	17.	1.7	12.
Phenol	U	12	ug/L	1	10	17.	3.0	12.
2-Methylphenol	U	12	ug/L	1	10	17.	6.3	12.
Acetophenone	U	12	ug/L	1	10	17.	6.5	12.
Isophorone	U	12	ug/L	1	10	17.	2.8	12.
2,4-Dimethylphenol	U	12	ug/L	1	10	17.	7.3	12.
Caprolactam	U	12	ug/L	1	10	17.	0.67	12.
4-Chloro-3-Methylphenol	U	12	ug/L	1	10	17.	6.0	12.
2-Chloronaphthalene	U	12	ug/L	1	10	17.	4.7	12.
Dimethyl Phthalate	U	12	ug/L	1	10	17.	3.3	12.
Acenaphthylene	U	12	ug/L	1	10	17.	2.5	12.
3-Nitroaniline	U	32	ug/L	1	25	42.	2.5	32.
Acenaphthene	J	2.7	ug/L	1	10	17.	2.5	12.
Diethylphthalate	U	12	ug/L	1	10	17.	3.3	12.
Fluorene	U	12	ug/L	1	10	17.	3.5	12.
4-Bromophenyl-Phenylether	U	12	ug/L	1	10	17.	3.2	12.
Carbazole	U	12	ug/L	1	10	17.	3.5	12.
2-Fluorophenol		49.1	%					
Phenol-d6		36.4	%					
Nitrobenzene-d5		76.0	%					
2-Fluorobiphenyl		84.7	%					
2,4,6-Tribromophenol		91.6	%					
Terphenyl-d14		81.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-4
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: U0869.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165445

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	8.2	ug/L	1	10	11.	1.1	8.2
Phenol	U	8.2	ug/L	1	10	11.	2.0	8.2
2-Methylphenol	U	8.2	ug/L	1	10	11.	4.1	8.2
Acetophenone	U	8.2	ug/L	1	10	11.	4.2	8.2
Isophorone	U	8.2	ug/L	1	10	11.	1.8	8.2
2,4-Dimethylphenol	U	8.2	ug/L	1	10	11.	4.8	8.2
Caprolactam	U	8.2	ug/L	1	10	11.	0.43	8.2
4-Chloro-3-Methylphenol	U	8.2	ug/L	1	10	11.	3.9	8.2
2-Chloronaphthalene	U	8.2	ug/L	1	10	11.	3.0	8.2
Dimethyl Phthalate	U	8.2	ug/L	1	10	11.	2.2	8.2
Acenaphthylene	U	8.2	ug/L	1	10	11.	1.6	8.2
3-Nitroaniline	U	21	ug/L	1	25	27.	1.6	21.
Acenaphthene	U	8.2	ug/L	1	10	11.	1.6	8.2
Diethylphthalate	U	8.2	ug/L	1	10	11.	2.2	8.2
Fluorene	U	8.2	ug/L	1	10	11.	2.3	8.2
4-Bromophenyl-Phenylether	U	8.2	ug/L	1	10	11.	2.1	8.2
Carbazole	U	8.2	ug/L	1	10	11.	2.3	8.2
2-Fluorophenol		31.7	%					
Phenol-d6		22.3	%					
Nitrobenzene-d5		80.6	%					
2-Fluorobiphenyl		85.5	%					
2,4,6-Tribromophenol		78.2	%					
Terphenyl-d14		72.9	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-6
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: U0870.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165445

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	8.2	ug/L	1	10	11.	1.1	8.2
Phenol	U	8.2	ug/L	1	10	11.	2.0	8.2
2-Methylphenol	U	8.2	ug/L	1	10	11.	4.1	8.2
Acetophenone	U	8.2	ug/L	1	10	11.	4.2	8.2
Isophorone	U	8.2	ug/L	1	10	11.	1.8	8.2
2,4-Dimethylphenol	U	8.2	ug/L	1	10	11.	4.8	8.2
Caprolactam	U	8.2	ug/L	1	10	11.	0.43	8.2
4-Chloro-3-Methylphenol	U	8.2	ug/L	1	10	11.	3.9	8.2
2-Chloronaphthalene	U	8.2	ug/L	1	10	11.	3.0	8.2
Dimethyl Phthalate	U	8.2	ug/L	1	10	11.	2.2	8.2
Acenaphthylene	U	8.2	ug/L	1	10	11.	1.6	8.2
3-Nitroaniline	U	21	ug/L	1	25	27.	1.6	21.
Acenaphthene	J	1.8	ug/L	1	10	11.	1.6	8.2
Diethylphthalate	U	8.2	ug/L	1	10	11.	2.2	8.2
Fluorene	U	8.2	ug/L	1	10	11.	2.3	8.2
4-Bromophenyl-Phenylether	U	8.2	ug/L	1	10	11.	2.1	8.2
Carbazole	U	8.2	ug/L	1	10	11.	2.3	8.2
2-Fluorophenol		34.3	%					
Phenol-d6		12.0	%					
Nitrobenzene-d5		68.0	%					
2-Fluorobiphenyl		81.3	%					
2,4,6-Tribromophenol		95.6	%					
Terphenyl-d14		81.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0830.D U0831.D U0829.D U0832.D U0833.D U0834.D **Column ID:**
Calibration Date(s): 25-JUN-15 15:14 25-JUN-15 17:36

	10.0000 Level 1	25.0000 Level 2	50.0000 Level 3	75.0000 Level 4	100.0000 Level 5	125.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Benzaldehyde	42237	81401	146798	191828	218624	299376	QUA	-0.07446	1.97751	0.54199	0.99019	0.99000	O
Phenol	1.73565	1.66029	1.28142	1.49369	1.45863	1.48924	AVG		1.51982		10.5484	30.00000	O
2-Methylphenol	1.31699	1.25904	1.27540	1.23267	1.13017	1.19786	AVG		1.23536		5.28420	15.00000	O
Acetophenone	0.37946	0.41298	0.40664	0.41581	0.38022	0.40220	AVG		0.39955		4.00293	15.00000	O
Isophorone	0.74029	0.60836	0.60909	0.59063	0.53912	0.56523	AVG		0.60879		11.46867	15.00000	O
2,4-Dimethylphenol	0.39185	0.34073	0.32409	0.31706	0.27840	0.27901	AVG		0.32186		13.1870	15.00000	O
Caprolactam	0.11210	0.09350	0.10186	0.09559	0.09087	0.09421	AVG		0.09802		7.96773	15.00000	O
4-Chloro-3-Methylphenol	0.35003	0.28974	0.29801	0.28115	0.25905	0.25661	AVG		0.28910		11.7948	30.00000	O
2-Chloronaphthalene	1.21947	0.85276	1.13985	1.06334	1.16553	0.98577	AVG		1.07112		12.5722	15.00000	O
Dimethyl Phthalate	1.37565	0.95180	1.15803	1.20586	1.06398	1.06930	AVG		1.13744		12.8219	15.00000	O
Acenaphthylene	1.90297	1.68109	1.47456	1.52052	1.33065	1.41579	AVG		1.55426		13.3215	15.00000	O
3-Nitroaniline	0.29267	0.27653	0.26437	0.26869	0.26790	0.24366	AVG		0.26897		5.95310	15.00000	O
Acenaphthene	186400	365965	554179	904454	1059266	1206643	QUA	0.03494	0.69303	0.26512	0.99537	0.99000	O
Diethylphthalate	1.02530	1.29609	1.07009	1.08663	0.98817	0.97850	AVG		1.07413		10.8854	15.00000	O
Fluorene	0.98703	1.09553	1.00687	0.91923	0.80783	0.73033	AVG		0.92447		14.6161	15.00000	O
4-Bromophenyl-phenylether	0.20698	0.19566	0.18052	0.16151	0.18169	0.17618	AVG		0.18376		8.59722	15.00000	O
Carbazole	1.01976	0.95398	0.78412	0.79398	0.81609	0.75357	AVG		0.85358		12.5613	15.00000	O
2-Fluorophenol	1.28455	1.20190	0.99638	1.22621	1.19867	1.19365	AVG		1.18356		8.25424	15.00000	
Phenol-D6	1.52566	1.44166	1.14947	1.36784	1.28712	1.31170	AVG		1.34724		9.68709	15.00000	
Nitrobenzene-D5	0.28611	0.31264	0.31612	0.32186	0.29122	0.30457	AVG		0.30542		4.65806	15.00000	
2-Fluorobiphenyl	1.21276	0.90415	1.02060	0.85790	0.98944	0.92998	AVG		0.98580		12.7410	15.00000	
2,4,6-Tribromophenol	0.13798	0.15685	0.14288	0.13370	0.12886	0.12934	AVG		0.13827		7.62358	15.00000	
Terphenyl-D14	0.83603	0.87134	0.74303	0.76197	0.83560	0.89897	AVG		0.82449		7.38609	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-u.i\U062515.b\U0835.D
Report Date: 08-Jul-2015 15:21

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: WG165447-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: INDcheck8270.spk
Quant Type: ISTD
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U062515.b\U8270C80.m
Misc Info: WG165447,WG165447,WG165447-4,SI4383-1

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	59.4	118.85	80-120
3 Pyridine	50.0	50.5	100.97	80-120
2 N-Nitrosodimethyla	50.0	49.7	99.41	80-120
5 2-Picoline	50.0	63.7	127.37*	80-120
6 N-Nitrosomethyleth	50.0	58.7	117.49	80-120
7 Methyl Methanesulf	50.0	48.7	97.49	80-120
9 N-Nitrosodiethylam	50.0	59.5	119.05	80-120
10 Ethyl Methanesulfo	50.0	55.9	111.73	80-120
11 Benzaldehyde	50.0	0.000	*	80-120
14 Aniline	50.0	57.5	115.05	80-120
13 Phenol	50.0	57.8	115.57	80-120
16 Bis(2-Chloroethyl)	50.0	59.9	119.73	80-120
17 2-Chlorophenol	50.0	57.6	115.26	80-120
18 1,3-Dichlorobenzen	50.0	56.8	113.52	80-120
20 1,4-Dichlorobenzen	50.0	57.0	113.92	80-120
22 Benzyl alcohol	50.0	50.8	101.71	80-120
21 1,2-Dichlorobenzen	50.0	56.1	112.24	80-120
25 2,2'-Oxybis(1-chlo	50.0	47.5	95.06	80-120
23 2-Methylphenol	50.0	56.6	113.19	80-120
26 Acetophenone	100	107	106.86	80-120
27 N-Nitrosopyrrolidi	50.0	58.0	115.97	80-120
30 N-Nitrosomorpholin	50.0	64.6	129.21*	80-120
28 N-Nitroso-di-n-pro	50.0	50.9	101.87	80-120
29 3&4-Methylphenol	50.0	57.1	114.19	80-120
32 Hexachloroethane	50.0	56.2	112.44	80-120
31 o-Toluidine	50.0	56.4	112.79	80-120
34 Nitrobenzene	50.0	63.5	126.93*	80-120
35 N-Nitrosopiperidin	50.0	59.1	118.30	80-120
36 Isophorone	50.0	54.8	109.69	80-120
37 2-Nitrophenol	50.0	54.6	109.21	80-120
38 2,4-Dimethylphenol	50.0	56.9	113.74	80-120
40 Bis(2-Chloroethoxy	50.0	47.7	95.35	80-120
39 O,O,O-Triethylphos	50.0	50.9	101.85	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	99.3	198.60*	80-120
42 2,4-Dichlorophenol	50.0	52.9	105.80	80-120
44 1,2,4-Trichloroben	50.0	55.6	111.26	80-120
46 Naphthalene	50.0	54.9	109.83	80-120
43 2,6-Dichlorophenol	50.0	69.2	138.37*	80-120
47 4-Chloroaniline	50.0	56.8	113.51	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062515.b\U0835.D
Report Date: 08-Jul-2015 15:21

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	59.6	119.29	80-120
49 Hexachlorobutadien	50.0	58.0	115.98	80-120
51 N-Nitroso-Di-N-But	50.0	56.5	113.04	80-120
53 Caprolactam	50.0	56.8	113.56	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	53.4	106.84	80-120
55 4-Chloro-3-Methylp	50.0	55.4	110.86	80-120
57 2-Methylnaphthalen	50.0	57.5	114.93	80-120
58 1-Methylnaphthalen	50.0	56.4	112.79	80-120
60 1,2,4,5-Tetrachlor	100	105	104.92	80-120
59 Hexachlorocyclopen	50.0	48.2	96.43	80-120
61 2,4,6-Trichlorophe	50.0	57.6	115.22	80-120
62 2,4,5-Trichlorophe	50.0	60.9	121.86*	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	59.8	119.61	80-120
65 1,1'-Biphenyl	50.0	65.4	130.74*	80-120
66 2-Chloronaphthalen	50.0	55.2	110.30	80-120
67 1-Chloronaphthalen	50.0	69.0	137.91*	80-120
69 2-Nitroaniline	50.0	58.5	117.06	80-120
70 1,4-Naphthoquinone	50.0	80.3	160.68*	80-120
72 Dimethyl Phthalate	50.0	56.3	112.70	80-120
73 1,3-Dinitrobenzene	50.0	52.4	104.91	80-120
75 Acenaphthylene	50.0	50.7	101.37	80-120
74 2,6-Dinitrotoluene	50.0	55.2	110.32	80-120
77 3-Nitroaniline	50.0	58.8	117.71	80-120
79 Acenaphthene	50.0	52.3	104.64	80-120
80 2,4-Dinitrophenol	50.0	57.7	115.39	80-120
83 Dibenzofuran	50.0	59.2	118.46	80-120
81 Pentachlorobenzene	50.0	57.9	115.82	80-120
82 4-Nitrophenol	50.0	62.8	125.55*	80-120
84 2,4-Dinitrotoluene	50.0	58.3	116.69	80-120
85 1-Naphthylamine	50.0	52.0	104.02	80-120
88 2-Naphthylamine	50.0	60.5	121.05*	80-120
87 2,3,4,6-Tetrachlor	50.0	55.7	111.43	80-120
89 Diethylphthalate	50.0	55.8	111.50	80-120
91 Fluorene	50.0	59.4	118.79	80-120
92 4-Chlorophenyl-phe	50.0	59.9	119.87	80-120
90 O,O-diethyl-o-2-py	50.0	64.1	128.13*	80-120
93 5-Nitro-O-Toluidin	50.0	66.4	132.78*	80-120
94 4-Nitroaniline	50.0	58.9	117.89	80-120
96 N-Nitrosodiphenyla	100	88.4	88.35	80-120
95 4,6-Dinitro-2-Meth	50.0	57.5	115.06	80-120
98 1,2-Diphenylhydraz	50.0	53.3	106.62	80-120
101 Sulfotepp	50.0	51.4	102.86	80-120
102 Diallate	50.0	54.9	109.88	80-120
103 Phorate	50.0	27.7	55.34*	80-120
105 4-Bromophenyl-phen	50.0	56.8	113.60	80-120
106 Phenacetin	50.0	54.4	108.73	80-120
104 1,3,5-Trinitrobenz	50.0	62.1	124.26*	80-120
107 Hexachlorobenzene	50.0	57.4	114.83	80-120
108 Dimethoate	50.0	59.1	118.26	80-120
109 Atrazine	50.0	21.9	43.82*	80-120
110 4-Aminobiphenyl	50.0	38.7	77.38*	80-120
111 Pentachlorophenol	50.0	70.6	141.17*	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062515.b\U0835.D
Report Date: 08-Jul-2015 15:21

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
113 Pronamide	50.0	54.6	109.12	80-120
112 Pentachloronitrobe	50.0	56.1	112.14	80-120
116 Phenanthrene	50.0	58.9	117.80	80-120
115 Disulfoton	50.0	51.2	102.40	80-120
118 Anthracene	50.0	50.6	101.15	80-120
117 Dinoseb	50.0	59.2	118.51	80-120
119 Carbazole	50.0	53.9	107.86	80-120
120 Methyl Parathion	50.0	63.8	127.63*	80-120
121 Di-n-butylphthalat	50.0	58.0	116.02	80-120
122 Ethyl Parathion	50.0	55.5	111.05	80-120
123 4-Nitroquinoline-1	50.0	69.9	139.79*	80-120
124 Methapyrilene	50.0	24.9	49.84*	80-120
125 Isodrin	50.0	53.8	107.53	80-120
126 Fluoranthene	50.0	54.8	109.54	80-120
127 Benzidine	50.0	42.0	83.99	80-120
128 Pyrene	50.0	51.2	102.43	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	54.6	109.23	80-120
133 Chlorobenzilate	50.0	53.3	106.58	80-120
134 Famphur	50.0	0.000	*	80-120
135 3,3'-Dimethylbenzi	50.0	50.4	100.75	80-120
136 Butylbenzylphthala	50.0	54.4	108.71	80-120
137 Bis(2-ethylhexyl)a	50.0	51.1	102.24	80-120
138 2-Acetylaminofluor	50.0	55.5	110.94	80-120
140 Benzo(a)anthracene	50.0	53.4	106.85	80-120
139 3,3'-Dichlorobenzi	50.0	52.8	105.66	80-120
141 Chrysene	50.0	54.6	109.25	80-120
143 bis(2-Ethylhexyl)p	50.0	57.8	115.50	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	60.3	120.66*	80-120
147 Benzo(b)fluoranthe	50.0	53.8	107.65	80-120
146 7,12-Dimethylbenz(	50.0	56.9	113.86	80-120
148 Benzo(k)fluoranthe	50.0	58.0	116.03	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	50.8	101.54	80-120
151 3-Methylcholanthre	50.0	60.2	120.35*	80-120
152 Dibenz(a,j)acridin	50.0	50.0	99.99	80-120
153 Indeno(1,2,3-cd)py	50.0	52.6	105.25	80-120
155 Dibenzo(a,h)anthra	50.0	52.7	105.43	80-120
156 Benzo(g,h,i)peryle	50.0	51.1	102.17	80-120

SURROGATE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	35-105
$ 12 Phenol-D6	100	0.000	*	40-100
$ 33 Nitrobenzene-D5	50.0	0.000	*	35-100
$ 63 2-Fluorobiphenyl	50.0	0.000	*	45-105
$ 100 2,4,6-Tribromophe	100	0.000	*	35-125
$ 129 Terphenyl-D14	50.0	0.000	*	30-125

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4463
Lab ID : WG165525-2
Analytical Date: 06/26/15 13:02
Lab File ID : U0864.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 06/25/15 15:14 06/25/15 17:36
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
11 Benzaldehyde	50.00000	46.28434	0.43377	0.010	-7.43132	20.00000	Quadratic	
13 Phenol	1.51982	1.52100	1.52100	0.010	0.07764	20.01000	Averaged	
23 2-Methylphenol	1.23536	1.17010	1.17010	0.010	-5.28253	20.00000	Averaged	
26 Acetophenone	0.39955	0.38959	0.38959	0.010	-2.49142	20.00000	Averaged	
36 Isophorone	0.60879	0.56043	0.56043	0.010	-7.94299	20.00000	Averaged	
38 2,4-Dimethylphenol	0.32186	0.31963	0.31963	0.010	-0.69195	20.00000	Averaged	
53 Caprolactam	0.09802	0.09525	0.09525	0.010	-2.82560	20.00000	Averaged	
55 4-Chloro-3-Methylphenol	0.28910	0.29076	0.29076	0.010	0.57613	20.01000	Averaged	
66 2-Chloronaphthalene	1.07112	0.91645	0.91645	0.010	-14.44022	20.00000	Averaged	
72 Dimethyl Phthalate	1.13744	1.12589	1.12589	0.010	-1.01479	20.00000	Averaged	
75 Acenaphthylene	1.55426	1.47496	1.47496	0.010	-5.10230	20.00000	Averaged	
77 3-Nitroaniline	0.26897	0.26503	0.26503	0.010	-1.46532	20.00000	Averaged	
79 Acenaphthene	50.00000	43.44920	0.85994	0.010	-13.10159	20.01000	Quadratic	
89 Diethylphthalate	1.07413	1.06576	1.06576	0.010	-0.77936	20.00000	Averaged	
91 Fluorene	0.92447	0.99910	0.99910	0.010	8.07267	20.00000	Averaged	
105 4-Bromophenyl-phenylether	0.18376	0.17526	0.17526	0.010	-4.62340	20.00000	Averaged	
119 Carbazole	0.85358	0.83378	0.83378	0.010	-2.31996	20.00000	Averaged	
8 2-Fluorophenol	1.18356	1.18161	1.18161	0.010	-0.16462	20.00000	Averaged	
12 Phenol-D6	1.34724	1.32748	1.32748	0.010	-1.46651	20.00000	Averaged	
33 Nitrobenzene-D5	0.30542	0.29063	0.29063	0.010	-4.84160	20.00000	Averaged	
63 2-Fluorobiphenyl	0.98580	1.01604	1.01604	0.010	3.06699	20.00000	Averaged	
100 2,4,6-Tribromophenol	0.13827	0.15199	0.15199	0.010	9.92243	20.00000	Averaged	
129 Terphenyl-D14	0.82449	0.64590	0.64590	0.010	-21.66003	20.00000	Averaged	*

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Logbooks and Supporting Documents

S/S SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV2721		Spike ID (1): SV2715		
	Surrogate ID (2):		Spike ID (2): SM:SV 2716		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM804		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 77965002		
Nitrogen Water Bath Temperature 36c			pH (1st Extraction) ≤2		pH (2nd Extraction) ≥11
Prep Start Time: 1145	Prep End Time: 1855		CLLE Start Time:		CLLE End Time:

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location S/040	Initials	Comments
6-25-15	KF	WG165445-1	1000	1mL	NR	✓	✓	1mL	6-25-15	C2	HG	SV-R 323122
		WG165446-1										SIM-R 322123
		WG165445-2			1mL	✓				C3		
		WG165446-2					✓			C4		
									KF	6-25-15		

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000092

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-25-15	KF	S14383-3H	1040	1mL	NR		✓	1mL	6-25-15	C5	HG	em-S.S.
		-5H	990							C6		em-S.S.
		-7H	1040							C7		em-S.S.
		-9H	950							C8		sediment - em-S.S.
		S14408-17E	1030			✓	✓			C9		Preserved in HCl
		S14463-2A	600			✓	✓			C10		SPLP
		-4A	920							D1		
		-6A	920							D2		
										~~D3~~		
									KF	6-25-15		

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 062575

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165447-1	50ng DFTPP	U0394	1	1	DFTPP390	2.0	~~2.0~~ JCL	OK
-4	SSTD050 U0625	U0829		2	U8270C80	1.0	~~1.0~~	✓
-2	010	30		3				✓
-3	025	31		4				✓
-5	075	32		5				✓
-6	100	33		6				✓
-7	125	34		7				✓
-8	150	35		8				OK
3550	WG165365-1	36		9				OK
	-2	37		10				OK
	-3	38		11				OK
	SI4408-15	39		12				OK
	-16	40		13				OK
	-13	41		14				1561
	-1	42		15				1561
	WG165365-4	43		16				1556↓ SS 6T
	-5	44		17				1561 ~~DL1:2~~
	SI4408-5	45		18				1556↓ DL1:2
	WG165365-6	46		19				1556↓ SS6T
	-7	47		20				1556↓
	SI4408-3	48		21				1556↓
	-7	49		22				1556↓
	SI4463-1DL	50	2	23				15456↓ SS3,4,6T
	-3DL	51	2	24				15456↓ SS3,4,6T
	-5DL	52	2	25				15456↓ SS4T
	SI4408-9	53	1	26				1556↓
	-11	54		27				1556↓
	-12	55		28				1556↓ DDC
			1	29				

STANDARD	CODE	
	Me Cl2	56-63
DFTPP	52611	
CAL. STD.	52640	SIK4917
IS MIX	SIK5001	

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 062615

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165525-1	50ng DFTPP	U0395	1	1	DFTPP390	2.0	JLy	ok
-2	SSTD050 U0626	U0864		2	U8270C80	1.0		ok
3510	WG165445-1	65		3				ok
	-2	66		4				ok
	SI44408-17	67		5				ok
	SI44463-2	68		6				ok SRP
	-4	69		7				ok
	-6	70		8				ok
3550	SI44408-15	71		9				ok
	-16	72		10				ok
	-13	73		11				ok
	-50L	74	2	12				ok 100/200
	-12	75	1	13				ok
	MeCl	76-BW	1	14				~
								JLW 62915

STANDARD	CODE
DFTPP	52611
CAL. STD.	52640 STK4917
IS MIX	STK5001

REVIEWED AND APPROVED BY: _____
DATE: _____

DATE OF DFTPP INJECTION: 062315

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165301-1	50ng DFTPP	U0392	1	1	DFTPPSIM	2.0	JLM	OK
-2	SSTD050U0623	U0788		2	U8270C79	1.0		OK
3550	WG164995-1RA	89		3				OK
3510	WG165248-1	90		4				OK PBT125IA
	-4	91		5				OK PBT125OA
	-5	92		6				OK
	-2	93		7				OK
	-3	94		8				~~SS23~~ SPLP
	SI4291-2	95		9				~~SS01~~ JLM
	-4	96		10				SS1,2,3
	-6	97		11				~~SS23~~
	-9	98		12				OK
	SI4240-1	99		13				OK
	SI4306-7	U0800		14				SS1
	SI4332-11	01		15				OK
	WG165248-6	02		16				OK
	-7	03		17				1S6 SS4,5 100/200
3550	SI4226-10DL	04	2	18				
	MeCl2	05-07	1	19				

STANDARD	CODE
DFTPP	52611
CAL. STD.	526316 STK4917
IS MIX	STK8001

REVIEWED AND APPROVED BY: _____
DATE: _____

JLM 062415

KATAHDIN ANALYTICAL SERVICES, INC.

Non-Volatile TCLP/SPLP Extraction Log

I. EXTRACTION CONDITIONS

Extraction Method:	SW846 1311 (TCLP) ☑	Extractor ID: #2	Room Thermometer ID: DIG-23	(Room Temp Criteria. 23(±2)°C)
	SW846 1312 (SPLP) ☐	Balance ID: BAL-0615	pH Meter ID: Orion 520A s/n 7422	pH Probe ID 573356-0030
			Analyst: GEJ / JS	
Solid pH Determination:	Date: 06·18·15		Analyst: GEJ	Room Temp. (degrees °C): 20.4
Rotary Extraction Started:	Date: 06·18·15	Time: 14:23	Analyst: GEJ	Room Temp. (degrees °C): 20.1
Rotary Extraction Completed:	Date: 06·19·15	Time: 06:23	Analyst: GEJ/DW	Filter Lot #: 8J5A44228 / R5AA49484
Extraction Filtered:	Date: 06·19·15	Time: 07:00 - 11:00	5% HNO_3 ID (used to wash filters): MR1474	HNO_3 Lot # (used to preserve extracts): 104117
Elapsed Extraction Time (HH:MM):	16:00		Fluid 1 Expiration Date: 06·18·16 06·18·16 06·03·16	
Fluid 1 pH (Day of use):	4.91 (1299) 4.19 (1251) 2.90 (1245)		Fluid 2 Expiration Date: 06·03·16	
Fluid 2 pH (Day of use):	2.90			

TCLP Fluid pH: #1 - 4.93 ± 0.05 #2 - 2.88 ± 0.05 SPLP Fluid pH: #1 - 4.20 ± 0.05 #2 - 5.00 ± 0.05

II. EXTRACTION SETUP

Katahdin Sample No. (include bottle ID)	Matrix	Check One: 100% Wet Solids-waste will yield no liquid upon filtration	Check One: < 100% Wet Solids (Perform Solids Determination below)	SPLP FLUID # (1 for east and 2 for west of Mississippi River)	TCLP pH Determination and Fluid Selection (date & init. above): Initial pH of solid phase: (if <5, use Fluid #1; if >5 add 3.5 mL of 1 N HCl)	TCLP pH Determination and Fluid Selection (date & init. above): pH after 1 N HCL addition (if <5, use Fluid #1; if >5, use Fluid #2	Extraction Setup: Volume of Extraction Fluid (mL)	Extraction Setup: Fluid # used	Extraction Setup: Associated Extraction Blank ID:	Extraction Setup: Weight of Waste (g)	pH of extract after extraction:	Extract to be analyzed for: Metals (M), SVOA (S), PEST (P), HERB (H), Cyanide (C)	Extraction Bottle ID (if applicable)
~~SI4243~~ 34-001A	SL	✓		—	11.55	11.07	2,000	2	PBT1245A		10.27	M	
-002A		✓		—	7.47	~~1.77~~ 1.73		1	PBT1250A	GEJ 4.99 5.43		M	
-003A		✓		—	4.75	—		1			4.70	M	
SI 4240-001A		✓		—	6.65	1.97		1		100.81	5.20	M,S,P,H	16
SI4291-002A		✓		1	5.38	1.77		—	~~PBT1250A~~ PBT1251A	100.13	5.75	S ~~M~~	28
-004A		✓		1	5.49	1.76		—	PBT1251A	100.34	5.98	S ~~M~~	29
GEJ -005A		✓		1	5.50	1.72		—		100.50	5.65 ~~5.80~~	S,M	15
-006A		✓		1	5.63	1.70		—		100.17	5.74	S M	34
PBT1250A	Aq	—	—	—	—	—		1	PBT1250A	—	4.94	M,S,P,H	30
PBT1251A		—	—	1	—	—		—	PBT1251A	—	3.34	S,M	27

KATAHDIN ANALYTICAL SERVICES, INC.

Non-Volatile TCLP/SPLP Extraction Log

I. EXTRACTION CONDITIONS

Extraction Method:	SW846 1311 (TCLP) ☑	Extractor ID: 1 ~~3~~ 2	Room Thermometer ID: DIG-23	(Room Temp Criteria. 23(±2)°C)
	SW846 1312 (SPLP) ☑	Balance ID: BAL-~~08~~ 15	pH Meter ID: Orion 520A s/n 7422	pH Probe ID: 573356-003
Solid pH Determination:	Date: 6/24/15		Analyst: TCS	
Rotary Extraction Started:	Date: GEJ 06.24.15	Time: 17:05	Analyst: MGEJ	Room Temp. (degrees °C): 19.9
Rotary Extraction Completed:	Date: 06/25/15	Time: ~~08:35~~ 09:48	Analyst:	Room Temp. (degrees °C): 20.1
Extraction Filtered:	Date: 06-25-15	Time: 10:30	Analyst:	Filter Lot #: R45A44228 / R5AA49484
Elapsed Extraction Time (HH:MM): 16:43		5% HNO_3 ID (used to wash filters): MR1477		HNO_3 Lot # (used to preserve extracts): 104736
Fluid 1 pH (Day of use): ~~PBT1252~~ 4.95 PBT1245 2.97		Fluid 1 Expiration Date: 6/23/16 6/3/16		
Fluid 2 pH (Day of use): 4.16 PBT1251		Fluid 2 Expiration Date: 6/18/16		

II. EXTRACTION SETUP

TCLP Fluid pH: #1 - 4.93 ± 0.05 #2 - 2.88 ± 0.05 SPLP Fluid pH: #1 - 4.20 ± 0.05 #2 - 5.00 ± 0.05

Katahdin Sample No. (include bottle ID)	Matrix	Check One: 100% Wet Solids-waste will yield no liquid upon filtration	Check One: < 100% Wet Solids (Perform Solids Determination below)	SPLP FLUID # (1 for east and 2 for west of Mississippi River)	TCLP pH Determination and Fluid Selection (date & init. above): Initial pH of solid phase: (if <5, use Fluid #1; if >5 add 3.5 mL of 1 N HCl)	TCLP pH Determination and Fluid Selection: pH after 1 N HCL addition (if <5, use Fluid #1; if >5, use Fluid #2	Extraction Setup: Volume of Extraction Fluid (mL)	Extraction Setup: Fluid # used	Extraction Setup: Associated Extraction Blank ID:	Extraction Setup: Weight of Waste (g)	pH of extract after extraction:	Extract to be analyzed for: Metals (M), SVOA (S), PEST (P), HERB (H), Cyanide (C)	Extraction Bottle ID (if applicable)
SI4427-1A	SL	✓	—		12.37	12.12	2000	2	PBT1245	100.44	12.13	M	N/A
SI4463-2A	SL	✓	—	✓	—	—	↓		PBT1251	100.06		S	36
SI4463-4A	SL	✓	—	✓	—	—			↓	100.02		S	17
SI4463-6A	SL	✓	—	✓	—	—				100.55		S	11
~~PBT1252A~~					4.84								
PBT1253A					4.86								
~~SI4427-1A~~					12.13								
~~SI4353-23A~~	SL	6/28/15											

Katahdin Analytical Services 0000234

SPLP SEMIVOLATILE SIM DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4463

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	DBP	#	FLO	#	PYR	#
SITE 4TS-SEE1-B	SI4463-2		62.6		94.2		84.4		61.2	
SITE 4TS-SEE2-B	SI4463-4		65.4		78.3		97.2		55.2	
SITE 4TS-SEE1-PT	SI4463-6		58.2		96.5		93.3		58.0	
SPLP Blank	WG165249-4		63.2		71.4		65.9		87.1	
Method Blank Sample	WG165446-1		70.7		89.1		73.1		73.4	
Laboratory Control S	WG165446-2		54.3		69.1		60.5		68.6	

		QC Limits
DBP	2,4-DIBROMOPHENOL	10-130
2MN	2-METHYLNAPHTHALENE-D10	43-92
FLO	FLUORENE-D10	29-101
PYR	PYRENE-D10	53-166

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : G5090.D
Instrument ID : GCMS-G
Matrix : AQ

SDG : SI4463
Lab Sample ID : WG165446-1
Date Extracted : 25-JUN-15
Date Analyzed : 26-JUN-15
Time Analyzed : 10:04

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165446-2	G5091.D	06/26/15	10:34
SITE 4TS-SEE1-B	SI4463-2	G5096.D	06/26/15	13:06
SITE 4TS-SEE2-B	SI4463-4	G5097.D	06/26/15	13:36
SITE 4TS-SEE1-PT	SI4463-6	G5098.D	06/26/15	14:07

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165446-1
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: G5090.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165446

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.10	ug/L	1	.2	0.20	0.041	0.10
2-Chlorophenol	U	0.50	ug/L	1	1	1.0	0.28	0.50
2,2'-Oxybis(1-Chloropropane)	U	0.15	ug/L	1	.2	0.20	0.12	0.15
3&4-Methylphenol	U	0.50	ug/L	1	1	1.0	0.44	0.50
N-Nitroso-Di-N-Propylamine	U	0.10	ug/L	1	.2	0.20	0.072	0.10
Hexachloroethane	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Nitrobenzene	U	0.15	ug/L	1	.2	0.20	0.13	0.15
2-Nitrophenol	U	1.0	ug/L	1	2	2.0	0.81	1.0
Bis(2-Chloroethoxy)Methane	U	0.25	ug/L	1	.5	0.50	0.18	0.25
2,4-Dichlorophenol	U	1.0	ug/L	1	2	2.0	0.89	1.0
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
4-Chloroaniline	U	1.5	ug/L	1	3	3.0	1.4	1.5
Hexachlorobutadiene	U	0.10	ug/L	1	.2	0.20	0.087	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
Hexachlorocyclopentadiene	U	0.10	ug/L	1	.2	0.20	0.067	0.10
2,4,6-Trichlorophenol	U	0.50	ug/L	1	1	1.0	0.12	0.50
2,4,5-Trichlorophenol	U	0.50	ug/L	1	1	1.0	0.078	0.50
1,1'-Biphenyl	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Nitroaniline	U	0.15	ug/L	1	.2	0.20	0.12	0.15
2,6-Dinitrotoluene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
2,4-Dinitrophenol	U	0.50	ug/L	1	1	1.0	0.24	0.50
4-Nitrophenol	U	0.50	ug/L	1	1	1.0	0.23	0.50
Dibenzofuran	U	0.10	ug/L	1	.2	0.20	0.068	0.10
2,4-Dinitrotoluene	U	0.10	ug/L	1	.2	0.20	0.035	0.10
4-Chlorophenyl-Phenylether	U	0.25	ug/L	1	.5	0.50	0.16	0.25
4-Nitroaniline	U	0.10	ug/L	1	.2	0.20	0.065	0.10
4,6-Dinitro-2-Methylphenol	U	0.75	ug/L	1	1	1.0	0.50	0.75
N-Nitrosodiphenylamine	U	0.10	ug/L	1	.2	0.20	0.071	0.10
1,2,4,5-Tetrachlorobenzene	U	0.10	ug/L	1	.2	0.20	0.037	0.10
Hexachlorobenzene	U	0.10	ug/L	1	.2	0.20	0.055	0.10
Atrazine	U	0.10	ug/L	1	.2	0.20	0.038	0.10
Pentachlorophenol	U	0.50	ug/L	1	1	1.0	0.33	0.50
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165446-1
Client ID: Method Blank Sample
Project:
SDG: SI4463
Lab File ID: G5090.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165446

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-N-Butylphthalate	U	1.0	ug/L	1	2	2.0	0.83	1.0
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Butylbenzylphthalate	U	0.50	ug/L	1	1	1.0	0.13	0.50
3,3'-Dichlorobenzidine	U	0.10	ug/L	1	.2	0.20	0.056	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Bis(2-Ethylhexyl)Phthalate	U	0.50	ug/L	1	1	1.0	0.50	0.50
Di-N-Octylphthalate	U	0.50	ug/L	1	1	1.0	0.079	0.50
Benzo(b)Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	J	0.085	ug/L	1	.2	0.20	0.065	0.10
2,3,4,6-Tetrachlorophenol	U	0.50	ug/L	1	1	1.0	0.071	0.50
2-Methylnaphthalene-D10		70.7	%					
Fluorene-D10		73.1	%					
Pyrene-D10		73.4	%					
2,4-Dibromophenol		89.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165249-4
Client ID: SPLP Blank
Project:
SDG: SI4463
Lab File ID: N6786.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 15-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.099	ug/L	1	.2	0.20	0.040	0.099
2-Chlorophenol	U	0.50	ug/L	1	1	0.99	0.28	0.50
2,2'-Oxybis(1-Chloropropane)	U	0.15	ug/L	1	.2	0.20	0.12	0.15
3&4-Methylphenol	U	0.50	ug/L	1	1	0.99	0.44	0.50
N-Nitroso-Di-N-Propylamine	U	0.099	ug/L	1	.2	0.20	0.071	0.099
Hexachloroethane	U	0.099	ug/L	1	.2	0.20	0.072	0.099
Nitrobenzene	U	0.15	ug/L	1	.2	0.20	0.13	0.15
2-Nitrophenol	U	0.99	ug/L	1	2	2.0	0.80	0.99
Bis(2-Chloroethoxy)Methane	U	0.25	ug/L	1	.5	0.50	0.18	0.25
2,4-Dichlorophenol	U	0.99	ug/L	1	2	2.0	0.88	0.99
Naphthalene	U	0.099	ug/L	1	.2	0.20	0.063	0.099
4-Chloroaniline	U	1.5	ug/L	1	3	3.0	1.4	1.5
Hexachlorobutadiene	U	0.099	ug/L	1	.2	0.20	0.086	0.099
2-Methylnaphthalene	U	0.099	ug/L	1	.2	0.20	0.076	0.099
Hexachlorocyclopentadiene	U	0.099	ug/L	1	.2	0.20	0.066	0.099
2,4,6-Trichlorophenol	U	0.50	ug/L	1	1	0.99	0.12	0.50
2,4,5-Trichlorophenol	U	0.50	ug/L	1	1	0.99	0.077	0.50
1,1'-Biphenyl	U	0.099	ug/L	1	.2	0.20	0.064	0.099
2-Nitroaniline	U	0.15	ug/L	1	.2	0.20	0.12	0.15
2,6-Dinitrotoluene	U	0.099	ug/L	1	.2	0.20	0.069	0.099
2,4-Dinitrophenol	U	0.50	ug/L	1	1	0.99	0.24	0.50
4-Nitrophenol	U	0.50	ug/L	1	1	0.99	0.23	0.50
Dibenzofuran	U	0.099	ug/L	1	.2	0.20	0.067	0.099
2,4-Dinitrotoluene	U	0.099	ug/L	1	.2	0.20	0.035	0.099
4-Chlorophenyl-Phenylether	U	0.25	ug/L	1	.5	0.50	0.16	0.25
4-Nitroaniline	U	0.099	ug/L	1	.2	0.20	0.064	0.099
4,6-Dinitro-2-Methylphenol	U	0.74	ug/L	1	1	0.99	0.50	0.74
N-Nitrosodiphenylamine	U	0.099	ug/L	1	.2	0.20	0.070	0.099
1,2,4,5-Tetrachlorobenzene	U	0.099	ug/L	1	.2	0.20	0.037	0.099
Hexachlorobenzene	U	0.099	ug/L	1	.2	0.20	0.054	0.099
Atrazine	U	0.099	ug/L	1	.2	0.20	0.038	0.099
Pentachlorophenol	U	0.50	ug/L	1	1	0.99	0.33	0.50
Phenanthrene	U	0.099	ug/L	1	.2	0.20	0.050	0.099
Anthracene	U	0.099	ug/L	1	.2	0.20	0.044	0.099

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165249-4
Client ID: SPLP Blank
Project:
SDG: SI4463
Lab File ID: N6786.D

Sample Date:
Received Date:
Extract Date: 22-JUN-15
Extracted By: WAS
Extraction Method: 3510/1312
Lab Prep Batch: WG165249

Analysis Date: 23-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 15-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-N-Butylphthalate	U	0.99	ug/L	1	2	2.0	0.82	0.99
Fluoranthene	U	0.099	ug/L	1	.2	0.20	0.072	0.099
Pyrene	U	0.099	ug/L	1	.2	0.20	0.058	0.099
Butylbenzylphthalate	U	0.50	ug/L	1	1	0.99	0.13	0.50
3,3'-Dichlorobenzidine	U	0.099	ug/L	1	.2	0.20	0.055	0.099
Benzo(a)anthracene	U	0.099	ug/L	1	.2	0.20	0.046	0.099
Chrysene	U	0.099	ug/L	1	.2	0.20	0.036	0.099
Bis(2-Ethylhexyl)Phthalate	U	0.50	ug/L	1	1	0.99	0.50	0.50
Di-N-Octylphthalate	U	0.50	ug/L	1	1	0.99	0.078	0.50
Benzo(b)Fluoranthene	U	0.099	ug/L	1	.2	0.20	0.088	0.099
Benzo(k)fluoranthene	U	0.099	ug/L	1	.2	0.20	0.048	0.099
Benzo(a)pyrene	U	0.099	ug/L	1	.2	0.20	0.065	0.099
Indeno(1,2,3-cd)pyrene	U	0.099	ug/L	1	.2	0.20	0.051	0.099
Dibenzo(a,h)anthracene	U	0.099	ug/L	1	.2	0.20	0.069	0.099
Benzo(g,h,i)perylene	U	0.099	ug/L	1	.2	0.20	0.064	0.099
2,3,4,6-Tetrachlorophenol	U	0.50	ug/L	1	1	0.99	0.070	0.50
2-Methylnaphthalene-D10		63.2	%					
Fluorene-D10		65.9	%					
Pyrene-D10		87.1	%					
2,4-Dibromophenol		71.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165446-2
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: G5091.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165446

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Bis(2-Chloroethyl)Ether	56.0	2.00	1.12	ug/L	56-87
2-Chlorophenol	47.5	4.00	1.90	ug/L	30-112
2,2'-Oxybis(1-Chloropropane)	* 45.0	2.00	0.899	ug/L	57-90
3&4-Methylphenol	38.0	4.00	1.52	ug/L	31-78
N-Nitroso-Di-N-Propylamine	54.0	2.00	1.08	ug/L	43-86
Hexachloroethane	50.5	2.00	1.01	ug/L	48-80
Nitrobenzene	66.5	2.00	1.33	ug/L	43-89
2-Nitrophenol	48.8	4.00	1.95	ug/L	30-113
Bis(2-Chloroethoxy)Methane	58.0	2.00	1.16	ug/L	53-93
2,4-Dichlorophenol	47.2	4.00	1.89	ug/L	31-106
Naphthalene	47.0	2.00	0.939	ug/L	46-84
4-Chloroaniline	48.1	2.00	0.962	ug/L	38-122
Hexachlorobutadiene	56.0	2.00	1.12	ug/L	48-95
2-Methylnaphthalene	* 49.2	2.00	0.985	ug/L	51-114
Hexachlorocyclopentadiene	37.0	2.00	0.741	ug/L	10-96
2,4,6-Trichlorophenol	49.2	4.00	1.97	ug/L	19-139
2,4,5-Trichlorophenol	43.5	4.00	1.74	ug/L	20-133
1,1'-Biphenyl	67.0	2.00	1.34	ug/L	56-96
2-Nitroaniline	* 106.	2.00	2.11	ug/L	54-105
2,6-Dinitrotoluene	52.5	2.00	1.05	ug/L	47-86
2,4-Dinitrophenol	18.9	4.00	0.756	ug/L	10-95
4-Nitrophenol	23.9	4.00	0.957	ug/L	10-160
Dibenzofuran	58.5	2.00	1.17	ug/L	56-98
2,4-Dinitrotoluene	57.0	2.00	1.14	ug/L	48-95
4-Chlorophenyl-Phenylether	62.0	2.00	1.24	ug/L	57-95
4-Nitroaniline	73.0	2.00	1.46	ug/L	42-152
4,6-Dinitro-2-Methylphenol	43.0	4.00	1.72	ug/L	10-77
N-Nitrosodiphenylamine	48.2	2.00	0.964	ug/L	48-82
1,2,4,5-Tetrachlorobenzene	56.5	2.00	1.13	ug/L	30-150
Hexachlorobenzene	62.5	2.00	1.25	ug/L	62-90
Atrazine	70.5	2.00	1.41	ug/L	66-126
Pentachlorophenol	48.0	4.00	1.92	ug/L	10-66
Phenanthrene	* 66.0	2.00	1.32	ug/L	73-100
Anthracene	* 64.0	2.00	1.28	ug/L	70-95
Di-N-Butylphthalate	88.0	2.00	1.76	ug/L	46-163

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165446-2
Client ID: LCS
Project:
SDG: SI4463
LCS File ID: G5091.D

Sample Date:
Received Date:
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165446

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Fluoranthene	* 68.0	2.00	1.36	ug/L	81-109
Pyrene	* 65.0	2.00	1.30	ug/L	71-104
Butylbenzylphthalate	69.0	2.00	1.38	ug/L	30-119
3,3'-Dichlorobenzidine	* 130.	2.00	2.59	ug/L	10-118
Benzo(a)anthracene	* 67.0	2.00	1.34	ug/L	70-110
Chrysene	* 66.5	2.00	1.33	ug/L	70-95
Bis(2-Ethylhexyl)Phthalate	* 81.5	2.00	1.63	ug/L	97-188
Di-N-Octylphthalate	59.5	2.00	1.19	ug/L	56-122
Benzo(b)Fluoranthene	83.5	2.00	1.67	ug/L	67-102
Benzo(k)fluoranthene	81.0	2.00	1.62	ug/L	68-103
Benzo(a)pyrene	74.5	2.00	1.49	ug/L	63-98
Indeno(1,2,3-cd)pyrene	104.	2.00	2.07	ug/L	61-112
Dibenzo(a,h)anthracene	* 65.0	2.00	1.30	ug/L	66-108
Benzo(g,h,i)perylene	68.0	2.00	1.36	ug/L	62-106
2,3,4,6-Tetrachlorophenol	50.8	4.00	2.03	ug/L	10-101
2-Methylnaphthalene-D10	54.3				43-92
Fluorene-D10	60.5				29-101
Pyrene-D10	68.6				53-166
2,4-Dibromophenol	69.1				10-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : GD627.D
Instrument ID : GCMS-G

SDG : SI4463
Date Analyzed : 16-JUN-15
Time Analyzed : 13:46

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	46.7		
68	Less than 2.0% of mass 69	0.6	1.49	1
69	Less than 100.0% of mass 198	40.6		
70	Less than 2.0% of mass 69	0.3	0.62	1
127	40.0 - 60.0% of mass 198	59.9		
197	Less than 1.0% of mass 198	0.6		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	19.5		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	10.4	73.78	2
442	40.0 - 100.0% of mass 198	72.0		
443	17.0 - 23.0% of mass 442	14.1	19.55	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG164853-2	G5052.D	06/16/15	14:38
Initial Calibration	WG164853-3	G5053.D	06/16/15	15:08
Initial Calibration	WG164853-5	G5054.D	06/16/15	15:38
Initial Calibration	WG164853-6	G5055.D	06/16/15	16:08
Initial Calibration	WG164853-7	G5056.D	06/16/15	16:38
Initial Calibration	WG164853-4	G5057.D	06/16/15	17:08
Independent Source	WG164853-8	G5058.D	06/16/15	17:39

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : GD632.D
Instrument ID : GCMS-G

SDG : SI4463
Date Analyzed : 26-JUN-15
Time Analyzed : 09:07

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	45.8		
68	Less than 2.0% of mass 69	0.6	1.49	1
69	Less than 100.0% of mass 198	41.2		
70	Less than 2.0% of mass 69	0.2	0.56	1
127	40.0 - 60.0% of mass 198	59.5		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	22.9		
365	1.0 - 100.0% of mass 198	3.2		
441	0.0 - 100.0% of mass 443	14.2	72.47	2
442	40.0 - 100.0% of mass 198	99.7		
443	17.0 - 23.0% of mass 442	19.6	19.67	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165507-2	G5089.D	06/26/15	09:29
Method Blank Sample	WG165446-1	G5090.D	06/26/15	10:04
Laboratory Control S	WG165446-2	G5091.D	06/26/15	10:34
SITE 4TS-SEE1-B	SI4463-2	G5096.D	06/26/15	13:06
SITE 4TS-SEE2-B	SI4463-4	G5097.D	06/26/15	13:36
SITE 4TS-SEE1-PT	SI4463-6	G5098.D	06/26/15	14:07

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164853-4
Lab File ID : G5057.D

SDG: SI4463
Analytical Date: 06/16/15 17:08
Instrument ID: GCMS-G

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	40154		6.02		139289		7.85		64634		10.62	
	Upper Limit	80308		6.52		278578		8.35		129268		11.12	
	Lower Limit	20077		5.52		69644.5		7.35		32317		10.12	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165507-2	37429		6.02		133275		7.85		55708		10.62	
Method Blank Sample	WG165446-1	39000		6.02		130573		7.85		59013		10.62	
Laboratory Control S	WG165446-2	36810		6.02		129921		7.85		56759		10.62	
SITE 4TS-SEE1-B	SI4463-2	36006		6.02		128720		7.85		57566		10.62	
SITE 4TS-SEE2-B	SI4463-4	38830		6.02		135967		7.85		60282		10.62	
SITE 4TS-SEE1-PT	SI4463-6	39781		6.02		141921		7.85		65149		10.62	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG164853-4
Lab File ID : G5057.D

SDG: SI4463
Analytical Date: 06/16/15 17:08
Instrument ID: GCMS-G

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	89923		12.99		41654		17.32		25565		19.72	
	Upper Limit	179846		13.49		83308		17.82		51130		20.22	
	Lower Limit	44961.5		12.49		20827		16.82		12782.5		19.22	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165507-2	72225		12.99		32597		17.32		18025		19.71	
Method Blank Sample	WG165446-1	82695		12.99		38646		17.32		20345		19.71	
Laboratory Control S	WG165446-2	76805		12.99		33029		17.32		16561		19.71	
SITE 4TS-SEE1-B	SI4463-2	82183		12.99		47719		17.32		25985		19.71	
SITE 4TS-SEE2-B	SI4463-4	81544		12.99		49342		17.32		25607		19.71	
SITE 4TS-SEE1-PT	SI4463-6	94811		12.99		61234		17.32		26077		19.71	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI4463
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	88250		4.40		265068		5.77		116126		7.83	
	Upper Limit	176500		4.90		530136		6.27		232252		8.33	
	Lower Limit	44125		3.90		132534		5.27		58063		7.33	
Client Sample ID	Lab Sample ID												
SPLP Blank	WG165249-4	66927		4.41		210573		5.82		93995		7.86	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI4463
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	156981		9.62		75747		12.97		36246		15.72	
	Upper Limit	313962		10.12		151494		13.47		72492		16.22	
	Lower Limit	78490.5		9.12		37873.5		12.47		18123		15.22	
Client Sample ID	Lab Sample ID												
SPLP Blank	WG165249-4	137170		9.65		58386		13.00		26183		15.76	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-2
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: G5096.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165446

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.17	ug/L	1	.2	0.33	0.068	0.17
2-Chlorophenol	U	0.83	ug/L	1	1	1.7	0.47	0.83
2,2'-Oxybis(1-Chloropropane)	UL	0.25	ug/L	1	.2	0.33	0.20	0.25
3&4-Methylphenol	U	0.83	ug/L	1	1	1.7	0.73	0.83
N-Nitroso-Di-N-Propylamine	U	0.17	ug/L	1	.2	0.33	0.12	0.17
Hexachloroethane	U	0.17	ug/L	1	.2	0.33	0.12	0.17
Nitrobenzene	U	0.25	ug/L	1	.2	0.33	0.22	0.25
2-Nitrophenol	U	1.7	ug/L	1	2	3.3	1.4	1.7
Bis(2-Chloroethoxy)Methane	U	0.42	ug/L	1	.5	0.83	0.30	0.42
2,4-Dichlorophenol	U	1.7	ug/L	1	2	3.3	1.5	1.7
Naphthalene		0.68	ug/L	1	.2	0.33	0.11	0.17
4-Chloroaniline	U	2.5	ug/L	1	3	5.0	2.3	2.5
Hexachlorobutadiene	U	0.17	ug/L	1	.2	0.33	0.14	0.17
2-Methylnaphthalene	L	1.5	ug/L	1	.2	0.33	0.13	0.17
Hexachlorocyclopentadiene	U	0.17	ug/L	1	.2	0.33	0.11	0.17
2,4,6-Trichlorophenol	U	0.83	ug/L	1	1	1.7	0.20	0.83
2,4,5-Trichlorophenol	U	0.83	ug/L	1	1	1.7	0.13	0.83
1,1'-Biphenyl	U	0.17	ug/L	1	.2	0.33	0.11	0.17
2-Nitroaniline	UL	0.25	ug/L	1	.2	0.33	0.20	0.25
2,6-Dinitrotoluene	U	0.17	ug/L	1	.2	0.33	0.12	0.17
2,4-Dinitrophenol	U	0.83	ug/L	1	1	1.7	0.40	0.83
4-Nitrophenol	U	0.83	ug/L	1	1	1.7	0.38	0.83
Dibenzofuran	J	0.14	ug/L	1	.2	0.33	0.11	0.17
2,4-Dinitrotoluene	U	0.17	ug/L	1	.2	0.33	0.058	0.17
4-Chlorophenyl-Phenylether	U	0.42	ug/L	1	.5	0.83	0.27	0.42
4-Nitroaniline	U	0.17	ug/L	1	.2	0.33	0.11	0.17
4,6-Dinitro-2-Methylphenol	U	1.2	ug/L	1	1	1.7	0.83	1.2
N-Nitrosodiphenylamine	U	0.17	ug/L	1	.2	0.33	0.12	0.17
1,2,4,5-Tetrachlorobenzene	U	0.17	ug/L	1	.2	0.33	0.062	0.17
Hexachlorobenzene	U	0.17	ug/L	1	.2	0.33	0.092	0.17
Atrazine	U	0.17	ug/L	1	.2	0.33	0.063	0.17
Pentachlorophenol	U	0.83	ug/L	1	1	1.7	0.55	0.83
Phenanthrene	L	0.52	ug/L	1	.2	0.33	0.085	0.17
Anthracene	JL	0.12	ug/L	1	.2	0.33	0.073	0.17
Di-N-Butylphthalate	U	1.7	ug/L	1	2	3.3	1.4	1.7

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-2
Client ID: SITE 4TS-SEE1-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: G5096.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165446

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Fluoranthene	UL	0.17	ug/L	1	.2	0.33	0.12	0.17
Pyrene	JL	0.17	ug/L	1	.2	0.33	0.098	0.17
Butylbenzylphthalate	U	0.83	ug/L	1	1	1.7	0.22	0.83
3,3'-Dichlorobenzidine	UL	0.17	ug/L	1	.2	0.33	0.093	0.17
Benzo(a)anthracene	UL	0.17	ug/L	1	.2	0.33	0.077	0.17
Chrysene	UL	0.17	ug/L	1	.2	0.33	0.060	0.17
Bis(2-Ethylhexyl)Phthalate	UL	0.83	ug/L	1	1	1.7	0.83	0.83
Di-N-Octylphthalate	U	0.83	ug/L	1	1	1.7	0.13	0.83
Benzo(b)Fluoranthene	U	0.17	ug/L	1	.2	0.33	0.15	0.17
Benzo(k)fluoranthene	U	0.17	ug/L	1	.2	0.33	0.082	0.17
Benzo(a)pyrene	U	0.17	ug/L	1	.2	0.33	0.11	0.17
Indeno(1,2,3-cd)pyrene		0.54	ug/L	1	.2	0.33	0.087	0.17
Dibenzo(a,h)anthracene	UL	0.17	ug/L	1	.2	0.33	0.12	0.17
Benzo(g,h,i)perylene	J	0.12	ug/L	1	.2	0.33	0.11	0.17
2,3,4,6-Tetrachlorophenol	U	0.83	ug/L	1	1	1.7	0.12	0.83
2-Methylnaphthalene-D10		62.6	%					
Fluorene-D10		84.4	%					
Pyrene-D10		61.2	%					
2,4-Dibromophenol		94.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-4
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: G5097.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165446

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.11	ug/L	1	.2	0.22	0.044	0.11
2-Chlorophenol	U	0.54	ug/L	1	1	1.1	0.30	0.54
2,2'-Oxybis(1-Chloropropane)	UL	0.16	ug/L	1	.2	0.22	0.13	0.16
3&4-Methylphenol	U	0.54	ug/L	1	1	1.1	0.48	0.54
N-Nitroso-Di-N-Propylamine	U	0.11	ug/L	1	.2	0.22	0.078	0.11
Hexachloroethane	U	0.11	ug/L	1	.2	0.22	0.079	0.11
Nitrobenzene	U	0.16	ug/L	1	.2	0.22	0.14	0.16
2-Nitrophenol	U	1.1	ug/L	1	2	2.2	0.88	1.1
Bis(2-Chloroethoxy)Methane	U	0.27	ug/L	1	.5	0.54	0.20	0.27
2,4-Dichlorophenol	U	1.1	ug/L	1	2	2.2	0.97	1.1
Naphthalene		0.70	ug/L	1	.2	0.22	0.070	0.11
4-Chloroaniline	U	1.6	ug/L	1	3	3.3	1.5	1.6
Hexachlorobutadiene	U	0.11	ug/L	1	.2	0.22	0.094	0.11
2-Methylnaphthalene	L	1.6	ug/L	1	.2	0.22	0.084	0.11
Hexachlorocyclopentadiene	U	0.11	ug/L	1	.2	0.22	0.073	0.11
2,4,6-Trichlorophenol	U	0.54	ug/L	1	1	1.1	0.13	0.54
2,4,5-Trichlorophenol	U	0.54	ug/L	1	1	1.1	0.085	0.54
1,1'-Biphenyl	J	0.13	ug/L	1	.2	0.22	0.071	0.11
2-Nitroaniline	UL	0.16	ug/L	1	.2	0.22	0.13	0.16
2,6-Dinitrotoluene	U	0.11	ug/L	1	.2	0.22	0.076	0.11
2,4-Dinitrophenol	U	0.54	ug/L	1	1	1.1	0.26	0.54
4-Nitrophenol	U	0.54	ug/L	1	1	1.1	0.25	0.54
Dibenzofuran	J	0.15	ug/L	1	.2	0.22	0.074	0.11
2,4-Dinitrotoluene	U	0.11	ug/L	1	.2	0.22	0.038	0.11
4-Chlorophenyl-Phenylether	U	0.27	ug/L	1	.5	0.54	0.17	0.27
4-Nitroaniline	U	0.11	ug/L	1	.2	0.22	0.071	0.11
4,6-Dinitro-2-Methylphenol	U	0.82	ug/L	1	1	1.1	0.54	0.82
N-Nitrosodiphenylamine	U	0.11	ug/L	1	.2	0.22	0.077	0.11
1,2,4,5-Tetrachlorobenzene	U	0.11	ug/L	1	.2	0.22	0.040	0.11
Hexachlorobenzene	U	0.11	ug/L	1	.2	0.22	0.060	0.11
Atrazine	U	0.11	ug/L	1	.2	0.22	0.041	0.11
Pentachlorophenol	U	0.54	ug/L	1	1	1.1	0.36	0.54
Phenanthrene	L	0.49	ug/L	1	.2	0.22	0.055	0.11
Anthracene	JL	0.11	ug/L	1	.2	0.22	0.048	0.11
Di-N-Butylphthalate	U	1.1	ug/L	1	2	2.2	0.90	1.1

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-4
Client ID: SITE 4TS-SEE2-B
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: G5097.D

Sample Date: 22-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165446

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Fluoranthene	UL	0.11	ug/L	1	.2	0.22	0.079	0.11
Pyrene	JL	0.16	ug/L	1	.2	0.22	0.064	0.11
Butylbenzylphthalate	U	0.54	ug/L	1	1	1.1	0.14	0.54
3,3'-Dichlorobenzidine	UL	0.11	ug/L	1	.2	0.22	0.061	0.11
Benzo(a)anthracene	UL	0.11	ug/L	1	.2	0.22	0.050	0.11
Chrysene	UL	0.11	ug/L	1	.2	0.22	0.039	0.11
Bis(2-Ethylhexyl)Phthalate	UL	0.54	ug/L	1	1	1.1	0.54	0.54
Di-N-Octylphthalate	U	0.54	ug/L	1	1	1.1	0.086	0.54
Benzo(b)Fluoranthene	U	0.11	ug/L	1	.2	0.22	0.097	0.11
Benzo(k)fluoranthene	U	0.11	ug/L	1	.2	0.22	0.053	0.11
Benzo(a)pyrene	U	0.11	ug/L	1	.2	0.22	0.072	0.11
Indeno(1,2,3-cd)pyrene		0.35	ug/L	1	.2	0.22	0.056	0.11
Dibenzo(a,h)anthracene	L	0.30	ug/L	1	.2	0.22	0.076	0.11
Benzo(g,h,i)perylene	J	0.082	ug/L	1	.2	0.22	0.071	0.11
2,3,4,6-Tetrachlorophenol	U	0.54	ug/L	1	1	1.1	0.077	0.54
2-Methylnaphthalene-D10		65.4	%					
Fluorene-D10		97.2	%					
Pyrene-D10		55.2	%					
2,4-Dibromophenol		78.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-6
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: G5098.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165446

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.11	ug/L	1	.2	0.22	0.044	0.11
2-Chlorophenol	U	0.54	ug/L	1	1	1.1	0.30	0.54
2,2'-Oxybis(1-Chloropropane)	UL	0.16	ug/L	1	.2	0.22	0.13	0.16
3&4-Methylphenol	U	0.54	ug/L	1	1	1.1	0.48	0.54
N-Nitroso-Di-N-Propylamine	U	0.11	ug/L	1	.2	0.22	0.078	0.11
Hexachloroethane	U	0.11	ug/L	1	.2	0.22	0.079	0.11
Nitrobenzene	U	0.16	ug/L	1	.2	0.22	0.14	0.16
2-Nitrophenol	U	1.1	ug/L	1	2	2.2	0.88	1.1
Bis(2-Chloroethoxy)Methane	U	0.27	ug/L	1	.5	0.54	0.20	0.27
2,4-Dichlorophenol	U	1.1	ug/L	1	2	2.2	0.97	1.1
Naphthalene		0.26	ug/L	1	.2	0.22	0.070	0.11
4-Chloroaniline	U	1.6	ug/L	1	3	3.3	1.5	1.6
Hexachlorobutadiene	U	0.11	ug/L	1	.2	0.22	0.094	0.11
2-Methylnaphthalene	L	0.68	ug/L	1	.2	0.22	0.084	0.11
Hexachlorocyclopentadiene	U	0.11	ug/L	1	.2	0.22	0.073	0.11
2,4,6-Trichlorophenol	U	0.54	ug/L	1	1	1.1	0.13	0.54
2,4,5-Trichlorophenol	U	0.54	ug/L	1	1	1.1	0.085	0.54
1,1'-Biphenyl	U	0.11	ug/L	1	.2	0.22	0.071	0.11
2-Nitroaniline	UL	0.16	ug/L	1	.2	0.22	0.13	0.16
2,6-Dinitrotoluene	U	0.11	ug/L	1	.2	0.22	0.076	0.11
2,4-Dinitrophenol	U	0.54	ug/L	1	1	1.1	0.26	0.54
4-Nitrophenol	U	0.54	ug/L	1	1	1.1	0.25	0.54
Dibenzofuran	J	0.11	ug/L	1	.2	0.22	0.074	0.11
2,4-Dinitrotoluene	U	0.11	ug/L	1	.2	0.22	0.038	0.11
4-Chlorophenyl-Phenylether	U	0.27	ug/L	1	.5	0.54	0.17	0.27
4-Nitroaniline	U	0.11	ug/L	1	.2	0.22	0.071	0.11
4,6-Dinitro-2-Methylphenol	U	0.82	ug/L	1	1	1.1	0.54	0.82
N-Nitrosodiphenylamine	U	0.11	ug/L	1	.2	0.22	0.077	0.11
1,2,4,5-Tetrachlorobenzene	U	0.11	ug/L	1	.2	0.22	0.040	0.11
Hexachlorobenzene	U	0.11	ug/L	1	.2	0.22	0.060	0.11
Atrazine	U	0.11	ug/L	1	.2	0.22	0.041	0.11
Pentachlorophenol	U	0.54	ug/L	1	1	1.1	0.36	0.54
Phenanthrene	L	0.48	ug/L	1	.2	0.22	0.055	0.11
Anthracene	JL	0.11	ug/L	1	.2	0.22	0.048	0.11
Di-N-Butylphthalate	U	1.1	ug/L	1	2	2.2	0.90	1.1

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4463-6
Client ID: SITE 4TS-SEE1-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4463
Lab File ID: G5098.D

Sample Date: 23-JUN-15
Received Date: 24-JUN-15
Extract Date: 25-JUN-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165446

Analysis Date: 26-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Fluoranthene	UL	0.11	ug/L	1	.2	0.22	0.079	0.11
Pyrene	JL	0.18	ug/L	1	.2	0.22	0.064	0.11
Butylbenzylphthalate	U	0.54	ug/L	1	1	1.1	0.14	0.54
3,3'-Dichlorobenzidine	UL	0.11	ug/L	1	.2	0.22	0.061	0.11
Benzo(a)anthracene	UL	0.11	ug/L	1	.2	0.22	0.050	0.11
Chrysene	UL	0.11	ug/L	1	.2	0.22	0.039	0.11
Bis(2-Ethylhexyl)Phthalate	UL	0.54	ug/L	1	1	1.1	0.54	0.54
Di-N-Octylphthalate	U	0.54	ug/L	1	1	1.1	0.086	0.54
Benzo(b)Fluoranthene	U	0.11	ug/L	1	.2	0.22	0.097	0.11
Benzo(k)fluoranthene	U	0.11	ug/L	1	.2	0.22	0.053	0.11
Benzo(a)pyrene	U	0.11	ug/L	1	.2	0.22	0.072	0.11
Indeno(1,2,3-cd)pyrene		0.35	ug/L	1	.2	0.22	0.056	0.11
Dibenzo(a,h)anthracene	UL	0.11	ug/L	1	.2	0.22	0.076	0.11
Benzo(g,h,i)perylene	J	0.075	ug/L	1	.2	0.22	0.071	0.11
2,3,4,6-Tetrachlorophenol	U	0.54	ug/L	1	1	1.1	0.077	0.54
2-Methylnaphthalene-D10		58.2	%					
Fluorene-D10		93.3	%					
Pyrene-D10		58.0	%					
2,4-Dibromophenol		96.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-G
Lab File IDs : G5052.D G5053.D G5057.D G5054.D G5055.D G5056.D **Column ID:**
Calibration Date(s): 16-JUN-15 14:38 16-JUN-15 17:08

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Crv					Max	
	0.200000(	0.500000(	1.0000	3.0000	7.0000	10.0000	New	b	m1	m2	%RSD	%RSD	
Bis(2-Chloroethyl)ether	1.45578	1.42313	1.24001	1.17016	1.09645	1.04724	AVG		1.23879		13.63864	15.00000	O
2-Chlorophenol	1.25493	1.20994	1.18070	1.21028	1.18277	1.13744	AVG		1.19601		3.28312	15.00000	O
2,2'-Oxybis(1-chloropropane	1.96392	1.97962	1.83802	1.79972	1.65015	1.59087	AVG		1.80372		8.82501	15.00000	O
N-Nitroso-di-n-propylamine	0.81984	0.86548	0.82905	0.79090	0.76755	0.77261	AVG		0.80757		4.65528	15.00000	O
3&4-Methylphenol	1.17318	1.16650	1.18749	1.18068	1.16019	1.12305	AVG		1.16518		1.95841	15.00000	O
Hexachloroethane	0.64116	0.63126	0.59834	0.57830	0.54328	0.51915	AVG		0.58525		8.22769	15.00000	O
Nitrobenzene	0.34099	0.32527	0.34425	0.32647	0.31169	0.27762	AVG		0.32105		7.57465	15.00000	O
2-Nitrophenol	0.17915	0.15344	0.16481	0.15211	0.15238	0.14548	AVG		0.15789		7.69203	15.00000	O
bis(2-Chloroethoxy)methane	0.44938	0.46358	0.46363	0.42792	0.39120	0.35830	AVG		0.42567		10.06213	15.00000	O
2,4-Dichlorophenol	0.30016	0.25499	0.26410	0.26172	0.25521	0.23540	AVG		0.26193		8.12361	15.00000	O
Naphthalene	34888	99564	188111	551988	1153217	1472709	QUA	0.09785	0.66873	0.07388	0.99860	0.99000	O
4-Chloroaniline	9259	28720	57706	149902	331081	417863	QUA	0.07739	2.48509	0.85868	0.99722	0.99000	O
Hexachlorobutadiene	0.16174	0.15318	0.15256	0.13939	0.12400	0.11041	AVG		0.14021		14.03121	15.00000	O
2-Methylnaphthalene	0.60154	0.54840	0.53884	0.49757	0.46311	0.41813	AVG		0.51127		12.81671	15.00000	O
Hexachlorocyclopentadiene	0.21331	0.18717	0.21709	0.23315	0.24920	0.24612	AVG		0.22434		10.40737	15.00000	O
1,2,4,5-Tetrachlorobenzene	0.61038	0.54436	0.52929	0.51272	0.48777	0.46057	AVG		0.52418		9.86434	15.00000	O
2,4,6-Trichlorophenol	0.36054	0.33355	0.33594	0.33875	0.34225	0.32823	AVG		0.33988		3.28996	15.00000	O
2,4,5-Trichlorophenol	0.38436	0.34228	0.34305	0.34649	0.35929	0.34986	AVG		0.35422		4.51789	15.00000	O
1,1'-Biphenyl	1.55146	1.44658	1.40387	1.32637	1.22385	1.15082	AVG		1.35049		10.93084	15.00000	O
2-Nitroaniline	0.26319	0.28677	0.34225	0.33864	0.32190	0.33671	AVG		0.31491		10.34056	15.00000	O
2,6-Dinitrotoluene	0.23412	0.26644	0.28168	0.29770	0.30163	0.27271	AVG		0.27571		8.90685	15.00000	O
2,4-Dinitrophenol	0.01443	0.03029	0.05528	0.06706	0.08904	0.11073	AVG		0.06114		58.70500	15.00000	W(
4-Nitrophenol	5174	15023	28682	47346	73376	111294	QUA	0.26731	8.80539	-0.82291	0.99756	0.99000	O
Dibenzofuran	1.59745	1.54524	1.57867	1.47412	1.49099	1.39426	AVG		1.51346		4.99529	15.00000	O
2,4-Dinitrotoluene	2933	12014	28691	92368	204146	301867	LNR	0.03316	0.35403		0.99945	0.99000	O
2,3,4,6-Tetrachlorophenol	0.19849	0.21216	0.22476	0.22822	0.24526	0.24669	AVG		0.22593		8.28870	15.00000	O
4-Chlorophenyl-Phenylether	0.54018	0.55372	0.57358	0.55644	0.51678	0.49869	AVG		0.53990		5.12737	15.00000	O
4-Nitroaniline	0.14748	0.17126	0.15647	0.17024	0.21080	0.20918	AVG		0.17757		15.00031	15.00000	W(
4,6-Dinitro-2-Methylphenol	4028	17443	29330	54513	94777	149530	QUA	0.38365	10.24686	-1.74472	0.99608	0.99000	O
N-Nitrosodiphenylamine	0.79431	0.76174	0.70031	0.70802	0.71059	0.67682	AVG		0.72530		6.03466	15.00000	O
Hexachlorobenzene	0.31261	0.27453	0.23492	0.25076	0.23424	0.21495	AVG		0.25367		13.82005	15.00000	O
Atrazine	0.14517	0.16244	0.15253	0.15498	0.13682	0.14815	AVG		0.15001		5.85966	15.00000	O
Pentachlorophenol	0.08698	0.11641	0.11568	0.12916	0.13077	0.12690	AVG		0.11765		13.89542	15.00000	O
Phenanthrene	1.17910	1.16734	1.09830	1.10960	1.06054	1.02796	AVG		1.10714		5.31703	15.00000	O
Anthracene	1.06061	1.06813	1.03875	1.10116	1.07293	0.97171	AVG		1.05221		4.20969	15.00000	O
Di-n-butylphthalate	1.49648	1.49960	1.39820	1.47206	1.42556	1.40852	AVG		1.45007		3.10061	15.00000	O
Fluoranthene	0.79117	0.90502	0.96019	0.97521	0.89792	0.86596	AVG		0.89925		7.42802	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4463
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-G
Lab File IDs : G5052.D G5053.D G5057.D G5054.D G5055.D G5056.D **Column ID:**
Calibration Date(s): 16-JUN-15 14:38 16-JUN-15 17:08

Pyrene	2.64305	2.49777	2.21760	2.20326	1.90351	1.76633	AVG		2.20526		15.19056	15.00000	W(
Butylbenzylphthalate	1.37497	1.37598	1.17824	1.25625	1.10318	1.05311	AVG		1.22362		11.13520	15.00000	O
Benzo(a)anthracene	1.00449	1.02560	1.07841	1.09304	1.06884	1.05614	AVG		1.05442		3.17437	15.00000	O
3,3'-Dichlorobenzidine	0.18272	0.19047	0.18902	0.21478	0.22329	0.21291	AVG		0.20220		8.29993	15.00000	O
Chrysene	1.53356	1.38691	1.30469	1.22378	1.09646	1.06336	AVG		1.26812		14.07389	15.00000	O
bis(2-Ethylhexyl)phthalate	1.70303	1.90715	1.64652	1.74545	1.57456	1.50572	AVG		1.68040		8.37477	15.00000	O
Di-n-octylphthalate	1.92649	2.53644	2.27697	2.50763	2.28806	2.21983	AVG		2.29257		9.66125	15.00000	O
Benzo(b)fluoranthene	0.78625	0.89846	1.05989	1.15257	1.07470	1.05560	AVG		1.00458		13.45922	15.00000	O
Benzo(k)fluoranthene	1.87921	1.76166	1.84358	1.66175	1.55792	1.52867	AVG		1.70547		8.59191	15.00000	O
Benzo(a)pyrene	1.10045	1.03060	1.02434	1.02738	1.01355	1.00334	AVG		1.03328		3.32970	15.00000	O
Indeno(1,2,3-cd)pyrene	1414	4405	8771	39923	131375	203792	LNR	0.34521	0.51323		0.99541	0.99000	O
Dibenzo(a,h)anthracene	2498	5504	11913	47906	150290	227375	LNR	0.23824	0.57192		0.99722	0.99000	O
Benzo(g,h,i)perylene	0.96169	0.77511	0.66519	0.71725	0.76549	0.75993	AVG		0.77411		12.99028	15.00000	O
2-Methylnaphthalene-D10	0.56917	0.49999	0.49479	0.45922	0.42641	0.38666	AVG		0.47270		13.46846	15.00000	
2,4-Dibromophenol	0.24231	0.22580	0.23439	0.23449	0.24085	0.22994	AVG		0.23463		2.68044	15.00000	
Fluorene-D10	0.82612	0.83998	0.82591	0.80299	0.77162	0.71412	AVG		0.79679		5.90794	15.00000	
Pyrene-D10	1.65690	1.56171	1.39173	1.39698	1.24145	1.18103	AVG		1.40497		12.93610	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-g.i\G061615.b\G5058.D
Report Date: 17-Jun-2015 08:50

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: WG164853-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: SIM_IND_CHK.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-g.i\G061615.b\GSPSIM43.m
Misc Info: WG164853,WG164853,WG164874-4,SI4109-1

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	2.08	104.13	80-120
4 Benzaldehyde	2.00	0.479	23.96*	80-120
6 Bis(2-Chloroethyl)	2.00	1.83	91.35	80-120
5 Phenol	2.00	1.95	97.53	80-120
7 2-Chlorophenol	2.00	1.97	98.34	80-120
13 2,2'-Oxybis(1-chlo	2.00	1.73	86.43	80-120
12 2-Methylphenol	2.00	1.90	94.85	80-120
14 Acetophenone	2.00	1.91	95.56	80-120
15 N-Nitroso-di-n-pro	2.00	1.85	92.33	80-120
17 Hexachloroethane	2.00	1.97	98.38	80-120
16 3&4-Methylphenol	2.00	1.84	92.19	80-120
18 Nitrobenzene	2.00	2.06	103.02	80-120
19 Isophorone	2.00	1.82	90.98	80-120
20 2-Nitrophenol	2.00	1.91	95.69	80-120
21 2,4-Dimethylphenol	2.00	1.99	99.54	80-120
22 bis(2-Chloroethoxy	2.00	1.99	99.42	80-120
23 2,4-Dichlorophenol	2.00	1.83	91.37	80-120
26 Naphthalene	2.00	1.87	93.61	80-120
27 4-Chloroaniline	2.00	1.40	69.96*	80-120
28 Hexachlorobutadien	2.00	2.04	102.25	80-120
29 Caprolactam	2.00	1.90	94.78	80-120
32 2-Methylnaphthalen	2.00	1.84	91.83	80-120
30 4-Chloro-3-Methylp	2.00	1.80	90.19	80-120
33 1-Methylnaphthalen	2.00	2.07	103.51	80-120
35 1,2,4,5-Tetrachlor	2.00	1.88	93.88	80-120
34 Hexachlorocyclopen	2.00	1.43	71.33*	80-120
37 2,4,6-Trichlorophe	2.00	1.84	91.90	80-120
38 2,4,5-Trichlorophe	2.00	2.02	101.08	80-120
40 2-Chloronaphthalen	2.00	2.05	102.68	80-120
39 1,1'-Biphenyl	2.00	1.99	99.65	80-120
41 2-Nitroaniline	2.00	2.00	100.12	80-120
42 Dimethyl Phthalate	2.00	1.99	99.58	80-120
44 Acenaphthylene	2.00	1.80	90.03	80-120
43 2,6-Dinitrotoluene	2.00	1.87	93.69	80-120
47 Acenaphthene	2.00	2.01	100.63	80-120
45 3-Nitroaniline	2.00	2.72	136.29*	80-120
48 2,4-Dinitrophenol	2.00	1.00	50.26*	80-120
50 Dibenzofuran	2.00	1.91	95.46	80-120
51 2,4-Dinitrotoluene	2.00	1.78	88.89	80-120
52 2,3,4,6-Tetrachlor	2.00	1.68	84.06	80-120

Data File: \\target_server\gg\chem\gcms-g.i\G061615.b\G5058.D
Report Date: 17-Jun-2015 08:50

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
49 4-Nitrophenol	2.00	1.74	86.79	80-120
53 Diethylphthalate	2.00	2.14	107.14	80-120
55 Fluorene	2.00	1.90	94.76	80-120
56 4-Chlorophenyl-Phe	2.00	1.97	98.32	80-120
58 4,6-Dinitro-2-Meth	2.00	1.88	93.82	80-120
57 4-Nitroaniline	2.00	1.46	73.21*	80-120
59 N-Nitrosodiphenyla	2.00	1.55	77.73*	80-120
60 4-Bromophenyl-phen	2.00	2.00	99.99	80-120
61 Hexachlorobenzene	2.00	1.88	94.03	80-120
62 Atrazine	2.00	1.84	92.08	80-120
63 Pentachlorophenol	2.00	1.73	86.50	80-120
65 Phenanthrene	2.00	1.90	94.80	80-120
66 Anthracene	2.00	1.86	93.05	80-120
67 Carbazole	2.00	1.78	89.08	80-120
68 Di-n-butylphthalat	2.00	2.14	107.21	80-120
69 Fluoranthene	2.00	1.87	93.44	80-120
71 Pyrene	2.00	2.02	100.89	80-120
72 Butylbenzylphthala	2.00	2.18	109.29	80-120
73 Benzo(a)anthracene	2.00	1.76	88.09	80-120
76 Chrysene	2.00	1.82	91.16	80-120
74 3,3'-Dichlorobenzi	2.00	1.57	78.54*	80-120
77 bis(2-Ethylhexyl)p	2.00	2.00	100.07	80-120
78 Di-n-octylphthalat	2.00	1.73	86.54	80-120
79 Benzo(b)fluoranthe	2.00	1.93	96.72	80-120
80 Benzo(k)fluoranthe	2.00	1.89	94.74	80-120
81 Benzo(a)pyrene	2.00	1.79	89.31	80-120
83 Indeno(1,2,3-cd)py	2.00	1.49	74.42*	80-120
84 Dibenzo(a,h)anthra	2.00	1.81	90.41	80-120
85 Benzo(g,h,i)peryle	2.00	1.97	98.60	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	30-150
$ 31 2-Methylnaphthale	2.00	0.000	*	43-92
$ 36 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 54 Fluorene-D10	2.00	0.000	*	29-101
$ 70 Pyrene-D10	2.00	0.000	*	53-166

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY **SDG:** SI4463
Lab ID : WG165507-2 **Analytical Date:** 06/26/15 09:29
Lab File ID : G5089.D **Instrument ID:** GCMS-G
Initial Calibration Date(s): 06/16/15 14:38 06/16/15 17:08 **Column ID:**

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
6 Bis(2-Chloroethyl)ether	1.23879	1.25727	1.25727	0.010	1.49149	20.00000	Averaged	
7 2-Chlorophenol	1.19601	1.29352	1.29352	0.010	8.15284	20.00000	Averaged	
13 2,2'-Oxybis(1-chloropropane	1.80372	1.87602	1.87602	0.010	4.00853	20.00000	Averaged	
15 N-Nitroso-di-n-propylamine	0.80757	0.87387	0.87387	0.050	8.20940	20.00000	Averaged	
16 3&4-Methylphenol	1.16518	1.16941	1.16941	0.010	0.36278	20.00000	Averaged	
17 Hexachloroethane	0.58525	0.59808	0.59808	0.010	2.19265	20.00000	Averaged	
18 Nitrobenzene	0.32105	0.35787	0.35787	0.010	11.46890	20.00000	Averaged	
20 2-Nitrophenol	0.15789	0.16041	0.16041	0.010	1.59347	20.01000	Averaged	
22 bis(2-Chloroethoxy)methane	0.42567	0.46971	0.46971	0.010	10.34574	20.00000	Averaged	
23 2,4-Dichlorophenol	0.26193	0.27326	0.27326	0.010	4.32647	20.01000	Averaged	
26 Naphthalene	1.00000	0.87087	1.03677	0.010	-12.91324	20.00000	Quadratic	
27 4-Chloroaniline	1.00000	1.05994	0.34900	0.010	5.99358	20.00000	Quadratic	
28 Hexachlorobutadiene	0.14021	0.14884	0.14884	0.010	6.14992	20.01000	Averaged	
32 2-Methylnaphthalene	0.51127	0.46163	0.46163	0.010	-9.70935	20.00000	Averaged	
34 Hexachlorocyclopentadiene	0.22434	0.22642	0.22642	0.050	0.92837	20.00000	Averaged	
35 1,2,4,5-Tetrachlorobenzene	0.52418	0.58104	0.58104	0.010	10.84751	20.00000	Averaged	
37 2,4,6-Trichlorophenol	0.33988	0.39266	0.39266	0.010	15.53059	20.01000	Averaged	
38 2,4,5-Trichlorophenol	0.35422	0.38681	0.38681	0.010	9.19909	20.00000	Averaged	
39 1,1'-Biphenyl	1.35049	1.56911	1.56911	0.010	16.18833	20.00000	Averaged	
41 2-Nitroaniline	0.31491	0.59095	0.59095	0.010	87.65802	20.00000	Averaged	*
43 2,6-Dinitrotoluene	0.27571	0.28020	0.28020	0.010	1.62819	20.00000	Averaged	
48 2,4-Dinitrophenol	0.06114	0.04962	0.04962	0.050	-18.83986	20.00000	Averaged	*
49 4-Nitrophenol	3.00000	2.82638	0.10259	0.050	-5.78741	20.00000	Quadratic	
50 Dibenzofuran	1.51346	1.60416	1.60416	0.010	5.99346	20.00000	Averaged	
51 2,4-Dinitrotoluene	1.00000	1.05646	0.36463	0.010	5.64577	20.00000	Linear	
52 2,3,4,6-Tetrachlorophenol	0.22593	0.25183	0.25183	0.010	11.46227	20.00000	Averaged	
56 4-Chlorophenyl-Phenylether	0.53990	0.61185	0.61185	0.010	13.32594	20.00000	Averaged	
57 4-Nitroaniline	0.17757	0.18235	0.18235	0.010	2.69053	20.00000	Averaged	
58 4,6-Dinitro-2-Methylphenol	3.00000	3.36857	0.10689	0.010	12.28572	20.00000	Quadratic	
59 N-Nitrosodiphenylamine	0.72530	0.76859	0.76859	0.010	5.96831	20.01000	Averaged	
61 Hexachlorobenzene	0.25367	0.29296	0.29296	0.010	15.48984	20.00000	Averaged	
62 Atrazine	0.15001	0.15197	0.15197	0.010	1.30291	20.00000	Averaged	
63 Pentachlorophenol	0.11765	0.12667	0.12667	0.010	7.66406	20.01000	Averaged	
65 Phenanthrene	1.10714	1.24971	1.24971	0.010	12.87700	20.00000	Averaged	
66 Anthracene	1.05221	1.09321	1.09321	0.010	3.89583	20.00000	Averaged	
68 Di-n-butylphthalate	1.45007	1.63468	1.63468	0.010	12.73088	20.00000	Averaged	
69 Fluoranthene	0.89925	0.92369	0.92369	0.010	2.71838	20.01000	Averaged	
71 Pyrene	2.20526	2.18722	2.18722	0.010	-0.81785	20.00000	Averaged	
72 Butylbenzylphthalate	1.22362	1.18920	1.18920	0.010	-2.81314	20.00000	Averaged	
73 Benzo(a)anthracene	1.05442	1.01379	1.01379	0.010	-3.85377	20.00000	Averaged	
74 3,3'-Dichlorobenzidine	0.20220	0.21030	0.21030	0.010	4.00723	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4463
Lab ID : WG165507-2
Analytical Date: 06/26/15 09:29
Lab File ID : G5089.D
Instrument ID: GCMS-G
Initial Calibration Date(s): 06/16/15 14:38 06/16/15 17:08
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
76 Chrysene	1.26812	1.29197	1.29197	0.010	1.88050	20.00000	Averaged	
77 bis(2-Ethylhexyl)phthalate	1.68040	1.62475	1.62475	0.010	-3.31168	20.00000	Averaged	
78 Di-n-octylphthalate	2.29257	1.98465	1.98465	0.010	-13.43134	20.01000	Averaged	
79 Benzo(b)fluoranthene	1.00458	1.18187	1.18187	0.010	17.64813	20.00000	Averaged	
80 Benzo(k)fluoranthene	1.70547	2.04143	2.04143	0.010	19.69936	20.00000	Averaged	
81 Benzo(a)pyrene	1.03328	1.14414	1.14414	0.010	10.72965	20.01000	Averaged	
83 Indeno(1,2,3-cd)pyrene	1.00000	0.81294	0.27548	0.010	-18.70631	20.00000	Linear	
84 Dibenzo(a,h)anthracene	1.00000	1.00030	0.46309	0.010	0.02962	20.00000	Linear	
85 Benzo(g,h,i)perylene	0.77411	0.82978	0.82978	0.010	7.19138	20.00000	Averaged	
31 2-Methylnaphthalene-D10	0.47270	0.42366	0.42366	0.010	-10.37548	20.00000	Averaged	
36 2,4-Dibromophenol	0.23463	0.30343	0.30343	0.010	29.32153	20.00000	Averaged	*
54 Fluorene-D10	0.79679	0.82660	0.82660	0.010	3.74076	20.00000	Averaged	
70 Pyrene-D10	1.40497	1.39826	1.39826	0.010	-0.47701	20.00000	Averaged	

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

S/S SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)	
Analytical Method: (check one)	SW846 8270 ✓	EPA 625	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2	
Standards	Surrogate ID (1): SV2721		Spike ID (1): SV2715			
	Surrogate ID (2):		Spike ID (2): SIM: SV 2716			
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM604		H_2SO_4 Lot # 71333		NaOH Lot # 62534	
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 27965002			
Nitrogen Water Bath Temperature 36c			pH (1st Extraction) ≤2		pH (2nd Extraction) ≥11	
Prep Start Time: 1145	Prep End Time: 1855		CLLE Start Time:		CLLE End Time:	

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location S-040	Initials	Comments
6-25-15	KF	~~WG165445-1~~ ~~WG165446-1~~	1000	1mL	NR	✓	✓	1mL	6-25-15	C2	HG	SV-R323122 SIM-R323123
↓	↓	WG165445-2	↓	↓	1mL	✓		↓	↓	C3	↓	
↓	↓	WG165446-2	↓	↓	↓		✓	↓	↓	C4	↓	
									KF	6-25-15		

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000092

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
6-25-15	KF	S14383-3A	1040	1mL	NR		✓	1mL	6-25-15	C5	HG	em-S.S.
↓	↓	-5A	990	↓	↓		↓	↓	↓	C6	↓	em-S.S.
		-7A	1040							C7		em-S.S'
		-9A	950							C8		sediment - em-S.S.
		S14408-17E	1030			✓	✓			C9		Preserved in HCl
		S14463-2A	600			✓	✓			C10		
		-4A	920			↓	↓			D1		SPLP
↓	↓	-6A	920	↓	↓	↓	↓	↓	↓	D2	↓	↓
										~~D3~~		
										KF 6-25-15		

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000093

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 061615

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG164853-1	50ng DFTPP	GD627	1	1	DFTPPSIM	20	JCH	OK
-4	SS ~~TD~~ 1.00 G0611	G5051		2	GSPSIM43			— not used
-2	0.2	52		3				✓
-3	0.5	53		4				✓
-5	3.0	54		5				✓
-6	7.0	55		6				✓
-7	10	56		7				✓
-4	5ml ~~+100~~ 1.0	57		8				✓
-8	IND	58		9				OK
3510	WG164890-1	59		10				OK
	-2	60		11				OK
	WG164899-1	61		12				OK
	SI3787-3RE	62		13				SS 3
	SI4109-1	63		14				OK
	SI4157-1	64		15				OK
	-2	65		16				OK
	-3	66		17				OK
	SI4050-3RE	67		18				OK
	-4RE	68		19				OK
	-5RE	69		20				OK
	SI3787-5RE	70		21				OK
	-1RE	71		22				SS 1 ~~T2~~ DL 1:2

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52624
IS MIX	52633

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-G

DATE OF DFTPP INJECTION: 062615

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165507-1	50ng DFTPP	G0632	1	1	DFTPPSIM	2.0	JCM	OK
-2	SSTD 100 G0626	G5089		2	GSPSIM43			OK
3590	WG165446-1	90		3				OK
	-2	91		4				OK
	SI4383-3	92		5				OK
	-5	93		6				OK
	-7	94		7				OK
	SI4408-17	95		8				OK
	SI4463-2	96		9				OK
	-4	97		10				OK
	-6	98		11				OK
	SI4383-9	99		12				OK

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52639
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

DATE OF DFTPP INJECTION: 062315

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165304-1	50ng DFTPP	ND958	1	1	DFTPPSV4	2.0	JLL	OK
-4	SSTD1.00 ND623	N6778		2	NSP SV4 45			✓
-2	0.2	79		3				✓
-3	0.5	80		4				✓
-5	3.0	81		5				✓
-6	7.0	82		6				✓
-7	12	83		7				✓
-8	IND	84		8				OK
3510	WG165249-1	85		9				OK
	-4	86		10				OK SPLP PAT1250A
	~~-2~~	87		11				OK
	~~-3~~	88		12				OK
	~~-5~~	89		13				OK SI3862 SPLP
	-6	90		14				OK SS94
	SI4291-2	91		15				~~X~~ not run; power loss SPLF
	-4	92		16				
	-6	93		17				
	-9	94		18				
	SI4332-1	95		19				
	-3	96		20				
	-5	97		21				
	-7	98		22				
	-9	99		23				
	-10	N6800		24				
	-11	01		25				SI4400
3550	SI4226-7DL	02	8	26				SI4350
	-8DL	03	7	27				SI4344
	~~SI~~ WG165008-1	04	1	28				

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52637
IS MIX	52638

REVIEWED AND APPROVED BY:
DATE:

cont next page

KATAHDIN ANALYTICAL SERVICES, INC.

Non-Volatile TCLP/SPLP Extraction Log

I. EXTRACTION CONDITIONS

Extraction Method:	SW846 1311 (TCLP) ☑	Extractor ID: ~~#~~ 2	Room Thermometer ID: DIG-23	(Room Temp Criteria. 23(±2)°C)
	SW846 1312 (SPLP) ☐	Balance ID: BAL-0815	pH Meter ID: Orion 520A s/n 7422	pH Probe ID 573356-0030
			Analyst: GEJ / JS	
Solid pH Determination:	Date: 06·18·15		Analyst: GEJ	Room Temp. (degrees °C): 20.4
Rotary Extraction Started:	Date: 06·18·15	Time: 14:23	Analyst: GEJ	Room Temp. (degrees °C): 20.1
Rotary Extraction Completed:	Date: 06·19·15	Time: 06:23	Analyst: GEJ/DW	Filter Lot #: R45A44228 / R5AA49484
Extraction Filtered:	Date: 06·19·15	Time: 07:00 - 11:00	5% HNO_3 ID (used to wash filters): MR1474	HNO_3 Lot # (used to preserve extracts): 104117
Elapsed Extraction Time (HH:MM):	16:00		Fluid 1 Expiration Date: 06·18·16 06·18·16 06·03·16	
Fluid 1 pH (Day of use):	4.91 (1299) 4.19 (1251) 2.90		Fluid 2 Expiration Date: 06·03·16	
Fluid 2 pH (Day of use):	2.90			

TCLP Fluid pH: #1 - 4.93 ± 0.05 #2 - 2.88 ± 0.05 SPLP Fluid pH: #1 - 4.20 ± 0.05 #2 - 5.00 ± 0.05

II. EXTRACTION SETUP

Katahdin Sample No. (include bottle ID)	Matrix	Check One: 100% Wet Solids- waste will yield no liquid upon filtration	Check One: < 100% Wet Solids (Perform Solids Determination below)	SPLP FLUID # (1 for east and 2 for west of Mississippi River)	TCLP pH Determination and Fluid Selection (date & init. above): Initial pH of solid phase: (if <5, use Fluid #1; if >5 add 3.5 mL of 1 N HCl)	TCLP pH Determination and Fluid Selection (date & init. above): pH after 1 N HCL addition (if <5, use Fluid #1; if >5, use Fluid #2	Extraction Setup: Volume of Extraction Fluid (mL)	Extraction Setup: Fluid # used	Extraction Setup: Associated Extraction Blank ID:	Extraction Setup: Weight of Waste (g)	pH of extract after extraction:	Extract to be analyzed for: Metals (M), SVOA (S), PEST (P), HERB (H), Cyanide (C)	Extraction Bottle ID (if applicable)
SI4238-001A (34)	SL	✓		—	11.55	11.07	2,000	2	PBT1245A		10.27	M	
-002A	↓	✓		—	7.47	~~1.97~~ 1.73	↓	1	PBT1250A		4.89 5.43	M	
-003A	↓	✓		—	4.75	—		1	↓		4.70	M	
SI4240-001A	↓	✓		—	6.65	1.97		1	↓	100.81	5.20	M,S,P,H	16
SI4291-002A	↓	✓		1	5.38	1.77		—	PBT1251A ~~PBT1250A~~	100.13	5.75	S ~~M~~	28
-004A	↓	✓		1	5.49	1.76		—	PBT1251A	100.34	5.98	S ~~M~~	29
GEJ -006A (16)	↓	✓		1	5.50	1.72		—	↓	100.50	5.65 ~~5.50~~	S,M	15
-008A	↓	✓		1	5.63	1.70		—	↓	100.17	5.74	S,M	34
PBT1250A	Aq	—	—	—	—	—		1	PBT1250A	—	4.94	M,S,P,H	30
PBT1251A	↓	—	—	1	—	—		—	PBT1251A	—	3.34	S,M	27

KATAHDIN ANALYTICAL SERVICES, INC.

Non-Volatile TCLP/SPLP Extraction Log

I. EXTRACTION CONDITIONS

Extraction Method:	SW846 1311 (TCLP) ☑	Extractor ID: 1 ~~3~~ 2	Room Thermometer ID: DIG-23	(Room Temp Criteria. 23(±2)°C)
	SW846 1312 (SPLP) ☑	Balance ID: BAL-~~08~~ 15	pH Meter ID: Orion 520A s/n 7422	pH Probe ID: 573356-003
Solid pH Determination:	Date: 6/24/15		Analyst: TCS	
Rotary Extraction Started:	Date: GEJ 06.24.15	Time: 17:05	Analyst: ~~TCS~~ GEJ	Room Temp. (degrees °C): 19.9
Rotary Extraction Completed:	Date: 06/25/15	Time: ~~08:35~~ 09:48	Analyst: [illegible]	Room Temp. (degrees °C): 20.1
Extraction Filtered:	Date: 06-25-15	Time: 10:30	Analyst: [illegible]	Filter Lot #: R45A44228 / R5AA49484
Elapsed Extraction Time (HH:MM): 16:43		5% HNO_3 ID (used to wash filters): MR1477		HNO_3 Lot # (used to preserve extracts): 104736
Fluid 1 pH (Day of use): ~~PBT1252~~ 4.93 PBT1245 2.97		Fluid 1 Expiration Date: 6/23/16 6/3/16		
Fluid 2 pH (Day of use): 4.16 PBT1251		Fluid 2 Expiration Date: 6/18/16		

II. EXTRACTION SETUP

TCLP Fluid pH: #1 - 4.93 ± 0.05 #2 - 2.88 ± 0.05 SPLP Fluid pH: #1 - 4.20 ± 0.05 #2 - 5.00 ± 0.05

Katahdin Sample No. (include bottle ID)	Matrix	Check One: 100% Wet Solids- waste will yield no liquid upon filtration	Check One: < 100% Wet Solids (Perform Solids Determination below)	SPLP FLUID # (1 for east and 2 for west of Mississippi River)	TCLP pH Determination and Fluid Selection (date & init. above): Initial pH of solid phase: (if <5, use Fluid #1; if >5 add 3.5 mL of 1 N HCl)	TCLP pH Determination and Fluid Selection: pH after 1 N HCL addition (if <5, use Fluid #1; if >5, use Fluid #2	Extraction Setup: Volume of Extraction Fluid (mL)	Extraction Setup: Fluid # used	Extraction Setup: Associated Extraction Blank ID:	Extraction Setup: Weight of Waste (g)	pH of extract after extraction:	Extract to be analyzed for: Metals (M), SVOA (S), PEST (P), HERB (H), Cyanide (C)	Extraction Bottle ID (if applicable)
SI 4427-1A	SL	✓	—		12.37	12.12	2000	2	PBT1245	100.44	12.13	M	N/A
SI 4463-2A	SL	✓	—	✓	—	—	↓		PBT1251	100.06		S	36
SI 4463-4A	SL	✓	—	✓	—	—			↓	100.02		S	17
SI 4463-6A	SL	✓	—	✓	—	—				100.55		S	11
~~PBT1252A~~					~~4.84~~								
PBT1253A					4.86								
~~SI 4427-1A~~					~~12.13~~								
~~SI 4353-23A~~													

6/24/15 6/25/15

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG165486	SM2540	29-JUN-15	25-JUN-15	U 1 %	1 %	N/A

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG165486-2	LCS	WG165486	29-JUN-15	25-JUN-15	%	90	90.	100	90-110	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG165486-3	SI4463-1	WG165486	29-JUN-15	%	92.	92.	0	20

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfide H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI4463-I
Report Date: 13-JUL-15
Client PO: I8884
Project: Navy Clean WE08 NWIR
SDG: SI4463

Sample Description	Matrix	Date Sampled	Date Received
SITE 4TS-SEE1-B	SL	22-JUN-15 12:05:00	24-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	92. %	1		N/A	SM2540G	WG165486	29-JUN-15 10:08:59	SM2540G	25-JUN-15	

Katahdin Analytical Services 0000281

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI4463-3
Report Date: 13-JUL-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI4463

Sample Description	Matrix	Date Sampled	Date Received
SITE 4TS-SEE2-B	SL	22-JUN-15 13:00:00	24-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	92. %	1		N/A	SM2540G	WG165486	29-JUN-15 10:09:09	SM2540G	25-JUN-15	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI4463-5
Report Date: 13-JUL-15
Client PO: I8884
Project: Navy Clean WE08 NWIR
SDG: SI4463

Sample Description	Matrix	Date Sampled	Date Received
SITE 4TS-SEE1-PT	SL	23-JUN-15 15:05:00	24-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	94. %	1		N/A	SM2540G	WG165486	29-JUN-15 10:09:17	SM2540G	25-JUN-15	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI4463-7
Report Date: 13-JUL-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI4463

Sample Description	Matrix	Date Sampled	Date Received
SITE 4TS-TB-62315	SL	23-JUN-15 00:00:00	24-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	100 %	1		N/A	SM2540G	WG165486	29-JUN-15 10:09:30	SM2540G	25-JUN-15	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Raw Data Section

TOTAL SOLIDS BATCH REPORT
Jun 29 2015, 12:32 pm
Batch: WG165486

Sample	Matrix	Type	Prep Date	Tare	Initial	Finall	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SI4463-1	SL	SAMP	25-JUN-15	1.3063 g	34.0147 g	31.5303 g	31.5303 g	AZ	29-JUN-15	92.4040	92. %		
SI4463-3	SL	SAMP	25-JUN-15	1.3274 g	39.7156 g	36.5821 g	36.5821 g	AZ	29-JUN-15	91.8370	92. %		
SI4463-5	SL	SAMP	25-JUN-15	1.3121 g	41.1421 g	38.5968 g	38.5968 g	AZ	29-JUN-15	93.6100	94. %		
SI4463-7	SL	SAMP	25-JUN-15	1 g	5 g	5 g	5 g	AZ	29-JUN-15	100.0000	100 %		
WG165486-1	SL	MBLANK	25-JUN-15	1.3076 g	1.8072 g	1.3068 g	1.3068 g	AZ	29-JUN-15	-0.1600	1 %		
WG165486-2	SL	LCS	25-JUN-15	1.3091 g	6.3697 g	5.8732 g	5.8732 g	AZ	29-JUN-15	90.1890	90. %	100	
WG165486-3	SL	DUP	25-JUN-15	1.3096 g	41.7345 g	38.6239 g	38.6239 g	AZ	29-JUN-15	92.3050	92. %		0

Comments:

SI4463-5	Metals on hold.
SI4463-7	Trip Blank, no TS jar
WG165486-1	SI4463-1
WG165486-2	SI4463-1
WG165486-3	SI4463-1

Entered by: _____ Date: 6-29-15 Accepted by: _____ Date: 06/29/15

TOTAL SOLIDS BATCH REPORT
Jun 29 2015, 12:33 pm
Batch: WG165487

Sample	Matrix	Type	Prep Date	Tare	Initial	Finall	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SI4480-1	SL	SAMP	25-JUN-15	1.3016 g	36.7315 g	32.2586 g	32.2957 g	AZ	29-JUN-15	87.4800	87. %		
SI4492-10	SL	SAMP	25-JUN-15	1.3112 g	29.8336 g	8.5067 g	8.556 g	AZ	29-JUN-15	25.4000	25. %		
SI4492-11	SL	SAMP	25-JUN-15	1.3112 g	29.8336 g	8.5067 g	8.556 g	AZ	29-JUN-15	25.4000	25. %		
SI4492-12	SL	SAMP	25-JUN-15	1.311 g	28.3718 g	10.8022 g	10.8554 g	AZ	29-JUN-15	35.2700	35. %		
SI4492-13	SL	SAMP	25-JUN-15	1.3072 g	41.8342 g	25.0561 g	25.1081 g	AZ	29-JUN-15	58.7280	59. %		
SI4492-3	SL	SAMP	25-JUN-15	1.3258 g	30.1839 g	9.4406 g	9.4866 g	AZ	29-JUN-15	28.2790	28. %		
SI4492-4	SL	SAMP	25-JUN-15	1.3258 g	30.1839 g	9.4406 g	9.4866 g	AZ	29-JUN-15	28.2790	28. %		
SI4492-5	SL	SAMP	25-JUN-15	1.3123 g	23.2493 g	6.1478 g	6.1911 g	AZ	29-JUN-15	22.2400	22. %		
SI4492-6	SL	SAMP	25-JUN-15	1.3171 g	32.2981 g	10.0578 g	10.1239 g	AZ	29-JUN-15	28.4260	28. %		
SI4492-7	SL	SAMP	25-JUN-15	1.3169 g	41.4727 g	29.838 g	29.8635 g	AZ	29-JUN-15	71.0900	71. %		
SI4492-8	SL	SAMP	25-JUN-15	1.3169 g	41.4727 g	29.838 g	29.8635 g	AZ	29-JUN-15	71.0900	71. %		
SI4492-9	SL	SAMP	25-JUN-15	1.3057 g	31.148 g	13.6909 g	13.7449 g	AZ	29-JUN-15	41.6830	42. %		
WG165487-1	SL	MBLANK	25-JUN-15	1.3076 g	1.8072 g	1.3068 g	1.3068 g	AZ	29-JUN-15	-0.1600	1 %		
WG165487-2	SL	LCS	25-JUN-15	1.3091 g	6.3697 g	5.8732 g	5.8734 g	AZ	29-JUN-15	90.1930	90. %	100	
WG165487-3	SL	DUP	25-JUN-15	1.2983 g	44.8946 g	25.0316 g	25.0835 g	AZ	29-JUN-15	54.5580	54. %		7

Comments:

SI4492-11	Use TS from SI4493-10
SI4492-4	Use TS from SI4493-3
SI4492-8	Use TS from SI4493-7
WG165487-1	SI4492-13
WG165487-2	SI4492-13
WG165487-3	SI4492-13

Entered by: _____ Date: 6-29-15 Accepted by: _____ Date: 06/29/15

R323133
WG165486

R323134
WG169487

KATAHDIN ANALYTICAL SERVICES

Total Solids: SM2540 G / ASTM D2216			PQL: 0.10%	Total Volatile Solids: SM2540 G / E160.4			PQL: 0.10%	Balance Calibrated?
TS/TVS	In 1	In 2	TS Only	Out 1	Out 2	TVS Only		Y / N
ANALYST IN:	[illegible]	[illegible]	ANALYST OUT:	[illegible]	[illegible]	ANALYST OUT:		In: Y
DATE IN:	6-25-15	6-25-15	DATE OUT:	6-29-15	6-29-15	DATE OUT:		Out (TS): Y
TIME IN:	16:17	10:03	TIME OUT:	8:30	11:06	TIME OUT:		Out (TVS):
TEMP IN:	104°C	104°C	TEMP OUT:	104°C	104°C	TEMP OUT:		Balance ID:
Oven ID: Oven-4			Muffle Oven ID: 030807 (assigned)					S/N 112401631

SI4463-7 : TS-100%

	SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)	1st DISH DRY WT (g)	2nd DISH DRY WT (g)	DISH/ASH WT (g)	TIME
1	Blank	4	1.3076	1.8072	1.3068			
2	LCS	5	1.3091	6.3697	5.8732			
3	SI4463-1	1						
4	-3	2						
5	-5	3						
6	SI4463-1 DUP	6						
7	SI4480-1	7						
8	SI 449902-3/4	8						
9	-5	9						
10	-6	10						
11	-7/-8	11						
12	-9	12						
13	-10/-11	13						
14	-12	14						
15	-13	15						
16	DUP -13	16						
~~17~~								
18								
19								
20				[illegible] 6-29-15				
21								
22								
23								
~~24~~								

WL-009 – Revision 4 – 05/20/2015

Reviewed By: [illegible]
QAWL772

Reviewed Date: 06/29/15

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, Maine

CASE NO. WE08 SDG NO. 514615 SDG NOS. TO FOLLOW
SAS NO.

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
1. **Inventory Sheet** (Form DC-2) (Do not Number)	0000001	0000012	✓	
2. **SDG Case Narrative**	0000015	0000021	✓	
3. **SDG Cover Sheet/Traffic Report**	0000013	0000014	✓	
4. **Volatiles Data**				
a. QC Summary				
System Monitoring Compound Summary (Form II	0000030	0000032	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	—	—	✓	
Method Blank Summary (Form IV VOA)	0000033	0000033	✓	
GC/MS Instrument Performance Check (Form V VOA)	0000040	0000040	✓	
Internal Standard Area and RT Summary (Form VIII VOA)	0000041	0000042	✓	
b. Sample Data	0000043	0000054		
TCL Results - (Form I VOA-1, VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	0000055	0000061		
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB	—	—	✓	
Blank Data	0000034	0000036	✓	
Martix Spike/Matrix Spike Duplicate Data	0000037	0000039	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, Maine

CASE NO. WE08 SDG NO. 81465 SDG NOS. TO FOLLOW
SAS NO.

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible.

	PAGE NOs FROM	TO	CHECK LAB	EPA
1. **Inventory Sheet** (Form DC-2) (Do not Number)	NA	NA	NA	
2. **SDG Case Narrative**	✓	✓	✓	
3. **SDG Cover Sheet/Traffic Report**	✓	✓	✓	
4. **Volatiles Data** - SPLP				
a. QC Summary				
System Monitoring Compound Summary (Form II	0000066	0000068	✓	
Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)	—	—	—	
Method Blank Summary (Form IV VOA)	0000069	0000069	—	
GC/MS Instrument Performance Check (Form V VOA)	0000076	0000077	—	
Internal Standard Area and RT Summary (Form VIII VOA)	0000078	0000079	—	
b. Sample Data	0000080	0000084		
TCL Results - (Form I VOA-1, VOA-2)			✓	
Tentatively Identified Compounds (Form I VOA-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			✓	
Quantitation reports			✓	
Mass Spectra of all reported TICs with three best library matches			✓	
c. Standards Data (All Instruments)	0000085	0000092		
Initial Calibration Data (Form VI VOA-1, VOA-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII VOA-1, VOA-2)			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data			✓	
BFB	—	—	✓	
Blank Data	0000070	0000073	✓	
Martix Spike/Matrix Spike Duplicate Data	0000074	0000075	✓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE08 SDG NO. 514615 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000098	0000100	✓	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000101	0000101	✓	
GC/MS Instrument Performance Check (Form V SV)	0000106	0000109	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000110	0000113	✓	
b. Sample Data	0000114	0000118		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000119	0000133		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000102	0000103	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000104	0000105	✓	
e. ~~Raw GPC Data~~ Logbooks	0000134	0000139	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WP08 SDG NO. S14615 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** -SIM				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000140	0000142	✓	
MS/MSD Summary (Form III SV)				
Method Blank Summary (Form IV SV)	0000143	0000143	✓	
GC/MS Instrument Performance Check (Form V SV)	0000146	0000148	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000149	0000152	✓	
b. Sample Data	0000153	0000156		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000157	0000164		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000144	0000144	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000145	0000145	✓	
e. ~~Raw GPC Data~~ logbooks	0000165	0000169	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE08 SDG NO. S14615 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** – SPLP				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000170	0000172	✓	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000173	0000173	✓	
GC/MS Instrument Performance Check (Form V SV)	0000177	0000177	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000178	0000179	✓	
b. Sample Data	0000180	0000183		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000184	0000188		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000174	0000175	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000176	0000176	✓	
e. ~~Raw GPC Data~~ Logbooks	0000189	0000191	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)	↓	↓	↓	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE08 SDG NO. S14615 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
5. **Semivolatiles Data** – SPLP Sim				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II SV)	0000192	0000194	✓	
MS/MSD Summary (Form III SV)	—	—	—	
Method Blank Summary (Form IV SV)	0000195	0000195	✓	
GC/MS Instrument Performance Check (Form V SV)	0000202	0000204	✓	
Internal Standard Area and RT Summary (Form VIII SV)	0000205	0000206	✓	
b. Sample Data	0000207	0000211		
TCL Results - (Form I SV-1, SV-2)			✓	
Tentatively Identified Compounds (Form I SV-			✓	
Reconstructed total ion chromatograms (RIC) for each sample			✓	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds			✓	
Quantitation reports			✓	
Mass Spectra of TICs with three best library matches			✓	
GPC chromatograms (if GPC is required)			✓	
c. Standards Data (All Instruments)	0000212	0000220		
Initial Calibration Data (Form VI SV-1, SV-2)			✓	
RICs and Quan Reports for all Standards			✓	
Continuing Calibration Data (Form VII SV-1, SV-			✓	
RICs and Quantitation Reports for all Standards			✓	
d. Raw QC Data				
DFTPP	—	—	—	
Blank Data	0000196	0000199	✓	
Matrix Spike/Matrix Spike Duplicate Data	0000200	0000201	✓	
e. ~~Raw GPC Data~~ Logbooks	0000221	0000225	✓	
6. **Pesticides Data**				
a. QC Summary				
Surrogate Percent Recovery Summary (Form II	NA	NA	NA	
MS/MSD Duplicate Summary (Form III PEST)	↓	↓	↓	
Method Blank Summary (Form IV PEST)				

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE08 SDG NO. S14615 SDG NOS. TO FOLLOW _____
SAS NO. _____

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK EPA
6. ~~Pesticides Data~~ (Cont.) VOA SPLP				
e. ~~Raw GPC Data~~ Logbooks	0000093	0000097	✓	
f. Raw Florisil Data	NA	NA	NA	
7. **Miscellaneous Data**				
Original preparation and analysis forms or of preparation and analysis logbook pages - VOA	0000062	0000065	✓	
Internal sample and sample extract transfer chain-of-custody records	0000028	0000029	✓	
Screening records	NA	NA	NA	
All instrument output, including strip charts from screening activities (describe or list)				
8. **EPA Shipping/Receiving Documents**				
Airbills (No. of shipments _____)				
Chain-of-Custody Records	0000025	0000025	✓	
Sample Tags			—	
Sample Log-in Sheet (Lab & DC1)	NA	NA	NA	
Miscellaneous Shipping/Receiving Records (describe or list)				
Sample Receipt Condition Report	0000023	0000023	✓	
Login Chain of Custody	0000026	0000027	✓	
9. **Internal Lab Sample Transfer Records and Tracking Sheets** (describe or list)				
	NA	NA	NA	
10. **Other Records** (describe or list)				
Telephone Communication Log				
11. **Comments:**				

FORM DC-2-4 OLM04.2

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (cont.)

CASE NO. WE08 SDG NO. 914615 SDG NOS. TO FOLLOW _____

_____ _____ SAS NO. _____

Completed by: (CLP Lab)	[signature] (Signature)	Heather Menzlom (Printed Name/Title)	7-17-15 (Date)
Verified by: (CLP Lab)	(Signature)	(Printed Name/Title)	(Date)
Audited by: (EPA)	(Signature)	(Printed Name/Title)	(Date)

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, ME
CASE NO. WE08 SDG NO. S141815 SDG NOS. TO FOLLOW

CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - ILM05.4, Exhibit B Section 2.6)

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1. Cover Page	0000013	0000014	✓	
2. SDG Narrative	0000015	0000021	✓	
3. Sample Log-In Sheet (DC-1)	—	—	—	
4. Inventory Sheet (DC-2))	0000001	0000012	✓	
5. Traffic Report/Chain of Custody Record(s)	0000025	0000025	✓	
Inorganic Analysis - metals				
6. Data Sheet (Form I-IN)	0000226	0000231	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	0000232	0000256	✓	
8. CRQL Standard(Form IIB-IN)	0000257	0000265	✓	
9. Blanks (Form III-IN)	0000266	0000286	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	0000287	0000293	✓	
11. ICP-MS Interference Check Sample(Form IVB-IN)	NA	NA	NA	
12. Matrix Spike Sample Recovery(Form VA-IN)	↓	↓	↓	
13. Post-Digestion Spike Sample Recovery(Form VB-IN)	↓	↓	↓	
14. Duplicates (Form VI-IN)	↓	↓	↓	
15. Laboratory Control Sample(Form VII-IN)	0000294	0000302	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	NA	NA	NA	
17. Method Detection Limits (Annually) (Form IX-IN)	0000303	0000313	✓	
18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN)	0000314	0000314	✓	
19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN)	NA	NA	NA	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN)	0000315	0000316	✓	
21. Preparation Log (Form XII-IN)	0000317	0000321	✓	
22. Analysis Run Log (Form XIII-IN)	0000322	0000339	✓	

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23. ICP-MS Tune (Form XIV-IN)	NA	NA	NA	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)				
25. ICP-AES ~~Raw Data~~ Logbooks	0000310	0000346	✓	
26. ICP-MS Raw Data	NA	NA	NA	
27. Mercury Raw Data				
28. Cyanide Raw Data				
29. Preparation Logs Raw Data (Wet Chemistry)				
30. Percent Solids Determination Log				
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)				
Sample Tags				
Sample Log-In Sheet (Lab)				
32. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs				
Sample Receipt Condition Report				
33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)				
Internal Chain of Custody				
Login Chain of Custody Report				
34. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records				
Analysis Records				
Description Duplicate Precision Form				
35. Other Records (describe or list)				
Telephone Communications Log				
DAS Specifications				
36. Comments				

Completed by:
(CLP Lab) [signature] Heather McNZ/DM 7-17-95
(Signature) (Print Name & Title) (Date)

Audited by:
(USEPA) _____ _____ _____
(Signature) (Print Name & Title) (Date)

FORM DC-2-2 M&E DAS

0000010

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, ME
CASE NO. WE08 SDG NO. 314615 SDG NOS. TO FOLLOW
CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - ILM05.4, Exhibit B Section 2.6)

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1. Cover Page	NA	NA	NA	
2. SDG Narrative				
3. Sample Log-In Sheet (DC-1)				
4. Inventory Sheet (DC-2))				
5. Traffic Report/Chain of Custody Record(s)				
Inorganic Analysis – wet chemistry	351	MM 7-7-15		
6. Data Sheet (Form I-IN)	0000347	0000354	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	NA	NA	NA	
8. CRQL Standard(Form IIB-IN)				
9. Blanks (Form III-IN)	0000347	0000349	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	NA	NA	NA	
11. ICP-MS Interference Check Sample(Form IVB-IN)				
12. Matrix Spike Sample Recovery(Form VA-IN)				
13. Post-Digestion Spike Sample Recovery(Form VB-IN)				
14. Duplicates (Form VI-IN)				
15. Laboratory Control Sample(Form VII-IN)	0000350	0000350	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	NA	NA	NA	
17. Method Detection Limits (Annually) (Form IX-IN)				
18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN)				
19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN)				
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN)				
21. Preparation Log (Form XII-IN)				
22. Analysis Run Log (Form XIII-IN)				

FORM DC-2-2 M&E DAS

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23. ICP-MS Tune (Form XIV-IN)	NA	NA	NA	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)				
25. ICP-AES Raw Data				
26. ICP-MS Raw Data				
27. Mercury Raw Data				
28. Cyanide Raw Data				
29. Preparation Logs Raw Data (Wet Chemistry)	0000355	0000359	✓	
30. Percent Solids Determination Log	NA	NA	NA	
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)				
Sample Tags				
Sample Log-In Sheet (Lab)				
32. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs				
Sample Receipt Condition Report	0000023	0000023	✓	
	NA	NA	NA	
33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)				
Internal Chain of Custody	0000028	0000029	✓	
Login Chain of Custody Report	0000026	0000027	✓	
34. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	NA	NA	NA	
Analysis Records				
Description Duplicate Precision Form				
35. Other Records (describe or list)				
Telephone Communications Log				
DAS Specifications				
36. Comments				

Completed by:
(CLP Lab) [signature] Heather Manzlom 7-17-15
(Signature) (Print Name & Title) (Date)

Audited by:
(USEPA) _____ _____ _____
(Signature) (Print Name & Title) (Date)

FORM DC-2-2 M&E DAS

ENSAFE
NAVY CLEAN WE08 NWIRP
BETHPAGE, NY
SI4615

KATAHDIN ANALYTICAL SERVICES, LLC
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

0000013

SAMPLE DATA PACKAGE

00000814

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
ENSAFE
NAVY CLEAN WE08 NWIRP BETHPAGE, NY
SI4615

Sample Receipt

The following samples were received on June 27, 2015 and were logged in under Katahdin Analytical Services work order number SI4615 for a hardcopy due date of July 10, 2015.

KATAHDIN Sample No.	AECOM Sample Identification
SI4615-1	SITE 4TS-SEE2-PT
SI4615-2	SITE 4TS-SEE2-PT
SI4615-3	SITE 4TS-TB-62615

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Jennifer Obrin.** This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SI4463 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

8270D SIM Analysis

Sample SI4615-1 was concentrated to a final volume of 5 mL instead of the laboratory procedure of 1 mL and was analyzed at a dilution of 1:10 due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQL was elevated by a factor of 50.

Sample SI4615-1DL was manually integrated for the analytes benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene and benzo(g,h,i)perylene. The specific reason

for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The laboratory control sample (LCS) WG165724-2RA had a high recovery for one surrogate, which was outside the laboratory established acceptance limits. Since the spike recoveries were acceptable, no further action was taken.

The independent check standard (file N6955) associated with the initial calibration on the N instrument on 07/01/2015 had low concentrations for the target analytes benzo(b)fluoranthene and benzo(a)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The CV (file N6909) had high responses for the target analytes benzo(a)anthracene and benzo(b)fluoranthene, which resulted in %D's that was greater than the DoD QSM acceptance limit of 20%.

8260C SPLP Analysis

The independent check standard (file P1539A), associated with the initial calibration analyzed on the P instrument on 06/22/15, had a high concentration for the target analyte chloroethane, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The calibration verification standard (file P1717) had high responses for the target analytes acetone, 2-butanone, 1,2-dibromo-3-chloropropane, and 2-hexanone that resulted in %D's that exceeded the DoD QSM acceptance limits of 20%.

8260C Analysis

Sample SI4615-1 had low or high recoveries for all four surrogates, which were outside of the acceptance limits. The sample also had low responses for three internal standards that resulted in %D's which were outside the DoD QSM acceptance limit of -50% to +100% of the response of the internal standard (IS) of the midpoint of the ICAL. The sample was reanalyzed and had similar surrogate and IS deviations. The results from both analyses are included in the report.

The independent check standard (file W3151A), associated with the initial calibration analyzed on the W instrument on 06/30/15, had high concentrations for the target analytes dichlorodifluoromethane, chloromethane, chloroethane and vinyl acetate, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The target analyte acetone was detected below ½ the reporting limit in the method blank WG165742-9. According to the DoD QSM section D.1.1.1, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit. Since the method blank was acceptable, no further action was taken.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are based on DoD QSM acceptance limits for the full list of spiked compounds and laboratory established acceptance limits for all other analytes. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

8270D SIM SPLP Analysis

The independent check standard (file N6955) associated with the initial calibration on the N instrument on 07/01/2015 had low concentrations for the target analytes hexachlorocyclopentadiene, 2,4-dinitrophenol, 4-nitrophenol, 2,3,4,6-tetrachlorophenol, 4,6-dinitro-2-methylphenol, N-nitrosodiphenylamine, benzo(b)fluoranthene and benzo(a)pyrene, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The CV's (files N6978 and N7020) had high responses for the target analytes bis(2-chloroethyl)ether, nitrobenzene, pentachlorophenol and/or chrysene which resulted in %D's that were greater than the DoD QSM acceptance limit of 20%.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived limits for the full list of spiked compounds. Although DoD QSM acceptance limits were requested for this project, laboratory established acceptance limits were used because the DoD QSM does not list acceptance limits for 8270SIM. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these statistical acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

The LCS WG165689-2RA and the LCSD WG165689-3RA had high and/or low recoveries for nine or ten spiked target analytes, respectively that were outside of the laboratory established acceptance limits. The DoD QSM allowable number of exceedances for 50 target analytes is two analytes.

8270D SCAN Analysis

Sample SI4615-1 was concentrated to a final volume of 5mL instead of the laboratory procedure of 1mL and was analyzed at a dilution of 1:5 due to matrix interference, sample viscosity or other matrix-related problem. Consequently, the sample PQL was elevated by a factor of 25. The sample also had low responses for two internal standards which were outside the DoD QSM acceptance limit of -50% to +100% of the responses of the internal standards of the ICAL midpoint standard. Due to the sample matrix issue, the sample was not reanalyzed.

The initial calibration analyzed on the U instrument on 06/25/2015 had %RSD values for several analytes that exceeded the method acceptance limit of 15%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analytes 4-chlorophenyl-phenylether and di-n-butylphthalate failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model. The corresponding independent check standard (file U0835) had high concentrations for the target analytes nitrobenzene, 2,6-dichlorophenol, 2,4,5-trichlorophenol, 1,1'-biphenyl, 4-nitrophenol, pentachlorophenol, and di-n-octylphthalate which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

The initial calibration analyzed on the U instrument on 07/02/2015 had an %RSD value for one analyte that exceeded the method acceptance limit of 15%. For this analyte, either a quadratic model was used for quantitation instead of an average response factor. The target analytes benzoic acid, 1,1'-biphenyl, 4-chlorophenyl-phenylether, benzidine, and 3,3'-dichlorobenzidine failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. These compounds were calibrated using the average model. The corresponding independent check standard (file U0927) had a high concentration for the target analyte benzoic acid, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL.

The CV (file U0883) had high responses for the target analytes benzoic acid, 2,4-dinitrophenol, 4-nitrophenl, 4-chlorophenyl-phenylether, pentachlorophenol, and surrogate 2,4,6-tribromophenol. The CV (file U0955) had a low response for the target analyte 2-chloronaphthalene. These responses resulted in %D's that were greater than the DoD QSM acceptance limit of 20%.

<u>8270D SCAN SPLP Analysis</u>

The initial calibration analyzed on the U instrument on 07/02/2015 had an %RSD value for one analyte that exceeded the method acceptance limit of 15%. For this analyte, either a quadratic model was used for quantitation instead of an average response factor. The target analyte benzaldehyde failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. This compound was calibrated using the average model. The corresponding independent check standard (file U0927) had a low concentration for the target analyte benzaldehyde, which exceeded the DoD QSM acceptance limit of ±20% of the expected value from the ICAL. The Independent Check Report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Metals Analysis

The samples of Katahdin Work Order SI4615 were prepared and analyzed for metals in accordance with the "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

SPLP Extraction (EPA Method 1312)

Katahdin Sample Number SI4615-2 is a soil sample that was subjected to SPLP extraction on 06/30/15 in accordance with USEPA Method 1312. The SPLP fluid blank identified as PBT1254A is associated with this extract. The measured concentrations of contaminants in this SPLP fluid blank are listed in Form 3P in the accompanying data package.

Inductively-Coupled Plasma Atomic Emission Spectroscopic Analysis (ICP)

Aqueous-matrix SPLP Extraction Blank PBT1254A and aqueous-matrix SPLP extraction of Katahdin Sample Number SI4615-2 were originally digested for ICP analysis on 07/01/15 (QC Batch IG01ICW2) in accordance with USEPA Method 3010A. Duplicate laboratory control samples were also prepared in this batch. The measured iron concentration (181 ug/L) of the preparation blank in this batch exceeds the project acceptance limit. For this reason, Katahdin Sample Number SI4615-2 was redigested on 07/10/15 (QC Batch IG10ICW1). Duplicate laboratory control samples were also prepared in this redigestion batch. The measured iron concentration of the SPLP Extraction Blank PBT1254A is less than the MDL. No corrective action was necessary for this blank. The redigestion aliquot is identified throughout the raw data by the suffix "R" appended to the Katahdin Sample Number, e.g. "SI4615-002R".

All SPLP extracts are diluted by a factor of five during digestion to reduce matrix interferences during ICP analysis.

ICP analyses of Katahdin Work Order SI4615 sample digestates were performed using a Thermo iCAP 6500 ICP spectrometer in accordance with USEPA Method 6010C. All samples were analyzed within holding times and all analytical run QC criteria were met.

Inductively-Coupled Plasma Mass Spectrometric Analysis (ICP-MS)

Solid-matrix Katahdin Sample Number SI4615-1 was digested for ICP-MS analysis on 06/30/15 (QC Batch IF30IMS1) in accordance with USEPA Method 3050B. The measured manganese concentration (0.15 mg/Kg) of the preparation blank in this batch exceeds the project acceptance limit. The measured manganese concentration of the associated field sample is greater than ten times that of the preparation blank. No corrective action was necessary. The result for this sample appears with a "B" flag on the accompanying Form Is.

ICP-MS analyses of Katahdin Work Order SI4615 sample digestates were performed using an Agilent 7500 ICP-MS spectrometer in accordance with USEPA Method 6020A. Results for all standards and samples are reported using the mean of 3 replicate measurements. All sample

digestates were diluted by a factor of 5 during analysis to reduce mass interferences from chlorine, which is present in the digestates from the hydrochloric acid used in digesting the samples. All samples were analyzed within holding times and all analytical run QC criteria were met.

Internal standard recoveries for ICP-MS analyses can be found in the raw data section of the accompanying data package. The following table indicates which analytes are associated with each internal standard element.

Internal Standard Element	Associated Analytes
Lithium	Beryllium
Scandium	Sodium, Magnesium, Aluminum, Potassium, Calcium
Germanium	Vanadium, Chromium, Manganese, Iron, Cobalt, Nickel, Copper, Zinc, Arsenic, Selenium, Silver, Cadmium
Terbium	Antimony, Barium
Bismuth	Lead, Thallium

Instrument tuning information can also be found in the raw data section in the report labeled "6020 QC Tune Report". The relative standard deviation was determined from 4 replicate measurements. The peak width was measured at 10% of the peak height.

Analysis of Mercury by Cold Vapor Atomic Absorption (CVAA)

Solid-matrix Katahdin Sample Number SI4615-1 was digested for mercury analysis on 06/30/15 (QC Batch IF30HGS1) in accordance with USEPA Method 7471B.

Aqueous-matrix SPLP extraction blank PBT1254A and aqueous-matrix SPLP extract of Katahdin Sample Number SI4615-2 were digested for mercury analysis on 07/01/15 (QC Batch IG01HGW3) in accordance with USEPA Method 7470A.

Mercury analysis of the Katahdin Work Order SI4615 sample digestates were performed using a Cetac M6100 automated mercury analyzer in accordance with USEPA Methods 7470A and 7471B. All analytical run QC criteria were met and all samples were analyzed within holding times.

Reporting of Metals Results

Per client request, analytical results for client samples on Form I and preparation blanks on Form IIIP have been reported using the laboratory's limits of detection (LOD). All results were evaluated down to the laboratory's method detection limits (MDLs). Results that fall between the MDL and the LOQ are flagged with "J" in the C-qualifier column, and the measured concentration appears in the concentration column. Results that are less than the MDL are flagged with "U" in the C-qualifier column, and the LOD is listed in the concentration column. These LOQs, MDLs, and LODs have been adjusted for each sample based on the sample amounts used in preparation and analysis.

Analytical results on Forms VA, VD, VII, and IX for client samples, matrix QC samples (duplicates and matrix spikes), and laboratory control samples have been reported down to the laboratory's method detection limits (MDLs). Analytical results that are below the MDLs are flagged with "U" in the C-qualifier column, and the measured concentration is listed in the concentration column.

Analytical results for instrument run QC samples (ICVs, ICBs, etc.) have been reported down to the laboratory's instrument detection limits (IDLs).

IDLs, LODs, MDLs, and LOQs are listed on Form 10 of the accompanying data package.

Wet Chemistry Analysis

The samples of Work Order SI4615 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times. All quality control criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Leslie Dimond 07.16.15

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, Inc. **Sample Receipt Condition Report**

Client: Ensafe		KAS PM: JO		Sampled By: Client	
Project:		KIMS Entry By: AP		Delivered By: FedEx (pick up)	
KAS Work Order#: S14615		KIMS Review By: JO		Received By: G. Brewer	
SDG #:	Cooler: 1 of 1			Date/Time Rec.: 06/27/15 09:37	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.		✓			Temp (°C): 1.0°C
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?					Note: No cooling process required for metals (except Hg) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?				✓	
Soil/Sediment: Received in airtight container?	✓				
Received in methanol?	✓				
Methanol covering soil?	✓				
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.
One 8-oz soil jar was rec'd broken. Cooler was loosely packed.

Sample Tracking Summary
Treatability Study
Site 4, NWIRP Bethpage

Test	VOCs 8260C	SVOCs 8270D	TAL Metals 6010C/7471B	SPLP VOCs 1312/8260C	SPLP SVOCs 1312/8270D	SPLP Metals 1312/6010C/7470A	Sample Name	Approximate Sample Date	Laboratory Turnaround Time	Approximate Date of Data Receipt	Notes
Hot Water Flushing Test											
Column 1 (15 PV) Baseline Soil	X	X		X	X		Site4TS-HWF1-B	6/15/2015	1 week	6/25/2015	Ship as one cooler
Column 2 (30 PV) Baseline Soil	X	X		X	X		Site4TS-HWF2-B	6/15/2015	1 week	6/25/2015	
Column 1 (15 PV) Final Soil	X	X	X*	X	X	X*	Site4TS-HWF1-PT	6/16/2015	1 week	6/25/2015	
Column 2 - First Flush (Aqueous)	X	X	X				Site4TS-HWF2-L1	6/15/2015	1 week	6/25/2015	
Column 2 (30 PV) Final Soil	X	X	X*	X	X	X*	Site4TS-HWF2-PT	6/17/2015	1 week	6/25/2015	Ship as one
Column 2 - Final Flush (Aqueous)	X	X	X				Site4TS-HWF2-L2	6/17/2015	1 week	6/25/2015	
Aqueous Trip Blank[1]	XX			XX			Site4TS-TB-Date	As needed with each cooler			
Steam Enhanced Extraction Test											
Column 1 (2 PV) Baseline	X	X		X	X		Site4TS-SEE1-B	6/22/2015	1 week	6/29/2015	Ship as one
Column 2 (6 PV) Baseline	X	X		X	X		Site4TS-SEE2-B	6/22/2015	1 week	6/29/2015	
Column 1 (2 PV) Final	X	X	X*	X	X	X*	Site4TS-SEE1-PT	6/26/2015	48 hour	7/1/2015	Ship as one
Column 2 (6 PV) Final	X	X	X*	X	X	X*	Site4TS-SEE2-PT	6/26/2015	48 hour	7/1/2015	
Aqueous Trip Blank[1]	XX			XX			Site4TS-TB-Date	As needed with each cooler			

SI4291

SI4463

SI4615

*- Collect samples. Analysis on hold.

Run analysis with 48 hour turnaround.
Do not run analysis.

000024

Katahdin Analytical Services
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client: Ensafe	Contact: Jeff Parillo	Phone #: 860-665-1140	Fax #: ( )
Address: 1233 Silas Dean Hwy	City: Westerfield	State: CT	Zip Code: 06109
Purchase Order #: NWIRP Belth	Proj. Name/No.:		Katahdin Quote #:
Bill (if different than above):		Address:	
Sampler (Print/Sign): James Moyer James Moyer			Copies To: tjordan@kemron.com afortune@terratherm.com

LAB USE ONLY — Work Order # 5IA615
Katahdin Project Number

Remarks:

Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C Temp Blank Intact Not Intact

Analysis and Container Type Preservatives

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	VOC 8260 (Filt. Y/N)	SVOC 8270 (Filt. Y/N)	TAL Metals 6010/7471 (Filt. Y/N)	SPLP VOC 1312/8260 (Filt. Y/N)	SPLP SVOC 1312/8270 (Filt. Y/N)	SPLP Metals 1312/7470A (Filt. Y/N)	(Filt. Y/N)	(Filt. Y/N)	(Filt. Y/N)	(Filt. Y/N)
	Site 4TS-SEE2-PT	6/26/2015 1330	S	7	X	X	X**	X	X	X				
	Site4TS-TB-62615	6/17/2015 1030		4	X									

COMMENTS: ** Hold Metals analysis until instructed by client to analyze.

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
James Moyer	6/26/15 1530	FedEx	FedEx	062715 09:37	[illegible]
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

0000025

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Jul. 01, 2015
05:17 AM

Login Number: SI4615

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Primary Report Address:
Dana Miller
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134
dmiller@Ensafe.com

Primary Invoice Address:
Accounts Payable
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: ENSAFE-BETHPAG

Login Information:

ANALYSIS INSTRUCTIONS	:	Follow DoD QSM Version 4.2 using DoD limits. "U" LOD. "J" flag between DL and LOQ. VOA soils are NaHSO4 and MeOH pres.
CHECK NO.	:	
CLIENT PO#	:	18884
CLIENT PROJECT MANAGE	:	
CONTRACT	:	
COOLER TEMPERATURE	:	1.0
DELIVERY SERVICES	:	FedEx/KAS
EDD FORMAT	:	KAS135QC-CSV & KAS062-CSV
LOGIN INITIALS	:	AP
PM	:	JO
PROJECT NAME	:	Navy Clean WE08 NWIRP Bethpage, NY
QC LEVEL	:	III
REGULATORY LIST	:	
REPORT INSTRUCTIONS	:	Send CD only to Dana. Upload to SDS folder. Email invoice to purchasing@ensafe.com.
SDG ID	:	
SDG STATUS	:	

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI4615-1	SITE 4TS-SEE2-PT	26-JUN-15 13:30	27-JUN-15		**01-JUL-15**	10-JUL-15	

Matrix		*Product*	*Hold Date (shortest)*	*Bottle Type*	*Bottle Count*	*Comments*
Solid	S	SW8260-S	10-JUL-15	40 mL Vial+DI+MEDH		**Metals are NOT on hold.**
Solid	S	SW8270-S	10-JUL-15	1L N-Amber Glass		
Solid	S	SW8270SIM-S	10-JUL-15	100g Glass		
Solid	P	TAL-MET-SW846-ICPMS				

SW3050MS-PREP	SW6020-ALUMINUM	SW6020-ANTIMONY
SW6020-ARSENIC	SW6020-BARIUM	SW6020-BERYLLIUM
SW6020-CADMIUM	SW6020-CALCIUM	SW6020-CHROMIUM
SW6020-COBALT	SW6020-COPPER	SW6020-IRON
SW6020-LEAD	SW6020-MAGNESIUM	SW6020-MANGANESE
SW6020-NICKEL	SW6020-POTASSIUM	SW6020-SELENIUM
SW6020-SILVER	SW6020-SODIUM	SW6020-THALLIUM
SW6020-VANADIUM	SW6020-ZINC	SW7471-MERCURY

Solid	S	TS	26-JUL-15	

OP
07.01.15

0000026

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (Ino1)

Jul. 01, 2015
05:17 AM

Login Number: SI4615

Quote/Incoming: ENSAFE-BETHPAGI

Account: ENSAFE001 Web
ENSAFE

Project: ENSAFE-BETHPAGE-WE08
NWIRP Bethpage, WE08

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI4615-2	SITE 4TS-SEE2-PT	26-JUN-15 13:30	27-JUN-15		**01-JUL-15**	10-JUL-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SPLP-ALUMINUM	23-DEC-15			
Aqueous	S	SPLP-ANTIMONY	23-DEC-15			
Aqueous	S	SPLP-BERYLLIUM	23-DEC-15			
Aqueous	S	SPLP-CALCIUM	23-DEC-15			
Aqueous	S	SPLP-COBALT	23-DEC-15			
Aqueous	S	SPLP-COPPER	23-DEC-15			
Aqueous	S	SPLP-IRON	23-DEC-15			
Aqueous	S	SPLP-MAGNESIUM	23-DEC-15			
Aqueous	S	SPLP-MANGANESE	23-DEC-15			
Solid	P	SPLP-METALS				
SPLP-ARSENIC		SPLP-BARIUM		SPLP-CADMIUM		
SPLP-CHROMIUM		SPLP-LEAD		SPLP-MERCURY		
SPLP-SELENIUM		SPLP-SILVER		SW1312-EXT		
SW3010-PREP						
Aqueous	S	SPLP-NICKEL	23-DEC-15			
Aqueous	S	SPLP-POTASSIUM	23-DEC-15			
Aqueous	S	SPLP-SODIUM	23-DEC-15			
Solid	P	SPLP-SVOA				
SPLP-SW8270		SW1312-EXT-SVOA				
Aqueous	S	SPLP-SW8270SIM	03-JUL-15	1L N-Amber Glass		
Aqueous	S	SPLP-THALLIUM	23-DEC-15			
Aqueous	S	SPLP-VANADIUM	23-DEC-15			
Solid	P	SPLP-VOA				
SPLP-SW8260		SW1312-EXT-VOA				
Aqueous	S	SPLP-ZINC	23-DEC-15			

SI4615-3	SITE 4TS-TB-62615	26-JUN-15 00:00	27-JUN-15		**01-JUL-15**	10-JUL-15

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8260-S	10-JUL-15	40 mL Vial+DI+MEOH		**Trip Blank, no TS jar.**
Solid	S	TS	26-JUL-15			

***Total Samples:* 3** ***Total Analyses:* 26**

QP
07.01.15

0000027

Katahdin Analytical Services, Inc.

Container Transfer History for SI4615

Samplenum SI4615-1

Container Id SI4615-1A **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
29-JUN-15 13:27	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI4615-1B **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
29-JUN-15 13:27	LOGIN	VOA_WALK-IN	APIMENTEL	N	
30-JUN-15 13:57	VOA_WALK-IN	GC/MS	RCROCKER	N	
01-JUL-15 14:21	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI4615-1C **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
29-JUN-15 13:27	LOGIN	VOA_WALK-IN	APIMENTEL	N	
30-JUN-15 13:57	VOA_WALK-IN	GC/MS	RCROCKER	N	
01-JUL-15 14:21	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI4615-1E **Containertype 1L N-Amber Glass** **Matrix SL**

Product *SW8270SIM-S, SW6020-VANADIUM, SW6020-SODIUM, SW6020-SELENIUM, SW6020-NICKEL, SW6020-CADMIUM, SW6020-CALCIUM, SW6020-CHROMIUM, SW6020-COBALT, SW6020-COPPER, SW6020-IRON, SW6020-LEAD, SW6020-MAGNESIUM, SW6020-MANGANESE, SW6020-ALUMINUM, SW6020-ANTIMONY, SW6020-ARSENIC, SW6020-BARIUM, SW6020-BERYLLIUM, SW6020-POTASSIUM, SW6020-SILVER, SW6020-THALLIUM, SW6020-ZINC, SW8270-S, SW7471-MERCURY*

Transferdate	From	To	Analyst	Custody Break	Comments
29-JUN-15 13:26	LOGIN	WALK-IN	APIMENTEL	N	
30-JUN-15 17:52	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
01-JUL-15 09:02	WALK-IN	METALS PREP	ELITTLEFIELD	Y	This container has not been properly returned to CUSTODY! It was last assigned to AZAZZARA for department WE' CHEMISTRY on 06/30/15 17:52 .
01-JUL-15 11:43	METALS PREP	WALK-IN	ELITTLEFIELD	N	

Container Id SI4615-1F **Containertype 4oz Glass** **Matrix SL**

Product *SW8270SIM-S, SW8270-S, SW7471-MERCURY, SW6020-SODIUM, SW6020-SELENIUM, SW6020-NICKEL, SW6020-MAGNESIUM, SW602(IRON, SW6020-ANTIMONY, SW6020-ARSENIC, SW6020-BARIUM, SW6020-BERYLLIUM, SW6020-CADMIUM, SW6020-CALCIUM, SW6020-CHROMIUM, SW6020-COBALT, SW6020-COPPER, SW6020-ALUMINUM, SW6020-LEAD, SW6020-MANGANESE, SW6020-POTASSIUM, SW6020-SILVER, SW6020-THALLIUM, SW6020-VANADIUM, SW6020-ZINC*

Transferdate	From	To	Analyst	Custody Break	Comments
29-JUN-15 13:26	LOGIN	WALK-IN	APIMENTEL	N	
29-JUN-15 13:53	WALK-IN	WALK-IN	APIMENTEL	Y	This container has not been properly returned to CUSTODY! It was last assigned to APIMENTEL for department CUSTODY on 06/29/15 13:26 .
30-JUN-15 10:33	WALK-IN	ORGANIC PREP	HGOULD	N	
30-JUN-15 15:52	ORGANIC PREP	WALK-IN	HGOULD	N	

Samplenum SI4615-3

Container Id SI4615-3A **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
29-JUN-15 13:27	LOGIN	VOA_WALK-IN	APIMENTEL	N	

Container Id SI4615-3B **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
29-JUN-15 13:27	LOGIN	VOA_WALK-IN	APIMENTEL	N	
30-JUN-15 13:57	VOA_WALK-IN	GC/MS	RCROCKER	N	
01-JUL-15 14:21	GC/MS	VOA_WALK-IN	EEVERETT	N	

Container Id SI4615-3C **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
29-JUN-15 13:27	LOGIN	VOA_WALK-IN	APIMENTEL	N	

0000028

Katahdin Analytical Services, Inc.

Container Transfer History for SI4615

Samplenum SI4615-3

Container Id SI4615-3D **Containertype 40 mL Vial+DI+MEOH** **Matrix SL**

Product *SW8260-S*

Transferdate	From	To	Analyst	Custody Break	Comments
29-JUN-15 13:27	LOGIN	VOA_WALK-IN	APIMENTEL	N	

000029

VOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI4615

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SITE 4TS-SEE2-PT	SI4615-1		41.6	*	195.	*	221.	*	74.3	*
SITE 4TS-SEE2-PT	SI4615-1RA		48.8	*	261.	*	292.	*	89.6	
SITE 4TS-TB-62615	SI4615-3		106.		113.		122.		110.	
Laboratory Control S	WG165742-8		107.		108.		108.		107.	
Method Blank Sample	WG165742-9		108.		112.		117.		114.	

		QC Limits
DBF	DIBROMOFLUOROMETHANE	64-130
TOL	TOLUENE-D8	85-115
BFB	P-BROMOFLUOROBENZENE	85-120
DCA	1,2-DICHLOROETHANE-D4	58-134

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : W3153.D
Instrument ID : GCMS-W
Heated Purge : Yes

SDG : SI4615
Lab Sample ID : WG165742-9
Date Analyzed : 30-JUN-15
Time Analyzed : 14:37

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165742-8	W3151.D	06/30/15	13:20
SITE 4TS-TB-62615	SI4615-3	W3154.D	06/30/15	15:09
SITE 4TS-SEE2-PT	SI4615-1	W3156.D	06/30/15	16:13
SITE 4TS-SEE2-PT	SI4615-1RA	W3157.D	06/30/15	16:45

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165742-9
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: W3153.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	U	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	U	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
Methylene Chloride	U	12	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone	J	5.6	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165742-9
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: W3153.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylenes	U	2.5	ug/Kgdrywt	1	10	10.	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Xylenes (Total)	U	7.5	ug/Kgdrywt	1	15	15.	1.3	7.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
1,1-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
1,2,3-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,2,3-Trichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
2,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.50	2.5
Bromobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
Bromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Dibromomethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Hexachlorobutadiene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
n-Propylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.83	2.5
p-Isopropyltoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,3-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
2-Hexanone	U	12	ug/Kgdrywt	1	25	25.	4.8	12.
4-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.49	2.5
1,2-Dichloroethylene (Total)	U	5.0	ug/Kgdrywt	1	10	10.	0.71	5.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165742-9
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: W3153.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,3,5-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Diethyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	0.80	2.5
Di-Isopropyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Tetrahydrofuran	U	25	ug/Kgdrywt	1	50	50.	4.5	25.
Vinyl Acetate	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
p-Bromofluorobenzene		108.	%					
Toluene-D8		114.	%					
1,2-Dichloroethane-D4		117.	%					
Dibromofluoromethane		112.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165742-8
Client ID: LCS
Project:
SDG: SI4615
LCS File ID: W3151.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	133.	50.0	66.5	ug/Kgdrywt	35-135
Chloromethane	* 131.	50.0	65.3	ug/Kgdrywt	50-130
Vinyl Chloride	115.	50.0	57.7	ug/Kgdrywt	60-125
Bromomethane	119.	50.0	59.6	ug/Kgdrywt	30-160
Chloroethane	142.	50.0	71.0	ug/Kgdrywt	40-155
Trichlorofluoromethane	120.	50.0	60.0	ug/Kgdrywt	25-185
1,1-Dichloroethene	112.	50.0	56.2	ug/Kgdrywt	65-135
Carbon Disulfide	112.	50.0	56.1	ug/Kgdrywt	45-160
Methylene Chloride	89.0	50.0	44.5	ug/Kgdrywt	55-140
Acetone	112.	50.0	56.2	ug/Kgdrywt	20-160
trans-1,2-Dichloroethene	107.	50.0	53.4	ug/Kgdrywt	65-135
Methyl tert-butyl Ether	114.	100.	114.	ug/Kgdrywt	81-125
1,1-Dichloroethane	114.	50.0	56.8	ug/Kgdrywt	75-125
cis-1,2-Dichloroethene	102.	50.0	51.1	ug/Kgdrywt	65-125
Chloroform	107.	50.0	53.5	ug/Kgdrywt	70-125
Carbon Tetrachloride	110.	50.0	55.0	ug/Kgdrywt	65-135
1,1,1-Trichloroethane	109.	50.0	54.3	ug/Kgdrywt	70-135
2-Butanone	108.	50.0	53.9	ug/Kgdrywt	30-160
Benzene	106.	50.0	52.8	ug/Kgdrywt	75-125
1,2-Dichloroethane	106.	50.0	53.0	ug/Kgdrywt	70-135
Trichloroethene	107.	50.0	53.3	ug/Kgdrywt	75-125
1,2-Dichloropropane	105.	50.0	52.4	ug/Kgdrywt	70-120
Bromodichloromethane	110.	50.0	54.9	ug/Kgdrywt	70-130
cis-1,3-Dichloropropene	112.	50.0	56.1	ug/Kgdrywt	70-125
Toluene	106.	50.0	53.2	ug/Kgdrywt	70-125
4-Methyl-2-Pentanone	113.	50.0	56.3	ug/Kgdrywt	45-145
Tetrachloroethene	108.	50.0	53.9	ug/Kgdrywt	65-140
trans-1,3-Dichloropropene	119.	50.0	59.5	ug/Kgdrywt	65-125
1,1,2-Trichloroethane	104.	50.0	52.1	ug/Kgdrywt	60-125
Dibromochloromethane	112.	50.0	55.8	ug/Kgdrywt	65-130
1,2-Dibromoethane	104.	50.0	52.1	ug/Kgdrywt	70-125
Chlorobenzene	107.	50.0	53.5	ug/Kgdrywt	75-125
Ethylbenzene	107.	50.0	53.7	ug/Kgdrywt	75-125
Styrene	111.	50.0	55.5	ug/Kgdrywt	75-125
Bromoform	111.	50.0	55.7	ug/Kgdrywt	55-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165742-8
Client ID: LCS
Project:
SDG: SI4615
LCS File ID: W3151.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Isopropylbenzene	111.	50.0	55.4	ug/Kgdrywt	75-130
1,1,2,2-Tetrachloroethane	104.	50.0	51.8	ug/Kgdrywt	55-130
1,3-Dichlorobenzene	108.	50.0	54.0	ug/Kgdrywt	70-125
1,4-Dichlorobenzene	107.	50.0	53.3	ug/Kgdrywt	70-125
1,2-Dichlorobenzene	108.	50.0	53.9	ug/Kgdrywt	75-120
1,2-Dibromo-3-Chloropropane	114.	50.0	57.2	ug/Kgdrywt	40-135
1,2,4-Trichlorobenzene	110.	50.0	54.8	ug/Kgdrywt	65-130
1,2,4-Trimethylbenzene	110.	50.0	55.0	ug/Kgdrywt	65-135
1,3,5-Trimethylbenzene	107.	50.0	53.5	ug/Kgdrywt	65-135
n-Butylbenzene	112.	50.0	56.2	ug/Kgdrywt	65-140
sec-Butylbenzene	112.	50.0	56.0	ug/Kgdrywt	65-130
tert-Butylbenzene	111.	50.0	55.5	ug/Kgdrywt	65-130
m+p-Xylenes	108.	100.	108.	ug/Kgdrywt	80-125
o-Xylene	107.	50.0	53.5	ug/Kgdrywt	75-125
Xylenes (Total)	107.	150.	161.	ug/Kgdrywt	81-114
Naphthalene	117.	50.0	58.3	ug/Kgdrywt	40-125
1,1-Dichloropropene	110.	50.0	54.8	ug/Kgdrywt	70-135
1,2,3-Trichlorobenzene	108.	50.0	53.8	ug/Kgdrywt	60-135
1,2,3-Trichloropropane	104.	50.0	52.2	ug/Kgdrywt	65-130
2-Chlorotoluene	110.	50.0	54.9	ug/Kgdrywt	70-130
2,2-Dichloropropane	117.	50.0	58.6	ug/Kgdrywt	65-135
Bromobenzene	106.	50.0	52.9	ug/Kgdrywt	65-120
Bromochloromethane	107.	50.0	53.4	ug/Kgdrywt	70-125
Dibromomethane	104.	50.0	52.2	ug/Kgdrywt	75-130
Hexachlorobutadiene	109.	50.0	54.6	ug/Kgdrywt	55-140
n-Propylbenzene	113.	50.0	56.7	ug/Kgdrywt	65-135
p-Isopropyltoluene	112.	50.0	56.2	ug/Kgdrywt	75-135
1,3-Dichloropropane	103.	50.0	51.6	ug/Kgdrywt	75-125
2-Hexanone	115.	50.0	57.3	ug/Kgdrywt	45-145
4-Chlorotoluene	110.	50.0	54.8	ug/Kgdrywt	75-125
1,2-Dichloroethylene (Total)	104.	100.	104.	ug/Kgdrywt	82-120
Methylcyclohexane	116.	50.0	57.9	ug/Kgdrywt	71-127
Freon-113	111.	50.0	55.6	ug/Kgdrywt	67-135
1,3,5-Trichlorobenzene	110.	50.0	54.9	ug/Kgdrywt	64-133
Cyclohexane	113.	50.0	56.6	ug/Kgdrywt	75-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165742-8
Client ID: LCS
Project:
SDG: SI4615
LCS File ID: W3151.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: NA
Report Date: 01-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Diethyl Ether	105.	50.0	52.4	ug/Kgdrywt	76-135
Di-Isopropyl Ether	110.	50.0	55.1	ug/Kgdrywt	68-131
Methyl Acetate	106.	50.0	53.1	ug/Kgdrywt	72-133
Tetrahydrofuran	108.	50.0	54.1	ug/Kgdrywt	78-137
Vinyl Acetate	* 126.	50.0	63.1	ug/Kgdrywt	77-119
p-Bromofluorobenzene	107.				85-120
Toluene-D8	107.				85-115
1,2-Dichloroethane-D4	108.				58-134
Dibromofluoromethane	108.				64-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : WB190.D
Instrument ID : GCMS-W

SDG : SI4615
Date Analyzed : 30-JUN-15
Time Analyzed : 09:30
Heated Purge : Yes

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	20.8		
75	30.0 - 60.0% of mass 95	58.4		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.0		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	75.8		
175	5.0 - 9.0% of mass 174	5.5	7.31	1
176	95.0 - 101.0% of mass 174	74.5	98.22	1
177	5.0 - 9.0% of mass 176	5.3	7.15	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165742-4	W3145.D	06/30/15	09:53
Initial Calibration	WG165742-3	W3146.D	06/30/15	10:25
Initial Calibration	WG165742-2	W3147.D	06/30/15	10:57
Initial Calibration	WG165742-1	W3148.D	06/30/15	11:30
Initial Calibration	WG165742-6	W3149.D	06/30/15	12:02
Initial Calibration	WG165742-5	W3150.D	06/30/15	12:34
Laboratory Control S	WG165742-8	W3151.D	06/30/15	13:20
Independent Source	WG165742-7	W3151A.D	06/30/15	13:20
Method Blank Sample	WG165742-9	W3153.D	06/30/15	14:37
SITE 4TS-TB-62615	SI4615-3	W3154.D	06/30/15	15:09
SITE 4TS-SEE2-PT	SI4615-1	W3156.D	06/30/15	16:13
SITE 4TS-SEE2-PT	SI4615-1RA	W3157.D	06/30/15	16:45

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165742-4
Lab File ID : W3145.D

SDG: SI4615
Analytical Date: 06/30/15 09:53
Instrument ID: GCMS-W

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	1229962		8.17		2007471		9.19		1853199		14.02	
	Upper Limit	2459924		8.67		4014942		9.69		3706398		14.52	
	Lower Limit	614981		7.67		1003735.5		8.69		926599.5		13.52	
Client Sample ID	Lab Sample ID												
Laboratory Control S	WG165742-8	1177952		8.16		1989675		9.19		1857411		14.01	
Method Blank Sample	WG165742-9	1107726		8.15		1872118		9.18		1759736		14.01	
SITE 4TS-TB-62615	SI4615-3	1007379		8.17		1738084		9.20		1633393		14.03	
SITE 4TS-SEE2-PT	SI4615-1	484174	*	8.16		1059299		9.19		481631	*	14.02	
SITE 4TS-SEE2-PT	SI4615-1RA	377695	*	8.16		888618	*	9.19		400003	*	14.01	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165742-4
Lab File ID : W3145.D

SDG: SI4615
Analytical Date: 06/30/15 09:53
Instrument ID: GCMS-W

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	998310		17.80	
	Upper Limit	1996620		18.30	
	Lower Limit	499155		17.30	
Client Sample ID	Lab Sample ID				
Laboratory Control S	WG165742-8	1013813		17.80	
Method Blank Sample	WG165742-9	920673		17.80	
SITE 4TS-TB-62615	SI4615-3	851206		17.81	
SITE 4TS-SEE2-PT	SI4615-1	72854	*	17.81	
SITE 4TS-SEE2-PT	SI4615-1RA	69529	*	17.80	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-1
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: W3156.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.0	ug/Kgdrywt	1	10	7.9	0.73	4.0
Chloromethane	UL	4.0	ug/Kgdrywt	1	10	7.9	1.1	4.0
Vinyl Chloride	U	4.0	ug/Kgdrywt	1	10	7.9	0.69	4.0
Bromomethane	U	4.0	ug/Kgdrywt	1	10	7.9	0.87	4.0
Chloroethane	U	4.0	ug/Kgdrywt	1	10	7.9	1.0	4.0
Trichlorofluoromethane	U	4.0	ug/Kgdrywt	1	10	7.9	0.72	4.0
1,1-Dichloroethene	U	2.0	ug/Kgdrywt	1	5	4.0	0.73	2.0
Carbon Disulfide	J	2.7	ug/Kgdrywt	1	5	4.0	0.62	2.0
Methylene Chloride	J	9.2	ug/Kgdrywt	1	25	20.	6.2	9.9
Acetone		300	ug/Kgdrywt	1	25	20.	4.0	9.9
trans-1,2-Dichloroethene	U	2.0	ug/Kgdrywt	1	5	4.0	0.56	2.0
Methyl tert-butyl Ether	U	2.0	ug/Kgdrywt	1	5	4.0	0.87	2.0
1,1-Dichloroethane	U	2.0	ug/Kgdrywt	1	5	4.0	1.3	2.0
cis-1,2-Dichloroethene	U	2.0	ug/Kgdrywt	1	5	4.0	0.72	2.0
Chloroform	U	2.0	ug/Kgdrywt	1	5	4.0	0.28	2.0
Carbon Tetrachloride	U	2.0	ug/Kgdrywt	1	5	4.0	1.0	2.0
1,1,1-Trichloroethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.33	2.0
2-Butanone		53	ug/Kgdrywt	1	25	20.	4.7	9.9
Benzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.73	2.0
1,2-Dichloroethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.79	2.0
Trichloroethene	U	2.0	ug/Kgdrywt	1	5	4.0	0.47	2.0
1,2-Dichloropropane	U	2.0	ug/Kgdrywt	1	5	4.0	1.1	2.0
Bromodichloromethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.47	2.0
cis-1,3-Dichloropropene	U	2.0	ug/Kgdrywt	1	5	4.0	0.57	2.0
Toluene	J	2.2	ug/Kgdrywt	1	5	4.0	1.1	2.0
4-Methyl-2-Pentanone	U	9.9	ug/Kgdrywt	1	25	20.	4.7	9.9
Tetrachloroethene	U	2.0	ug/Kgdrywt	1	5	4.0	0.95	2.0
trans-1,3-Dichloropropene	U	2.0	ug/Kgdrywt	1	5	4.0	0.68	2.0
1,1,2-Trichloroethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.77	2.0
Dibromochloromethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.79	2.0
1,2-Dibromoethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.95	2.0
Chlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.40	2.0
Ethylbenzene	J	0.89	ug/Kgdrywt	1	5	4.0	0.51	2.0
Styrene	U	2.0	ug/Kgdrywt	1	5	4.0	0.40	2.0
Bromoform	U	2.0	ug/Kgdrywt	1	5	4.0	0.55	2.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-1
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: W3156.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.73	2.0
1,1,2,2-Tetrachloroethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.66	2.0
1,3-Dichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.49	2.0
1,4-Dichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.35	2.0
1,2-Dichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.62	2.0
1,2-Dibromo-3-Chloropropane	U	2.0	ug/Kgdrywt	1	5	4.0	1.2	2.0
1,2,4-Trichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.62	2.0
1,2,4-Trimethylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.69	2.0
1,3,5-Trimethylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.53	2.0
n-Butylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.73	2.0
sec-Butylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.72	2.0
tert-Butylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.71	2.0
m+p-Xylenes	J	3.6	ug/Kgdrywt	1	10	7.9	1.3	2.0
o-Xylene	U	2.0	ug/Kgdrywt	1	5	4.0	1.0	2.0
Xylenes (Total)	J	3.6	ug/Kgdrywt	1	15	12.	1.0	5.9
Naphthalene	U	2.0	ug/Kgdrywt	1	5	4.0	0.70	2.0
1,1-Dichloropropene	U	2.0	ug/Kgdrywt	1	5	4.0	0.72	2.0
1,2,3-Trichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.60	2.0
1,2,3-Trichloropropane	U	2.0	ug/Kgdrywt	1	5	4.0	0.95	2.0
2-Chlorotoluene	U	2.0	ug/Kgdrywt	1	5	4.0	0.87	2.0
2,2-Dichloropropane	U	2.0	ug/Kgdrywt	1	5	4.0	0.40	2.0
Bromobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.58	2.0
Bromochloromethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.72	2.0
Dibromomethane	U	2.0	ug/Kgdrywt	1	5	4.0	0.40	2.0
Hexachlorobutadiene	U	2.0	ug/Kgdrywt	1	5	4.0	0.58	2.0
n-Propylbenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.66	2.0
p-Isopropyltoluene	U	2.0	ug/Kgdrywt	1	5	4.0	0.60	2.0
1,3-Dichloropropane	U	2.0	ug/Kgdrywt	1	5	4.0	0.74	2.0
2-Hexanone	U	9.9	ug/Kgdrywt	1	25	20.	3.8	9.9
4-Chlorotoluene	U	2.0	ug/Kgdrywt	1	5	4.0	0.39	2.0
1,2-Dichloroethylene (Total)	U	4.0	ug/Kgdrywt	1	10	7.9	0.56	4.0
Methylcyclohexane		4.6	ug/Kgdrywt	1	5	4.0	0.76	2.0
Freon-113	U	2.0	ug/Kgdrywt	1	5	4.0	0.71	2.0
1,3,5-Trichlorobenzene	U	2.0	ug/Kgdrywt	1	5	4.0	0.69	2.0
Cyclohexane	U	2.0	ug/Kgdrywt	1	5	4.0	1.1	2.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-1
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: W3156.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.0	ug/Kgdrywt	1	5	4.0	0.63	2.0
Di-Isopropyl Ether	U	2.0	ug/Kgdrywt	1	5	4.0	1.6	2.0
Methyl Acetate	U	2.4	ug/Kgdrywt	1	5	4.0	2.1	2.4
Tetrahydrofuran	U	20	ug/Kgdrywt	1	50	40.	3.6	20.
Vinyl Acetate	UL	2.0	ug/Kgdrywt	1	5	4.0	0.74	2.0
p-Bromofluorobenzene	*	41.6	%					
Toluene-D8	*	74.3	%					
1,2-Dichloroethane-D4	*	221.	%					
Dibromofluoromethane	*	195.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-1RA
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: W3157.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	4.2	ug/Kgdrywt	1	10	8.5	0.78	4.2
Chloromethane	UL	4.2	ug/Kgdrywt	1	10	8.5	1.2	4.2
Vinyl Chloride	U	4.2	ug/Kgdrywt	1	10	8.5	0.74	4.2
Bromomethane	U	4.2	ug/Kgdrywt	1	10	8.5	0.94	4.2
Chloroethane	U	4.2	ug/Kgdrywt	1	10	8.5	1.1	4.2
Trichlorofluoromethane	U	4.2	ug/Kgdrywt	1	10	8.5	0.77	4.2
1,1-Dichloroethene	U	2.1	ug/Kgdrywt	1	5	4.2	0.79	2.1
Carbon Disulfide	J	3.2	ug/Kgdrywt	1	5	4.2	0.66	2.1
Methylene Chloride	J	12	ug/Kgdrywt	1	25	21.	6.7	11.
Acetone		370	ug/Kgdrywt	1	25	21.	4.3	11.
trans-1,2-Dichloroethene	U	2.1	ug/Kgdrywt	1	5	4.2	0.60	2.1
Methyl tert-butyl Ether	U	2.1	ug/Kgdrywt	1	5	4.2	0.94	2.1
1,1-Dichloroethane	U	2.1	ug/Kgdrywt	1	5	4.2	1.4	2.1
cis-1,2-Dichloroethene	U	2.1	ug/Kgdrywt	1	5	4.2	0.77	2.1
Chloroform	U	2.1	ug/Kgdrywt	1	5	4.2	0.30	2.1
Carbon Tetrachloride	U	2.1	ug/Kgdrywt	1	5	4.2	1.1	2.1
1,1,1-Trichloroethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.36	2.1
2-Butanone		70	ug/Kgdrywt	1	25	21.	5.0	11.
Benzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.78	2.1
1,2-Dichloroethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.85	2.1
Trichloroethene	U	2.1	ug/Kgdrywt	1	5	4.2	0.50	2.1
1,2-Dichloropropane	U	2.1	ug/Kgdrywt	1	5	4.2	1.2	2.1
Bromodichloromethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.51	2.1
cis-1,3-Dichloropropene	U	2.1	ug/Kgdrywt	1	5	4.2	0.61	2.1
Toluene	J	2.7	ug/Kgdrywt	1	5	4.2	1.2	2.1
4-Methyl-2-Pentanone	U	11	ug/Kgdrywt	1	25	21.	5.0	11.
Tetrachloroethene	U	2.1	ug/Kgdrywt	1	5	4.2	1.0	2.1
trans-1,3-Dichloropropene	U	2.1	ug/Kgdrywt	1	5	4.2	0.73	2.1
1,1,2-Trichloroethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.82	2.1
Dibromochloromethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.85	2.1
1,2-Dibromoethane	U	2.1	ug/Kgdrywt	1	5	4.2	1.0	2.1
Chlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.43	2.1
Ethylbenzene	J	0.76	ug/Kgdrywt	1	5	4.2	0.55	2.1
Styrene	U	2.1	ug/Kgdrywt	1	5	4.2	0.43	2.1
Bromoform	U	2.1	ug/Kgdrywt	1	5	4.2	0.60	2.1

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-1RA
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: W3157.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.78	2.1
1,1,2,2-Tetrachloroethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.71	2.1
1,3-Dichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.53	2.1
1,4-Dichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.37	2.1
1,2-Dichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.66	2.1
1,2-Dibromo-3-Chloropropane	U	2.1	ug/Kgdrywt	1	5	4.2	1.3	2.1
1,2,4-Trichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.67	2.1
1,2,4-Trimethylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.74	2.1
1,3,5-Trimethylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.57	2.1
n-Butylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.78	2.1
sec-Butylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.77	2.1
tert-Butylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.76	2.1
m+p-Xylenes	J	3.5	ug/Kgdrywt	1	10	8.5	1.4	2.1
o-Xylene	U	2.1	ug/Kgdrywt	1	5	4.2	1.1	2.1
Xylenes (Total)	J	3.5	ug/Kgdrywt	1	15	13.	1.1	6.4
Naphthalene	U	2.1	ug/Kgdrywt	1	5	4.2	0.75	2.1
1,1-Dichloropropene	U	2.1	ug/Kgdrywt	1	5	4.2	0.77	2.1
1,2,3-Trichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.65	2.1
1,2,3-Trichloropropane	U	2.1	ug/Kgdrywt	1	5	4.2	1.0	2.1
2-Chlorotoluene	U	2.1	ug/Kgdrywt	1	5	4.2	0.94	2.1
2,2-Dichloropropane	U	2.1	ug/Kgdrywt	1	5	4.2	0.42	2.1
Bromobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.63	2.1
Bromochloromethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.77	2.1
Dibromomethane	U	2.1	ug/Kgdrywt	1	5	4.2	0.43	2.1
Hexachlorobutadiene	U	2.1	ug/Kgdrywt	1	5	4.2	0.63	2.1
n-Propylbenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.70	2.1
p-Isopropyltoluene	U	2.1	ug/Kgdrywt	1	5	4.2	0.65	2.1
1,3-Dichloropropane	U	2.1	ug/Kgdrywt	1	5	4.2	0.80	2.1
2-Hexanone	U	11	ug/Kgdrywt	1	25	21.	4.1	11.
4-Chlorotoluene	U	2.1	ug/Kgdrywt	1	5	4.2	0.42	2.1
1,2-Dichloroethylene (Total)	U	4.2	ug/Kgdrywt	1	10	8.5	0.60	4.2
Methylcyclohexane		11	ug/Kgdrywt	1	5	4.2	0.82	2.1
Freon-113	U	2.1	ug/Kgdrywt	1	5	4.2	0.76	2.1
1,3,5-Trichlorobenzene	U	2.1	ug/Kgdrywt	1	5	4.2	0.74	2.1
Cyclohexane	U	2.1	ug/Kgdrywt	1	5	4.2	1.2	2.1

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-1RA
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: W3157.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 94.
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.1	ug/Kgdrywt	1	5	4.2	0.68	2.1
Di-Isopropyl Ether	U	2.1	ug/Kgdrywt	1	5	4.2	1.8	2.1
Methyl Acetate		50	ug/Kgdrywt	1	5	4.2	2.3	2.6
Tetrahydrofuran	U	21	ug/Kgdrywt	1	50	42.	3.8	21.
Vinyl Acetate	UL	2.1	ug/Kgdrywt	1	5	4.2	0.80	2.1
p-Bromofluorobenzene	*	48.8	%					
Toluene-D8		89.6	%					
1,2-Dichloroethane-D4	*	292.	%					
Dibromofluoromethane	*	261.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-3
Client ID: SITE 4TS-TB-62615
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: W3154.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 100
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	UL	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	U	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
Methylene Chloride	U	12	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone	J	12	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-3
Client ID: SITE 4TS-TB-62615
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: W3154.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 100
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylenes	U	2.5	ug/Kgdrywt	1	10	10.	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Xylenes (Total)	U	7.5	ug/Kgdrywt	1	15	15.	1.3	7.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
1,1-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
1,2,3-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,2,3-Trichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
2,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.50	2.5
Bromobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
Bromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Dibromomethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Hexachlorobutadiene	U	2.5	ug/Kgdrywt	1	5	5.0	0.74	2.5
n-Propylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.83	2.5
p-Isopropyltoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.76	2.5
1,3-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
2-Hexanone	U	12	ug/Kgdrywt	1	25	25.	4.8	12.
4-Chlorotoluene	U	2.5	ug/Kgdrywt	1	5	5.0	0.49	2.5
1,2-Dichloroethylene (Total)	U	5.0	ug/Kgdrywt	1	10	10.	0.71	5.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
1,3,5-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-3
Client ID: SITE 4TS-TB-62615
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: W3154.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: EME
Extraction Method: SW846 5035
Lab Prep Batch: WG165742

Analysis Date: 30-JUN-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: SL
% Solids: 100
Report Date: 01-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	0.80	2.5
Di-Isopropyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Tetrahydrofuran	U	25	ug/Kgdrywt	1	50	50.	4.5	25.
Vinyl Acetate	UL	2.5	ug/Kgdrywt	1	5	5.0	0.94	2.5
p-Bromofluorobenzene		106.	%					
Toluene-D8		110.	%					
1,2-Dichloroethane-D4		122.	%					
Dibromofluoromethane		113.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-W
Lab File IDs : W3148.D W3147.D W3146.D W3145.D W3150.D W3149.D **Column ID:**
Calibration Date(s): 30-JUN-15 09:53 30-JUN-15 12:34

	5.0000 Level 1	10.0000 Level 2	20.0000 Level 3	50.0000 Level 4	100.0000 Level 5	200.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.29168	0.26581	0.29320	0.31626	0.31554	0.32101	AVG		0.30058		7.02530	15.00000	O
Chloromethane	0.43317	0.41062	0.41690	0.41427	0.44329	0.43691	AVG		0.42586		3.19566	15.00000	O
Vinyl chloride	0.41921	0.38932	0.39856	0.39520	0.42170	0.42857	AVG		0.40876		3.99752	15.00000	O
Bromomethane	0.15619	0.15414	0.15050	0.13486	0.16750	0.15504	AVG		0.15304		6.92151	15.00000	O
Chloroethane	27356	54104	99999	226785	373771	672360	LNR	-0.19945	0.13555		0.99357	0.99000	O
Trichlorofluoromethane	0.45916	0.40919	0.43393	0.44373	0.44804	0.32247	AVG		0.41942		12.01774	15.00000	O
Diethyl Ether	0.26349	0.25831	0.27416	0.26272	0.27613	0.27106	AVG		0.26765		2.66677	15.00000	O
1,1-Dichloroethene	0.27534	0.23859	0.25296	0.25587	0.25854	0.26843	AVG		0.25829		4.94599	15.00000	O
Carbon Disulfide	0.91180	0.83874	0.90907	0.88851	0.90640	0.88888	AVG		0.89056		3.06989	15.00000	O
Freon-113	0.17078	0.17164	0.18357	0.18748	0.18746	0.19075	AVG		0.18195		4.74167	15.00000	O
Methylene Chloride	88232	121727	215232	443711	930594	1921204	LNR	-0.03973	0.38871		0.99835	0.99000	O
Acetone	0.11811	0.10517	0.10576	0.09884	0.09469	0.10389	AVG		0.10441		7.61187	15.00000	O
trans-1,2-Dichloroethene	0.30181	0.28648	0.31776	0.31984	0.28847	0.31981	AVG		0.30569		5.12201	15.00000	O
Methyl tert-butyl ether	0.93159	0.95768	1.02874	0.99962	1.03232	0.97147	AVG		0.98690		4.08505	15.00000	O
Di-isopropyl ether	1.11825	1.14988	1.22287	1.15936	1.22593	1.22138	AVG		1.18294		3.92033	15.00000	O
1,1-Dichloroethane	0.61844	0.59193	0.63456	0.61541	0.64163	0.64080	AVG		0.62379		3.07308	15.00000	O
Vinyl Acetate	0.33297	0.38846	0.42056	0.42311	0.40213	0.44604	AVG		0.40221		9.74304	15.00000	O
cis-1,2-Dichloroethene	0.37484	0.36048	0.38954	0.37954	0.40173	0.40205	AVG		0.38470		4.23173	15.00000	O
1,2-Dichloroethylene (total	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+0	15.00000	M (
2,2-Dichloropropane	0.45941	0.43414	0.48169	0.48520	0.52104	0.53415	AVG		0.48594		7.67907	15.00000	O
Bromochloromethane	0.14156	0.14331	0.14950	0.14449	0.15376	0.14712	AVG		0.14662		3.06162	15.00000	O
Chloroform	0.56976	0.55376	0.58406	0.58396	0.59743	0.61278	AVG		0.58362		3.53270	15.00000	O
Carbon Tetrachloride	0.23752	0.21227	0.24329	0.24639	0.26180	0.27143	AVG		0.24545		8.37321	15.00000	O
Tetrahydrofuran	0.10462	0.10587	0.11742	0.11068	0.11642	0.12603	AVG		0.11350		7.11366	15.00000	O
1,1,1-Trichloroethane	0.51231	0.47072	0.52373	0.50798	0.53167	0.54344	AVG		0.51497		4.89749	15.00000	O
1,1-Dichloropropene	0.29409	0.25798	0.28958	0.28767	0.29093	0.30406	AVG		0.28739		5.40238	15.00000	O
2-Butanone	0.15658	0.16488	0.17522	0.16592	0.17395	0.18974	AVG		0.17105		6.66075	15.00000	O
Benzene	0.87868	0.83178	0.86327	0.87663	0.89450	0.88219	AVG		0.87117		2.49683	15.00000	O
Cyclohexane	0.54912	0.47336	0.55750	0.55415	0.59186	0.59486	AVG		0.55348		7.93373	15.00000	O
1,2-Dichloroethane	0.26401	0.26796	0.28161	0.28678	0.28786	0.29390	AVG		0.28035		4.23010	15.00000	O
Trichloroethene	0.19678	0.18869	0.20376	0.19821	0.20554	0.21026	AVG		0.20054		3.79661	15.00000	O
Dibromomethane	0.11499	0.10869	0.11864	0.11654	0.12097	0.12621	AVG		0.11767		5.01148	15.00000	O
1,2-Dichloropropane	0.20597	0.19726	0.21129	0.21897	0.22579	0.23144	AVG		0.21512		5.92477	15.00000	O
Bromodichloromethane	0.24492	0.24155	0.26053	0.27331	0.28300	0.29888	AVG		0.26703		8.35633	15.00000	O
cis-1,3-dichloropropene	0.28808	0.29805	0.33180	0.34550	0.36616	0.37921	AVG		0.33480		10.86216	15.00000	O
Toluene	0.54229	0.51843	0.55691	0.55946	0.56243	0.57395	AVG		0.55224		3.52190	15.00000	O
4-methyl-2-pentanone	0.20576	0.21721	0.23739	0.22806	0.22835	0.21953	AVG		0.22272		4.93350	15.00000	O

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-W
Lab File IDs : W3148.D W3147.D W3146.D W3145.D W3150.D W3149.D **Column ID:**
Calibration Date(s): 30-JUN-15 09:53 30-JUN-15 12:34

Tetrachloroethene	0.17457	0.16372	0.18203	0.17655	0.17807	0.17924	AVG		0.17570		3.63335	15.00000	O
trans-1,3-Dichloropropene	0.25023	0.25548	0.28220	0.29875	0.31741	0.33552	AVG		0.28993		11.6807	15.00000	O
1,1,2-Trichloroethane	0.12615	0.14802	0.14478	0.15043	0.15689	0.16599	AVG		0.14871		8.98744	15.00000	O
Dibromochloromethane	0.16283	0.17300	0.19448	0.20568	0.20881	0.21879	AVG		0.19393		11.2566	15.00000	O
1,3-Dichloropropane	0.36180	0.38194	0.38910	0.39054	0.39952	0.39912	AVG		0.38700		3.61959	15.00000	O
1,2-Dibromoethane	0.16449	0.16465	0.17517	0.17963	0.18555	0.19906	AVG		0.17809		7.41415	15.00000	O
2-Hexanone	0.15493	0.17228	0.18669	0.17883	0.17863	0.17707	AVG		0.17474		6.15523	15.00000	O
Chlorobenzene	0.59006	0.59477	0.61066	0.61843	0.60985	0.59163	AVG		0.60257		1.97376	15.00000	O
Ethylbenzene	0.34630	0.33743	0.36808	0.36843	0.36576	0.36749	AVG		0.35891		3.77036	15.00000	O
Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.44583	0.43015	0.45371	0.44434	0.43235	0.39783	AVG		0.43404		4.56347	15.00000	O
o-Xylene	0.40766	0.40829	0.43677	0.43336	0.44149	0.44327	AVG		0.42847		3.79449	15.00000	O
Styrene	0.67847	0.66187	0.72511	0.73467	0.73790	0.69955	AVG		0.70626		4.45580	15.00000	O
Bromoform	0.10753	0.12054	0.13059	0.13975	0.14916	0.16043	AVG		0.13467		14.2926	15.00000	O
Isopropylbenzene	2.06255	1.96718	2.06812	2.02880	1.89041	1.66388	AVG		1.94682		7.90704	15.00000	O
Bromobenzene	0.48100	0.47550	0.50025	0.49503	0.48431	0.48446	AVG		0.48676		1.88618	15.00000	O
N-Propylbenzene	2.55991	2.43164	2.58121	2.46531	2.26507	1.88739	AVG		2.36509		10.9824	15.00000	O
1,1,2,2-Tetrachloroethane	0.50707	0.51049	0.54291	0.53537	0.52643	0.56404	AVG		0.53105		4.00971	15.00000	O
1,3,5-Trimethylbenzene	1.78511	1.71397	1.85083	1.83176	1.75367	1.56727	AVG		1.75044		5.86975	15.00000	O
2-Chlorotoluene	1.46431	1.43003	1.52220	1.49751	1.43293	1.34408	AVG		1.44851		4.31916	15.00000	O
1,2,3-Trichloropropane	0.42668	0.44586	0.45533	0.45139	0.44145	0.46830	AVG		0.44817		3.12255	15.00000	O
4-Chlorotoluene	1.56837	1.53212	1.63450	1.59779	1.52801	1.42547	AVG		1.54771		4.66284	15.00000	O
tert-Butylbenzene	1.60781	1.55659	1.68770	1.67870	1.63991	1.53486	AVG		1.61759		3.89112	15.00000	O
1,2,4-Trimethylbenzene	1.81232	1.80089	1.88760	1.85931	1.78662	1.63191	AVG		1.79644		4.96017	15.00000	O
P-Isopropyltoluene	1.82125	1.84341	1.94913	1.93066	1.86558	1.71080	AVG		1.85347		4.62550	15.00000	O
1,3-Dichlorobenzene	0.96646	0.95072	0.98396	0.99425	0.98117	0.95300	AVG		0.97159		1.82144	15.00000	O
1,4-Dichlorobenzene	1.03099	0.97442	1.02183	1.00796	0.99500	0.95950	AVG		0.99828		2.76231	15.00000	O
N-Butylbenzene	2.03224	1.91092	2.03730	1.99227	1.89906	1.69307	AVG		1.92748		6.69508	15.00000	O
sec-Butylbenzene	2.35725	2.25542	2.40114	2.32631	2.24630	1.98457	AVG		2.26183		6.55252	15.00000	O
1,2-Dichlorobenzene	0.91975	0.90998	0.94890	0.95103	0.95226	0.91691	AVG		0.93314		2.09629	15.00000	O
1,2-Dibromo-3-Chloropropane	0.10633	0.10330	0.12199	0.12600	0.12802	0.13731	AVG		0.12049		10.9366	15.00000	O
1,3,5-Trichlorobenzene	0.64550	0.63924	0.68555	0.65499	0.68423	0.67808	AVG		0.66460		3.08791	15.00000	O
Hexachlorobutadiene	0.42273	0.40119	0.41814	0.42368	0.38782	0.37102	AVG		0.40410		5.30288	15.00000	O
1,2,4-Trichlorobenzene	0.76253	0.76505	0.81865	0.78058	0.72970	0.66816	AVG		0.75411		6.77187	15.00000	O
Naphthalene	1.87773	1.89681	1.97382	1.87830	1.70684	1.44936	AVG		1.79714		10.6551	15.00000	O
1,2,3-Trichlorobenzene	0.72062	0.73695	0.76092	0.74114	0.69336	0.63785	AVG		0.71514		6.16709	15.00000	O
Methyl Acetate	0.25863	0.25516	0.27599	0.23933	0.21357	0.24791	AVG		0.24843		8.45746	15.00000	O
Methylcyclohexane	0.49886	0.51736	0.55756	0.59664	0.60469	0.61043	AVG		0.56426		8.43846	15.00000	O
Dibromofluoromethane	0.25991	0.24312	0.26883	0.30556	0.29647	0.29284	AVG		0.27779		8.74216	15.00000	

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-W
Lab File IDs : W3148.D W3147.D W3146.D W3145.D W3150.D W3149.D **Column ID:**
Calibration Date(s): 30-JUN-15 09:53 30-JUN-15 12:34

1,2-Dichloroethane-D4	0.37054	0.33612	0.37232	0.40711	0.40688	0.39460	AVG		0.38126		7.16902	15.00000	
Toluene-D8	0.66908	0.61838	0.66885	0.77273	0.73262	0.68985	AVG		0.69192		7.82373	15.00000	
P-Bromofluorobenzene	0.26894	0.25127	0.26941	0.31179	0.31689	0.32275	AVG		0.29018		10.49584	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-w.i\W063015.b\W3151A.D
Report Date: 01-Jul-2015 11:54

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: WG165742-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-w.i\W063015.b\W826SB05.m
Misc Info: WG165742,WG165742-4

Client SDG: WG165742
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: LCS
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	66.5	132.95*	80-120
	2 Chloromethane	50.0	65.3	130.69*	80-120
	3 Vinyl chloride	50.0	57.7	115.38	80-120
	4 Bromomethane	50.0	59.6	119.12	80-120
	5 Chloroethane	50.0	71.0	141.92*	80-120
	6 Trichlorofluoromet	50.0	60.0	119.92	80-120
	7 Diethyl Ether	50.0	52.4	104.85	80-120
	8 Tertiary-butyl alc	250	265	105.93	80-120
	9 1,1-Dichloroethene	50.0	56.2	112.49	80-120
	10 Carbon Disulfide	50.0	56.1	112.28	80-120
	11 Freon-113	50.0	55.6	111.15	80-120
	12 Iodomethane	50.0	45.6	91.17	80-120
	13 Acrolein	250	286	114.45	80-120
	14 Methylene Chloride	50.0	44.5	89.06	80-120
	15 Acetone	50.0	56.2	112.48	80-120
	16 Isobutyl Alcohol	1000	1020	101.73	80-120
	17 trans-1,2-Dichloro	50.0	53.4	106.91	80-120
	18 Allyl Chloride	50.0	52.0	104.02	80-120
	19 Methyl tert-butyl	100	114	113.60	80-120
	20 Acetonitrile	500	530	105.92	80-120
	21 Di-isopropyl ether	50.0	55.1	110.16	80-120
	22 Chloroprene	50.0	53.4	106.82	80-120
	23 Propionitrile	500	542	108.44	80-120
	24 Methacrylonitrile	500	541	108.21	80-120
	25 1,1-Dichloroethane	50.0	56.8	113.67	80-120
	26 Acrylonitrile	250	271	108.52	80-120
	27 Ethyl tertiary-but	50.0	54.2	108.31	80-120
	28 Vinyl Acetate	50.0	63.1	126.14*	80-120
	29 cis-1,2-Dichloroet	50.0	51.1	102.17	80-120
M	30 1,2-Dichloroethyle	100	104	104.54	80-120
	31 Methyl Methacrylat	50.0	49.8	99.56	80-120
	32 2,2-Dichloropropan	50.0	58.6	117.27	80-120
	33 Bromochloromethane	50.0	53.4	106.74	80-120
	34 Chloroform	50.0	53.5	106.96	80-120
	35 Carbon Tetrachlori	50.0	55.0	110.08	80-120
	36 Tetrahydrofuran	50.0	54.1	108.17	80-120
	38 1,1,1-Trichloroeth	50.0	54.3	108.61	80-120
	39 1,1-Dichloropropen	50.0	54.8	109.56	80-120
	40 2-Butanone	50.0	53.9	107.72	80-120
	41 Benzene	50.0	52.8	105.64	80-120

Data File: \\target_server\gg\chem\gcms-w.i\W063015.b\W3151A.D
Report Date: 01-Jul-2015 11:54

	SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
	43 Cyclohexane	50.0	56.6	113.28	80-120
	44 Ethyl Methacrylate	50.0	50.4	100.89	80-120
	46 Tertiary-amyl meth	50.0	55.7	111.39	80-120
	47 1,2-Dichloroethane	50.0	53.0	105.98	80-120
	48 Trichloroethene	50.0	53.3	106.64	80-120
	50 Dibromomethane	50.0	52.2	104.43	80-120
	51 1,2-Dichloropropan	50.0	52.4	104.85	80-120
	52 Bromodichlorometha	50.0	54.9	109.89	80-120
	53 cis-1,3-dichloropr	50.0	56.1	112.14	80-120
	54 1,4-Dioxane	1000	1090	109.41	80-120
	56 2-Chloroethylviny	50.0	0.00	*	80-120
	57 Toluene	50.0	53.2	106.35	80-120
	58 4-methyl-2-pentano	50.0	56.3	112.68	80-120
	59 Tetrachloroethene	50.0	53.9	107.75	80-120
	60 trans-1,3-Dichloro	50.0	59.5	119.10	80-120
	61 1,1,2-Trichloroeth	50.0	52.1	104.14	80-120
	62 Dibromochlorometha	50.0	55.8	111.64	80-120
	63 1,3-Dichloropropan	50.0	51.6	103.25	80-120
	64 1,2-Dibromoethane	50.0	52.1	104.26	80-120
	65 2-Hexanone	50.0	57.3	114.53	80-120
	67 Chlorobenzene	50.0	53.5	106.93	80-120
	152 1-Chlorohexane	50.0	56.6	113.27	80-120
	68 Ethylbenzene	50.0	53.7	107.38	80-120
	69 1,1,1,2-Tetrachlor	50.0	52.8	105.67	80-120
M	70 Xylenes (total)	150	161	107.46	80-120
	71 m+p-Xylenes	100	108	107.66	80-120
	72 o-Xylene	50.0	53.5	107.05	80-120
	73 Styrene	50.0	55.5	111.06	80-120
	74 Bromoform	50.0	55.7	111.38	80-120
	75 Isopropylbenzene	50.0	55.4	110.77	80-120
	77 cis-1,4-Dichloro-2	50.0	54.1	108.18	80-120
	78 trans-1,4-Dichloro	50.0	54.3	108.56	80-120
	79 Bromobenzene	50.0	52.9	105.81	80-120
	80 N-Propylbenzene	50.0	56.7	113.36	80-120
	81 1,1,2,2-Tetrachlor	50.0	51.8	103.63	80-120
	82 1,3,5-Trimethylben	50.0	53.5	106.92	80-120
	83 2-Chlorotoluene	50.0	54.9	109.84	80-120
	84 1,2,3-Trichloropro	50.0	52.2	104.38	80-120
	85 4-Chlorotoluene	50.0	54.8	109.56	80-120
	86 tert-Butylbenzene	50.0	55.5	110.93	80-120
	87 Pentachloroethane	50.0	53.8	107.58	80-120
	88 1,2,4-Trimethylben	50.0	55.0	110.03	80-120
	89 P-Isopropyltoluene	50.0	56.2	112.42	80-120
	90 1,3-Dichlorobenzen	50.0	54.0	108.08	80-120
	92 1,4-Dichlorobenzen	50.0	53.3	106.66	80-120
	93 N-Butylbenzene	50.0	56.2	112.33	80-120
	94 sec-Butylbenzene	50.0	56.0	111.92	80-120
	95 1,2-Dichlorobenzen	50.0	53.9	107.85	80-120
	96 1,2-Dibromo-3-Chlo	50.0	57.2	114.41	80-120
	97 1,3,5-Trichloroben	50.0	54.9	109.86	80-120
	98 Hexachlorobutadien	50.0	54.6	109.23	80-120
	99 1,2,4-Trichloroben	50.0	54.8	109.71	80-120
	100 1,2,3-Trimethylben	50.0	54.7	109.46	80-120
	101 Naphthalene	50.0	58.3	116.63	80-120

Data File: \\target_server\gg\chem\gcms-w.i\W063015.b\W3151A.D
Report Date: 01-Jul-2015 11:54

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	53.8	107.58	80-120
103 Methyl Acetate	50.0	53.1	106.21	80-120
104 Methylcyclohexane	50.0	57.9	115.85	80-120
M 153 Total Alkylbenzene	350	389	111.13	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/kg	AMOUNT RECOVERED ug/kg	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	54.0	108.04	64-130
$ 45 1,2-Dichloroethane	50.0	54.0	108.01	58-134
$ 55 Toluene-D8	50.0	53.4	106.85	67-118
$ 76 P-Bromofluorobenze	50.0	53.6	107.27	47-119

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

Organics Vial Prep Log

Methods: SW8260 SW8015 ME DEP 4.2.17 MA DEP VPH

Date	Analyst	Vial Number	Vial + Preservative (g)	Vial + Preservative + Sample (g)	Sample Weight (g)	Preservative		Preservative Volume (mL)		Sample Name	Comments
5/29/15	DEN	88760	34.93	40.44	5.51	DI / MEOH	NaHSO4	5	10	SI4291-1 D	
		88761	35.26			DI / MEOH	NaHSO4	5	10		
		88762	34.66	40.77	6.11	DI / MEOH	NaHSO4	5	10	SI4463-1 C	
		88763	35.16	37.44	2.28	DI / MEOH	NaHSO4	5	10	SI4463-1 B	
		88764	34.91			DI / MEOH	NaHSO4	5	10		
		88765	34.92	41.90	6.98	DI / MEOH	NaHSO4	5	10	SI4291-8 B	
		88766	34.58			DI / MEOH	NaHSO4	5	10		
		88767	35.03			DI / MEOH	NaHSO4	5	10		
		88768	35.30	41.56	6.26	DI / MEOH	NaHSO4	5	10	SI4615-1 C	
		88769	34.83	41.55	6.72	DI / MEOH	NaHSO4	5	10	SI4615-1 B	
		88770	35.24	42.01	6.77	DI / MEOH	NaHSO4	5	10	SI4463-5 D	
		88771	35.26	43.39	8.13	DI / MEOH	NaHSO4	5	10	SI4463-5C	
		88772	35.28	41.24	5.96	DI / MEOH	NaHSO4	5	10	SI4463-5 B	
		88773	34.69	38.88	4.19	DI / MEOH	NaHSO4	5	10	SI4291-3 B	
		88774	35.[illegible]16			DI / MEOH	NaHSO4	5	10		
		88775	35.12	40.57	5.45	DI / MEOH	NaHSO4	5	10	SI4291-3 C	
		88776	35.15	35.33	0.18	DI / MEOH	NaHSO4	5	10	SI4110-3 A	TB
		88777	35.32			DI / MEOH	NaHSO4	5	10		
		88778	35.22			DI / MEOH	NaHSO4	5	10		
		88779	35.25			DI / MEOH	NaHSO4	5	10		

40 mL Vial Lot # 032315 - 3AVF
MeOH Lot #:
NaSO4 Lot #: BCB H606,22 ✓

DI Preservative = Deionized Water +Stirbar
NaHSO4 Preservative = 20% NaSO4 Solution + stirbar

Katahdin Analytical Services 0000063

KATAHDIN ANALYTICAL SERVICES

Organics Vial Prep Log

Methods: SW8260 SW8015 ME DEP 4.2.17 MA DEP VPH

Date	Analyst	Vial Number	Vial + Preservative (g)	Vial + Preservative + Sample (g)	Sample Weight (g)	Preservative	Preservative Volume (mL)	Sample Name	Comments
6/9/15	DJP	89160	34.94			DI / MEOH / NaHSO4	5 / 10		
		89161	34.92	39.37	4.45	DI / MEOH / NaHSO4	5 / 10	SI4015-2C	
		89162	34.85	39.72	4.87	DI / MEOH / NaHSO4	5 / 10	SI4015-2D	
		89163	35.04			DI / MEOH / NaHSO4	5 / 10		
		89164	34.90			DI / MEOH / NaHSO4	5 / 10		
		89165	35.01			DI / MEOH / NaHSO4	5 / 10		
		89166	35.17			DI / MEOH / NaHSO4	5 / 10		
		89167	33.96			DI / MEOH / NaHSO4	5 / 10		
		89168	35.15			DI / MEOH / NaHSO4	5 / 10		
		89169	35.04			DI / MEOH / NaHSO4	5 / 10		
6.17.15	DEW	89170	34.86			DI / MEOH / NaHSO4	5 / 10		
		89171	35.11			DI / MEOH / NaHSO4	5 / 10		
		89172	35.28			DI / MEOH / NaHSO4	5 / 10		
		89173	35.15			DI / MEOH / NaHSO4	5 / 10		
		89174	35.22			DI / MEOH / NaHSO4	5 / 10		
		89175	35.04			DI / MEOH / NaHSO4	5 / 10		
		89176	34.80	34.98	0.18	DI / MEOH / NaHSO4	5 / 10	SI4615-3B	TB
		89177	35.17			DI / MEOH / NaHSO4	5 / 10		
		89178	35.04			DI / MEOH / NaHSO4	5 / 10		
		89179	33.15			DI / MEOH / NaHSO4	5 / 10		

40 mL Vial Lot # 032315-3AVF
MeOH Lot #: DM417
NaSO4 Lot #: ~~BCB1606 22~~ 066282

DI Preservative = Deionized Water +Stirbar
NaHSO4 Preservative = 20% NaSO4 Solution + stirbar

Katahdin Analytical Services 0000064

KATAHDIN ANALYTICAL SERVICES

GCMS-W INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06/30/15 9:30

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB -10	W8190	1	-1	V0ABFBSL							Y	~~RECEIVE~~		
VSTD050W30A	W3145	1	1	W8260B05							Y	06/30/15 REC		WG165742-4
VSTD020W30A	46	1	2								Y			-3
VSTD010W30A	47	1	3								Y			-2
VSTD005W30A	48	1	4								Y			-1
VSTD200W30A	49	1	5								Y			-6
VSTD100W30A	50	1	6								Y			-5
LCSA -8	51	1	7								Y			-7
VBLKA	52	1	8								N			
VBLKB -9	53	1	9								Y			Acetone CL Pal
SI4615-3 B	54	1	10			X			X		Y			~~3ISL~~ 07/01/15 REC
SI4463-5RA2 D	55	1	11								Y			1ISL 2SSA 3SSL
SI4615-1 B	56	1	12								Y			3ISL 2SSA 3SSL
1 -1RA C	57	1	13								Y			4ISL 2SSA 3SSL
Rinse	58	1	14								N			
Rinse	59	1	15								N			17:49
Rinse	60	1	16								N			
Rinse	61	1	17								N			
														07/01/15 REC

STANDARD	CODE
BFB	V9879
CAL. STD.	V9910 V9911
LCS/MS MIX	V9912
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9914
SS MIX	V9915

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM	EPA 624
(heated purge)	EPA 524

QAMS562

0000084

Katahdin Analytical Services 0000065

SPLP VOLATILE DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4615

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SITE 4TS-SEE2-PT	SI4615-2DL		88.3		88.9		98.5		93.7	
Laboratory Control S	WG165787-1		95.5		95.9		97.3		100.	
Method Blank Sample	WG165787-2		88.1		89.0		98.2		94.6	
SPLP Blank	WG165787-5		87.2		89.0		97.7		94.4	

		QC Limits
DCA	1,2-DICHLOROETHANE-D4	70-120
BFB	P-BROMOFLUOROBENZENE	75-120
DBF	DIBROMOFLUOROMETHANE	85-115
TOL	TOLUENE-D8	85-120

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 4
Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : P1721.D
Instrument ID : GCMS-P
Heated Purge : No

SDG : SI4615
Lab Sample ID : WG165787-2
Date Analyzed : 01-JUL-15
Time Analyzed : 11:47

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165787-1	P1718.D	07/01/15	10:03
SPLP Blank	WG165787-5	P1722.D	07/01/15	12:14
SITE 4TS-SEE2-PT	SI4615-2DL	P1727.D	07/01/15	14:25

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165787-2
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: P1721.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165787

Analysis Date: 01-JUL-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 02-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165787-2
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: P1721.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165787

Analysis Date: 01-JUL-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 02-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
M+P-Xylenes	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Xylenes (Total)	U	1.5	ug/L	1	3	3.0	0.25	1.5
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
Bromochloromethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
1,2,3-Trichloropropane	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,2-dibromo-3-chloropropane	U	0.50	ug/L	1	1	1.0	0.50	0.50
P-Bromofluorobenzene		88.1	%					
Toluene-d8		94.6	%					
1,2-Dichloroethane-d4		98.2	%					
Dibromofluoromethane		89.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165787-5
Client ID: SPLP Blank
Project:
SDG: SI4615
Lab File ID: P1722.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165787

Analysis Date: 01-JUL-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 02-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride	U	12.	ug/L	5	5	25.	5.6	12.
Acetone	U	12.	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12.	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12.	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12.	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165787-5
Client ID: SPLP Blank
Project:
SDG: SI4615
Lab File ID: P1722.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165787

Analysis Date: 01-JUL-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 02-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		87.2	%					
Toluene-d8		94.4	%					
1,2-Dichloroethane-d4		97.7	%					
Dibromofluoromethane		89.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165787-1
Client ID: LCS
Project:
SDG: SI4615
LCS File ID: P1718.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165787

Analysis Date: 01-JUL-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 02-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Dichlorodifluoromethane	113.	50.0	56.3	ug/L	30-155
Chloromethane	110.	50.0	55.0	ug/L	40-125
Vinyl Chloride	102.	50.0	50.8	ug/L	50-145
Bromomethane	98.6	50.0	49.3	ug/L	30-145
Chloroethane	120.	50.0	59.9	ug/L	60-135
Trichlorofluoromethane	114.	50.0	57.1	ug/L	60-145
1,1-Dichloroethene	105.	50.0	52.5	ug/L	70-130
Carbon Disulfide	107.	50.0	53.4	ug/L	35-160
Freon-113	103.	50.0	51.5	ug/L	73-126
Methylene Chloride	100.	50.0	50.0	ug/L	55-140
Acetone	111.	50.0	55.5	ug/L	40-140
trans-1,2-Dichloroethene	110.	50.0	55.1	ug/L	60-140
Methyl tert-butyl Ether	106.	100.	106.	ug/L	65-125
1,1-Dichloroethane	109.	50.0	54.7	ug/L	70-135
cis-1,2-Dichloroethene	93.6	50.0	46.8	ug/L	70-125
Chloroform	104.	50.0	51.9	ug/L	65-135
1,1,1-Trichloroethane	110.	50.0	54.9	ug/L	65-130
2-Butanone	102.	50.0	51.0	ug/L	30-150
Cyclohexane	100.	50.0	50.2	ug/L	71-133
Carbon Tetrachloride	120.	50.0	59.9	ug/L	65-140
Benzene	102.	50.0	51.1	ug/L	80-120
1,2-Dichloroethane	114.	50.0	57.2	ug/L	70-130
Trichloroethene	102.	50.0	51.2	ug/L	70-125
1,2-Dichloropropane	103.	50.0	51.4	ug/L	75-125
Bromodichloromethane	109.	50.0	54.3	ug/L	75-120
cis-1,3-Dichloropropene	109.	50.0	54.6	ug/L	70-130
Toluene	102.	50.0	51.2	ug/L	75-120
4-Methyl-2-Pentanone	114.	50.0	56.8	ug/L	60-135
trans-1,3-Dichloropropene	120.	50.0	59.8	ug/L	55-140
1,1,2-Trichloroethane	102.	50.0	51.2	ug/L	75-125
Tetrachloroethene	108.	50.0	54.0	ug/L	45-150
Dibromochloromethane	110.	50.0	55.1	ug/L	60-135
2-Hexanone	111.	50.0	55.7	ug/L	55-130
Chlorobenzene	104.	50.0	51.8	ug/L	80-120
Ethylbenzene	103.	50.0	51.7	ug/L	75-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165787-1
Client ID: LCS
Project:
SDG: SI4615
LCS File ID: P1718.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: EME
Extraction Method: SW846 5030
Lab Prep Batch: WG165787

Analysis Date: 01-JUL-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 02-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
1,2-Dibromoethane	105.	50.0	52.7	ug/L	80-120
M+P-Xylenes	108.	100.	108.	ug/L	75-130
o-Xylene	107.	50.0	53.4	ug/L	80-120
Xylenes (Total)	107.	150.	161.	ug/L	89-116
Styrene	109.	50.0	54.7	ug/L	65-135
Bromoform	116.	50.0	58.1	ug/L	70-130
Isopropylbenzene	109.	50.0	54.7	ug/L	75-125
1,1,2,2-Tetrachloroethane	99.6	50.0	49.8	ug/L	65-130
1,3-Dichlorobenzene	103.	50.0	51.3	ug/L	75-125
1,4-Dichlorobenzene	103.	50.0	51.5	ug/L	75-125
1,2-Dichlorobenzene	105.	50.0	52.6	ug/L	70-120
1,2,4-Trichlorobenzene	104.	50.0	51.9	ug/L	65-135
Methyl Acetate	101.	50.0	50.5	ug/L	70-132
Methylcyclohexane	99.6	50.0	49.8	ug/L	73-125
Bromochloromethane	100.	50.0	50.0	ug/L	65-130
1,2,3-Trichloropropane	107.	50.0	53.5	ug/L	75-125
1,2-dibromo-3-chloropropane	125.	50.0	62.6	ug/L	50-130
P-Bromofluorobenzene	95.5				75-120
Toluene-d8	100.				85-120
1,2-Dichloroethane-d4	97.3				70-120
Dibromofluoromethane	95.9				85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB295.D
Instrument ID : GCMS-P

SDG : SI4615
Date Analyzed : 22-JUN-15
Time Analyzed : 09:27
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	22.5		
75	30.0 - 60.0% of mass 95	50.9		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	8.0		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	65.3		
175	5.0 - 9.0% of mass 174	5.6	8.62	1
176	95.0 - 101.0% of mass 174	62.5	95.70	1
177	5.0 - 9.0% of mass 176	4.3	6.90	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165276-4	P1533.D	06/22/15	10:02
Initial Calibration	WG165276-3	P1534.D	06/22/15	10:29
Initial Calibration	WG165276-2	P1535.D	06/22/15	10:55
Initial Calibration	WG165276-1	P1536.D	06/22/15	11:21
Initial Calibration	WG165276-6	P1537.D	06/22/15	11:47
Initial Calibration	WG165276-5	P1538.D	06/22/15	12:13
Independent Source	WG165276-7	P1539A.D	06/22/15	12:59

Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : PB302.D
Instrument ID : GCMS-P

SDG : SI4615
Date Analyzed : 01-JUL-15
Time Analyzed : 08:52
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	24.2		
75	30.0 - 60.0% of mass 95	54.2		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.6		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	62.1		
175	5.0 - 9.0% of mass 174	5.1	8.19	1
176	95.0 - 101.0% of mass 174	59.7	96.10	1
177	5.0 - 9.0% of mass 176	4.0	6.65	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165787-4	P1717.D	07/01/15	09:15
Laboratory Control S	WG165787-1	P1718.D	07/01/15	10:03
Method Blank Sample	WG165787-2	P1721.D	07/01/15	11:47
SPLP Blank	WG165787-5	P1722.D	07/01/15	12:14
SITE 4TS-SEE2-PT	SI4615-2DL	P1727.D	07/01/15	14:25

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165276-4
Lab File ID : P1533.D

SDG: SI4615
Analytical Date: 06/22/15 10:02
Instrument ID: GCMS-P

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	409293		8.72		766451		9.57		699533		13.93	
	Upper Limit	818586		9.22		1532902		10.07		1399066		14.43	
	Lower Limit	204646.5		8.22		383225.5		9.07		349766.5		13.43	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165787-4	353150		8.72		628510		9.58		587222		13.93	
Laboratory Control S	WG165787-1	356046		8.72		649490		9.58		586179		13.93	
Method Blank Sample	WG165787-2	359862		8.72		654999		9.58		587916		13.94	
SPLP Blank	WG165787-5	356382		8.72		642666		9.58		576283		13.93	
SITE 4TS-SEE2-PT	SI4615-2DL	348636		8.72		633312		9.58		564340		13.93	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165276-4
Lab File ID : P1533.D

SDG: SI4615
Analytical Date: 06/22/15 10:02
Instrument ID: GCMS-P

		1,4-DICHLOROBENZENE-D4			
		Area	#	RT	#
	Std .	376902		16.92	
	Upper Limit	753804		17.42	
	Lower Limit	188451		16.42	
Client Sample ID	Lab Sample ID				
Continuing Calibrati	WG165787-4	330845		16.93	
Laboratory Control S	WG165787-1	327917		16.93	
Method Blank Sample	WG165787-2	321940		16.92	
SPLP Blank	WG165787-5	320822		16.93	
SITE 4TS-SEE2-PT	SI4615-2DL	313225		16.93	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-2DL
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: P1727.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 01-JUL-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165787

Analysis Date: 01-JUL-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 02-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
Chloromethane	U	5.0	ug/L	5	2	10.	1.8	5.0
Vinyl Chloride	U	5.0	ug/L	5	2	10.	1.2	5.0
Bromomethane	U	5.0	ug/L	5	2	10.	2.4	5.0
Chloroethane	U	5.0	ug/L	5	2	10.	2.8	5.0
Trichlorofluoromethane	U	5.0	ug/L	5	2	10.	1.2	5.0
1,1-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Carbon Disulfide	U	2.5	ug/L	5	1	5.0	1.2	2.5
Freon-113	U	2.5	ug/L	5	1	5.0	1.6	2.5
Methylene Chloride		170	ug/L	5	5	25.	5.6	12.
Acetone	U	12	ug/L	5	5	25.	11.	12.
trans-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Methyl tert-butyl Ether	U	2.5	ug/L	5	1	5.0	1.8	2.5
1,1-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
cis-1,2-Dichloroethene	U	2.5	ug/L	5	1	5.0	1.0	2.5
Chloroform	U	2.5	ug/L	5	1	5.0	1.6	2.5
1,1,1-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
2-Butanone	U	12	ug/L	5	5	25.	6.6	12.
Cyclohexane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Carbon Tetrachloride	U	2.5	ug/L	5	1	5.0	1.1	2.5
Benzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,2-Dichloroethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/L	5	1	5.0	1.4	2.5
1,2-Dichloropropane	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromodichloromethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
cis-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	0.95	2.5
Toluene	U	2.5	ug/L	5	1	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12	ug/L	5	5	25.	6.6	12.
trans-1,3-Dichloropropene	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,1,2-Trichloroethane	U	2.5	ug/L	5	1	5.0	1.6	2.5
Tetrachloroethene	U	2.5	ug/L	5	1	5.0	2.0	2.5
Dibromochloromethane	U	2.5	ug/L	5	1	5.0	1.5	2.5
2-Hexanone	U	12	ug/L	5	5	25.	8.5	12.
Chlorobenzene	U	2.5	ug/L	5	1	5.0	1.1	2.5
Ethylbenzene	U	2.5	ug/L	5	1	5.0	1.0	2.5

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-2DL
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: P1727.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 01-JUL-15
Extracted By: EME
Extraction Method: 5030/1312
Lab Prep Batch: WG165787

Analysis Date: 01-JUL-15
Analyst: EME
Analysis Method: SW846 8260C
Matrix: AQ
% Solids: NA
Report Date: 02-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
1,2-Dibromoethane	U	2.5	ug/L	5	1	5.0	1.1	2.5
M+P-Xylenes	U	5.0	ug/L	5	2	10.	3.0	5.0
o-Xylene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Xylenes (Total)	U	7.5	ug/L	5	3	15.	1.2	7.5
Styrene	U	2.5	ug/L	5	1	5.0	1.2	2.5
Bromoform	U	2.5	ug/L	5	1	5.0	1.2	2.5
Isopropylbenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/L	5	1	5.0	1.9	2.5
1,3-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.3	2.5
1,4-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	1.2	2.5
1,2-Dichlorobenzene	U	2.5	ug/L	5	1	5.0	0.75	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/L	5	1	5.0	1.8	2.5
Methyl Acetate	U	3.8	ug/L	5	1	5.0	2.6	3.8
Methylcyclohexane	U	2.5	ug/L	5	1	5.0	1.5	2.5
Bromochloromethane	U	2.5	ug/L	5	1	5.0	1.0	2.5
1,2,3-Trichloropropane	U	2.5	ug/L	5	1	5.0	0.95	2.5
1,2-dibromo-3-chloropropane	U	2.5	ug/L	5	1	5.0	2.5	2.5
P-Bromofluorobenzene		88.3	%					
Toluene-d8		93.7	%					
1,2-Dichloroethane-d4		98.5	%					
Dibromofluoromethane		88.9	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1536.D P1535.D P1534.D P1533.D P1538.D P1537.D **Column ID:**
Calibration Date(s): 22-JUN-15 10:02 22-JUN-15 12:13

	Level 1 1.0000	Level 2 5.0000	Level 3 20.0000	Level 4 50.0000	Level 5 100.0000	Level 6 200.0000	Crv New	b	m1	m2	%RSD	Max %RSD	
Dichlorodifluoromethane	0.71991	0.64793	0.65273	0.68867	0.71376	0.67358	AVG		0.68276		4.43040	15.00000	O
Chloromethane	1.05365	0.91418	0.91249	0.96518	0.96130	1.04364	AVG		0.97507		6.28640	15.00000	O
Vinyl chloride	0.67640	0.69866	0.69303	0.72668	0.76449	0.73236	AVG		0.71527		4.47691	15.00000	O
Bromomethane	2161	12281	50033	141413	345778	617776	LNR	0.02370	0.38031		0.99741	0.99000	O
Chloroethane	4765	22347	93465	235608	315080	500563	QUA	0.01805	1.01089	1.91194	0.99228	0.99000	O
Trichlorofluoromethane	1.05539	0.88132	0.89902	0.95662	0.88002	1.03352	AVG		0.95098		8.19060	15.00000	O
1,1-Dichloroethene	0.48383	0.49724	0.50562	0.51835	0.52337	0.55233	AVG		0.51346		4.63801	15.00000	O
Carbon Disulfide	1.91590	1.70298	1.81864	1.96791	1.96121	1.92880	AVG		1.88257		5.47164	15.00000	O
Freon-113	0.33779	0.31231	0.31048	0.31669	0.35641	0.33078	AVG		0.32741		5.44557	15.00000	O
Methylene Chloride	10315	31973	122218	287284	603269	1149174	LNR	-0.01408	0.69234		0.99993	0.99000	O
Acetone	0.22360	0.22286	0.22696	0.23345	0.24087	0.22396	AVG		0.22862		3.13073	15.00000	O
trans-1,2-Dichloroethene	0.54343	0.52928	0.53499	0.56174	0.56553	0.54736	AVG		0.54706		2.62564	15.00000	O
Methyl tert-butyl ether	1.49918	1.68350	1.79965	1.82931	1.89366	1.57188	AVG		1.71286		9.05113	15.00000	O
1,1-Dichloroethane	1.06962	1.05046	1.06445	1.05825	1.08594	1.04684	AVG		1.06259		1.33895	15.00000	O
cis-1,2-Dichloroethene	0.67154	0.64001	0.67597	0.66289	0.69061	0.67474	AVG		0.66929		2.52869	15.00000	O
Bromochloromethane	0.24614	0.25963	0.26684	0.26946	0.26022	0.25866	AVG		0.26016		3.12325	15.00000	O
Chloroform	1.13466	1.05314	1.08559	1.08617	1.09400	1.06096	AVG		1.08575		2.64962	15.00000	O
Carbon Tetrachloride	0.32974	0.34745	0.34149	0.36054	0.37367	0.35926	AVG		0.35203		4.44040	15.00000	O
1,1,1-Trichloroethane	0.87532	0.86723	0.90337	0.92499	0.94220	0.89080	AVG		0.90065		3.21088	15.00000	O
2-Butanone	0.25440	0.29325	0.29957	0.28998	0.30535	0.26034	AVG		0.28381		7.48252	15.00000	O
Benzene	1.29935	1.27451	1.29079	1.26836	1.27648	1.14955	AVG		1.25984		4.38327	15.00000	O
Cyclohexane	0.98260	0.94842	0.95244	0.96567	1.05404	0.95588	AVG		0.97651		4.08590	15.00000	O
1,2-Dichloroethane	0.49124	0.46409	0.48123	0.47081	0.45223	0.42609	AVG		0.46428		4.96877	15.00000	O
Trichloroethene	0.34335	0.32343	0.31989	0.31552	0.31620	0.30400	AVG		0.32040		4.06165	15.00000	O
1,2-Dichloropropane	0.32962	0.30581	0.31078	0.32033	0.32915	0.31738	AVG		0.31885		3.01328	15.00000	O
Bromodichloromethane	0.44768	0.42917	0.45277	0.46246	0.47078	0.45642	AVG		0.45321		3.14144	15.00000	O
cis-1,3-dichloropropene	0.46154	0.46912	0.51024	0.52965	0.55257	0.54056	AVG		0.51061		7.40581	15.00000	O
Toluene	0.84808	0.84328	0.83629	0.82510	0.84155	0.77551	AVG		0.82830		3.26300	15.00000	O
4-methyl-2-pentanone	0.25780	0.31011	0.33323	0.32280	0.32342	0.26174	AVG		0.30152		11.00487	15.00000	O
Tetrachloroethene	0.25186	0.24707	0.24160	0.24821	0.25657	0.24433	AVG		0.24827		2.15612	15.00000	O
trans-1,3-Dichloropropene	0.35641	0.40434	0.44234	0.46434	0.48052	0.46569	AVG		0.43561		10.78859	15.00000	O
1,1,2-Trichloroethane	0.24237	0.24575	0.25185	0.25225	0.25727	0.24739	AVG		0.24948		2.14196	15.00000	O
Dibromochloromethane	0.33125	0.33355	0.34399	0.35992	0.37268	0.36521	AVG		0.35110		4.92462	15.00000	O
1,2-Dibromoethane	0.25951	0.27529	0.29079	0.29902	0.30821	0.29705	AVG		0.28831		6.18963	15.00000	O
2-Hexanone	0.19410	0.23510	0.24878	0.24944	0.25714	0.21350	AVG		0.23301		10.51204	15.00000	O
Chlorobenzene	1.02910	0.98113	0.99287	0.97261	0.97917	0.89287	AVG		0.97462		4.60027	15.00000	O
Ethylbenzene	0.53946	0.53046	0.54708	0.52878	0.54353	0.50523	AVG		0.53242		2.84106	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-P
Lab File IDs : P1536.D P1535.D P1534.D **Column ID:**
P1533.D P1538.D P1537.D **Calibration Date(s):** 22-JUN-15 10:02
22-JUN-15 12:13

Xylenes (total)	+++++	+++++	+++++	+++++	+++++	+++++	AVG		0.000e+00		0.000e+(	15.00000	M (
m+p-Xylenes	0.67642	0.64943	0.68430	0.65681	0.63621	0.53007	AVG		0.63887		8.78523	15.00000	O
o-Xylene	0.60544	0.60584	0.68090	0.66227	0.66588	0.61354	AVG		0.63898		5.37314	15.00000	O
Styrene	1.01790	1.06902	1.18056	1.16717	1.14636	0.97868	AVG		1.09328		7.68530	15.00000	O
Bromoform	0.17783	0.19657	0.21366	0.22317	0.23477	0.22730	AVG		0.21222		10.07382	15.00000	O
Isopropylbenzene	3.03478	3.08062	3.25483	3.14588	3.04527	2.48623	AVG		3.00793		8.91525	15.00000	O
1,1,2,2-Tetrachloroethane	0.87382	0.86251	0.94110	0.90988	0.94434	0.83213	AVG		0.89396		5.06015	15.00000	O
1,2,3-Trichloropropane	0.66498	0.68672	0.73087	0.68952	0.71189	0.62763	AVG		0.68527		5.27863	15.00000	O
1,3-Dichlorobenzene	1.66015	1.52884	1.60105	1.55868	1.55689	1.36006	AVG		1.54428		6.55229	15.00000	O
1,4-Dichlorobenzene	1.74242	1.57152	1.62025	1.57991	1.58478	1.36191	AVG		1.57680		7.79816	15.00000	O
1,2-Dichlorobenzene	1.50839	1.47291	1.56665	1.50778	1.51909	1.31309	AVG		1.48132		5.92465	15.00000	O
1,2-Dibromo-3-Chloropropane	0.13637	0.15390	0.16536	0.16795	0.18308	0.16183	AVG		0.16142		9.64315	15.00000	O
1,2,4-Trichlorobenzene	0.90323	0.88225	0.96724	0.96720	1.04527	0.94973	AVG		0.95249		6.01475	15.00000	O
Methyl Acetate	0.44194	0.50779	0.50859	0.51636	0.55423	0.50870	AVG		0.50627		7.15095	15.00000	O
Methylcyclohexane	0.99301	0.93852	0.89140	0.89861	1.04239	0.91594	AVG		0.94665		6.28261	15.00000	O
Dibromofluoromethane	0.54146	0.54917	0.54382	0.55211	0.53342	0.52500	AVG		0.54083		1.86986	15.00000	
1,2-Dichloroethane-D4	0.84986	0.79987	0.78528	0.75705	0.70335	0.66171	AVG		0.75952		8.96510	15.00000	
Toluene-D8	1.12857	1.15803	1.14527	1.12648	1.07876	0.99941	AVG		1.10608		5.31517	15.00000	
P-Bromofluorobenzene	0.54037	0.52383	0.51143	0.50027	0.47926	0.46366	AVG		0.50314		5.63594	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG165276-7
Level: LOW
Data Type: MS DATA
SpikeList File: IND_CHECK4.1.spk
Sublist File: SW8260-S.sub
Method File: \\target_server\gg\chem\gcms-p.i\P062215.b\P826A09.m
Misc Info: WG165276,WG165276-4

Client SDG: WG165276
Fraction: VOA
Client Smp ID: Independent Source
Operator: EME
SampleType: INDSOURCE
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	1 Dichlorodifluorome	50.0	51.4	102.84	80-120
	2 Chloromethane	50.0	57.1	114.19	80-120
	3 Vinyl chloride	50.0	54.7	109.46	80-120
	4 Bromomethane	50.0	53.3	106.52	80-120
	5 Chloroethane	50.0	63.7	127.50*	80-120
	6 Trichlorofluoromet	50.0	52.4	104.85	80-120
	7 Diethyl Ether	50.0	55.1	110.29	80-120
	8 Tertiary-butyl alc	250	225	90.12	80-120
	9 1,1-Dichloroethene	50.0	54.8	109.53	80-120
	10 Carbon Disulfide	50.0	56.4	112.76	80-120
	11 Freon-113	50.0	53.3	106.66	80-120
	12 Iodomethane	50.0	45.6	91.19	80-120
	13 Acrolein	250	280	112.03	80-120
	14 Methylene Chloride	50.0	51.9	103.83	80-120
	15 Acetone	50.0	52.2	104.38	80-120
	16 Isobutyl Alcohol	1000	964	96.36	80-120
	17 trans-1,2-Dichloro	50.0	57.4	114.70	80-120
	18 Allyl Chloride	50.0	56.0	111.99	80-120
	19 Methyl tert-butyl	100	114	114.18	80-120
	20 Acetonitrile	500	513	102.53	80-120
	21 Di-isopropyl ether	50.0	56.2	112.38	80-120
	22 Chloroprene	50.0	55.0	109.99	80-120
	23 Propionitrile	500	555	110.99	80-120
	24 Methacrylonitrile	500	552	110.32	80-120
	25 1,1-Dichloroethane	50.0	55.0	110.01	80-120
	26 Acrylonitrile	250	275	110.14	80-120
	27 Ethyl tertiary-but	50.0	56.9	113.75	80-120
	28 Vinyl Acetate	50.0	55.0	109.90	80-120
	29 cis-1,2-Dichloroet	50.0	48.8	97.63	80-120
M	30 1,2-Dichloroethyle	100	106	106.16	80-120
	31 Methyl Methacrylat	50.0	56.3	112.64	80-120
	32 2,2-Dichloropropan	50.0	53.1	106.25	80-120
	33 Bromochloromethane	50.0	52.1	104.18	80-120
	34 Chloroform	50.0	50.9	101.74	80-120
	35 Carbon Tetrachlori	50.0	51.9	103.77	80-120
	36 Tetrahydrofuran	50.0	52.9	105.89	80-120
	38 1,1,1-Trichloroeth	50.0	52.8	105.64	80-120
	39 1,1-Dichloropropen	50.0	52.8	105.72	80-120
	40 2-Butanone	50.0	50.1	100.15	80-120
	41 Benzene	50.0	51.4	102.80	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

	SPIKE	COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
	43	Cyclohexane	50.0	49.0	98.00	80-120
	44	Ethyl Methacrylate	50.0	51.6	103.13	80-120
	46	Tertiary-amyl meth	50.0	56.6	113.21	80-120
	47	1,2-Dichloroethane	50.0	50.8	101.66	80-120
	48	Trichloroethene	50.0	50.5	101.02	80-120
	50	Dibromomethane	50.0	50.8	101.54	80-120
	51	1,2-Dichloropropan	50.0	51.4	102.77	80-120
	52	Bromodichlorometha	50.0	51.0	102.09	80-120
	53	cis-1,3-dichloropr	50.0	54.0	107.92	80-120
	54	1,4-Dioxane	1000	838	83.76	80-120
	56	2-Chloroethylvinyl	50.0	43.8	87.52	80-120
	57	Toluene	50.0	51.5	103.00	80-120
	58	4-methyl-2-pentano	50.0	54.2	108.35	80-120
	59	Tetrachloroethene	50.0	52.0	103.91	80-120
	60	trans-1,3-Dichloro	50.0	57.5	115.09	80-120
	61	1,1,2-Trichloroeth	50.0	50.8	101.67	80-120
	62	Dibromochlorometha	50.0	51.3	102.56	80-120
	63	1,3-Dichloropropan	50.0	49.1	98.19	80-120
	64	1,2-Dibromoethane	50.0	51.5	103.04	80-120
	65	2-Hexanone	50.0	53.5	107.07	80-120
	67	Chlorobenzene	50.0	51.0	101.98	80-120
	152	1-Chlorohexane	50.0	46.8	93.62	80-120
	68	Ethylbenzene	50.0	51.0	102.00	80-120
	69	1,1,1,2-Tetrachlor	50.0	52.8	105.71	80-120
M	70	Xylenes (total)	150	159	106.02	80-120
	71	m+p-Xylenes	100	106	106.27	80-120
	72	o-Xylene	50.0	52.8	105.53	80-120
	73	Styrene	50.0	54.0	107.97	80-120
	74	Bromoform	50.0	52.7	105.45	80-120
	75	Isopropylbenzene	50.0	53.9	107.85	80-120
	77	cis-1,4-Dichloro-2	50.0	49.2	98.43	80-120
	78	trans-1,4-Dichloro	50.0	54.1	108.29	80-120
	79	Bromobenzene	50.0	50.8	101.58	80-120
	80	N-Propylbenzene	50.0	55.7	111.37	80-120
	81	1,1,2,2-Tetrachlor	50.0	50.1	100.23	80-120
	82	1,3,5-Trimethylben	50.0	53.3	106.63	80-120
	83	2-Chlorotoluene	50.0	53.7	107.41	80-120
	84	1,2,3-Trichloropro	50.0	51.7	103.45	80-120
	85	4-Chlorotoluene	50.0	53.1	106.18	80-120
	86	tert-Butylbenzene	50.0	55.4	110.74	80-120
	87	Pentachloroethane	50.0	54.2	108.48	80-120
	88	1,2,4-Trimethylben	50.0	55.3	110.66	80-120
	89	P-Isopropyltoluene	50.0	53.8	107.64	80-120
	90	1,3-Dichlorobenzen	50.0	51.1	102.28	80-120
	92	1,4-Dichlorobenzen	50.0	50.5	101.04	80-120
	93	N-Butylbenzene	50.0	54.4	108.80	80-120
	94	sec-Butylbenzene	50.0	54.3	108.61	80-120
	95	1,2-Dichlorobenzen	50.0	51.7	103.42	80-120
	96	1,2-Dibromo-3-Chlo	50.0	54.6	109.25	80-120
	97	1,3,5-Trichloroben	50.0	53.0	105.99	80-120
	98	Hexachlorobutadien	50.0	52.6	105.26	80-120
	99	1,2,4-Trichloroben	50.0	51.0	101.94	80-120
	100	1,2,3-Trimethylben	50.0	54.4	108.83	80-120
	101	Naphthalene	50.0	51.3	102.70	80-120

Data File: \\target_server\gg\chem\gcms-p.i\P062215.b\P1539A.D
Report Date: 23-Jun-2015 11:39

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
102 1,2,3-Trichloroben	50.0	52.5	104.92	80-120
103 Methyl Acetate	50.0	54.5	108.94	80-120
104 Methylcyclohexane	50.0	54.5	108.95	80-120
M 153 Total Alkylbenzene	350	382	109.21	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 37 Dibromofluorometha	50.0	48.2	96.44	68-128
$ 45 1,2-Dichloroethane	50.0	45.8	91.66	67-135
$ 55 Toluene-D8	50.0	50.7	101.48	65-128
$ 76 P-Bromofluorobenze	50.0	49.1	98.15	56-133

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4615
Lab ID : WG165787-4
Analytical Date: 07/01/15 09:15
Lab File ID : P1717.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/22/15 10:02 06/22/15 12:13
Column ID:

	Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
1	Dichlorodifluoromethane	0.68276	0.68437	0.68437	0.010	0.23599	20.00000	Averaged	
2	Chloromethane	0.97507	0.87025	0.87025	0.100	-10.75063	20.00000	Averaged	
3	Vinyl chloride	0.71527	0.64713	0.64713	0.010	-9.52677	20.00000	Averaged	
4	Bromomethane	50.00000	46.55154	0.34506	0.010	-6.89692	20.00000	Linear	
5	Chloroethane	50.00000	53.15827	0.52082	0.010	6.31654	20.00000	Quadratic	
6	Trichlorofluoromethane	0.95098	1.03901	1.03901	0.010	9.25687	20.00000	Averaged	
9	1,1-Dichloroethene	0.51346	0.48898	0.48898	0.100	-4.76778	20.00000	Averaged	
10	Carbon Disulfide	1.88257	1.77144	1.77144	0.010	-5.90307	20.00000	Averaged	
11	Freon-113	0.32741	0.34626	0.34626	0.010	5.75680	20.00000	Averaged	
14	Methylene Chloride	50.00000	45.29323	0.63692	0.010	-9.41354	20.00000	Linear	
15	Acetone	0.22862	0.32945	0.32945	0.010	44.10472	20.00000	Averaged	*
17	trans-1,2-Dichloroethene	0.54706	0.52348	0.52348	0.010	-4.30896	20.00000	Averaged	
19	Methyl tert-butyl ether	1.71286	1.73424	1.73424	0.010	1.24773	20.00000	Averaged	
25	1,1-Dichloroethane	1.06259	1.05414	1.05414	0.100	-0.79554	20.00000	Averaged	
29	cis-1,2-Dichloroethene	0.66929	0.62572	0.62572	0.010	-6.50998	20.00000	Averaged	
33	Bromochloromethane	0.26016	0.24533	0.24533	0.010	-5.70051	20.00000	Averaged	
34	Chloroform	1.08575	1.09120	1.09120	0.010	0.50168	20.00000	Averaged	
35	Carbon Tetrachloride	0.35203	0.41923	0.41923	0.010	19.09084	20.00000	Averaged	
38	1,1,1-Trichloroethane	0.90065	0.96312	0.96312	0.010	6.93593	20.00000	Averaged	
40	2-Butanone	0.28381	0.34561	0.34561	0.010	21.77421	20.00000	Averaged	*
41	Benzene	1.25984	1.23720	1.23720	0.010	-1.79710	20.00000	Averaged	
43	Cyclohexane	0.97651	0.96579	0.96579	0.010	-1.09753	20.00000	Averaged	
47	1,2-Dichloroethane	0.46428	0.52714	0.52714	0.010	13.53842	20.00000	Averaged	
48	Trichloroethene	0.32040	0.30992	0.30992	0.010	-3.27068	20.00000	Averaged	
51	1,2-Dichloropropane	0.31885	0.31462	0.31462	0.010	-1.32559	20.00000	Averaged	
52	Bromodichloromethane	0.45321	0.48856	0.48856	0.010	7.79811	20.00000	Averaged	
53	cis-1,3-dichloropropene	0.51061	0.54255	0.54255	0.010	6.25553	20.00000	Averaged	
57	Toluene	0.82830	0.84689	0.84689	0.010	2.24371	20.00000	Averaged	
58	4-methyl-2-pentanone	0.30152	0.35834	0.35834	0.010	18.84363	20.00000	Averaged	
59	Tetrachloroethene	0.24827	0.25420	0.25420	0.010	2.38668	20.00000	Averaged	
60	trans-1,3-Dichloropropene	0.43561	0.48639	0.48639	0.010	11.65699	20.00000	Averaged	
61	1,1,2-Trichloroethane	0.24948	0.25060	0.25060	0.010	0.44699	20.00000	Averaged	
62	Dibromochloromethane	0.35110	0.37287	0.37287	0.010	6.19920	20.00000	Averaged	
64	1,2-Dibromoethane	0.28831	0.30442	0.30442	0.010	5.58557	20.00000	Averaged	
65	2-Hexanone	0.23301	0.29115	0.29115	0.010	24.95029	20.00000	Averaged	*
67	Chlorobenzene	0.97462	0.96148	0.96148	0.300	-1.34886	20.00000	Averaged	
68	Ethylbenzene	0.53242	0.51904	0.51904	0.010	-2.51331	20.00000	Averaged	
70	Xylenes (total)	++++	0.64645	0.64645	0.010	++++	20.00000	Averaged	*
71	m+p-Xylenes	0.63887	0.64859	0.64859	0.010	1.52053	20.00000	Averaged	
72	o-Xylene	0.63898	0.64218	0.64218	0.010	0.50046	20.00000	Averaged	
73	Styrene	1.09328	1.12139	1.12139	0.010	2.57118	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4615
Lab ID : WG165787-4
Analytical Date: 07/01/15 09:15
Lab File ID : P1717.D
Instrument ID: GCMS-P
Initial Calibration Date(s): 06/22/15 10:02 06/22/15 12:13
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
74 Bromoform	0.21222	0.23126	0.23126	0.100	8.97365	20.00000	Averaged	
75 Isopropylbenzene	3.00793	3.02646	3.02646	0.010	0.61604	20.00000	Averaged	
81 1,1,2,2-Tetrachloroethane	0.89396	0.87695	0.87695	0.300	-1.90281	20.00000	Averaged	
84 1,2,3-Trichloropropane	0.68527	0.70510	0.70510	0.010	2.89388	20.00000	Averaged	
90 1,3-Dichlorobenzene	1.54428	1.49548	1.49548	0.010	-3.16007	20.00000	Averaged	
92 1,4-Dichlorobenzene	1.57680	1.54367	1.54367	0.010	-2.10143	20.00000	Averaged	
95 1,2-Dichlorobenzene	1.48132	1.46793	1.46793	0.010	-0.90375	20.00000	Averaged	
96 1,2-Dibromo-3-Chloropropane	0.16142	0.20053	0.20053	0.010	24.23471	20.00000	Averaged	*
99 1,2,4-Trichlorobenzene	0.95249	0.96414	0.96414	0.010	1.22368	20.00000	Averaged	
103 Methyl Acetate	0.50627	0.50310	0.50310	0.010	-0.62575	20.00000	Averaged	
104 Methylcyclohexane	0.94665	0.90404	0.90404	0.010	-4.50038	20.00000	Averaged	
37 Dibromofluoromethane	0.54083	0.51267	0.51267	0.010	-5.20710	20.00000	Averaged	
45 1,2-Dichloroethane-D4	0.75952	0.74466	0.74466	0.010	-1.95633	20.00000	Averaged	
55 Toluene-D8	1.10608	1.10286	1.10286	0.010	-0.29140	20.00000	Averaged	
76 P-Bromofluorobenzene	0.50314	0.47359	0.47359	0.010	-5.87295	20.00000	Averaged	

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR SPLP - BLK

Dry Weight Determination 100% ✓ <0.5%_____ %Wet Solids ✓ EME 06305

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description: Baked Sand Homogeneous ✓ Non-homogeneous_____

1)	Weight Container I + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	____/____	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 06305

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 06305 pH of Fluid Today 7.45 Extraction Fluid Batch # DI, H2O

Extract Use Filter Paper Lot #: 102807-5057

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.
____ 100% Solids
10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)
____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste		_____g
2)	Weight Container 1 + Residue		_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)		_____g
4)	Weight of Pre-extraction Collection Device		_____g
5)	Weight of Device and Filtrate		_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/	_____6b
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))		

Pressure before Tumbling 40 Pressure after Tumbling: 40
Time Started Tumbling 1515 Time Stopped 0925 Hours Extracted 18h 10m
Room Temp @ Start 20.3 Room Temp @ End 21.3

Was pre-extracted filtrate recombined with extract _____YES _____NO
If "NO" enter volume of filtrate (6) _____
Amount of Fluid (8) _____

Analyst EME Date 06305 Rev 6/08

(K

KATAHDIN ANALYTICAL SERVICES, INC.
VOLATILE TCLP EXTRACTION BENCH SHEET FOR 514615 - 2

Dry Weight Determination 100%_____ <0.5%_____ %Wet Solids ✓

_____Refer to non-volatile TCLP extraction sheet, page #_____ for _____-_____

Sample description:_____Homogeneous_____ Non-homogeneous ✓

1)	Weight Container 1 + Residue	_____g	7)	Weight of Filter	_____g
2)	Weight Container 1 + Waste	_____g	8)	Wt of Filter and Wet Solid	_____g
3)	Weight of Waste ((2) - (1))	_____g	9)	Wt of Wet Solid Phase ((8) - (7))	_____g
4)	Weight of Container 2	_____g	10)	%Wet Solids (100*(9)/(3))	_____
5)	Weight of Container 2 and Filtrate	_____g	11)	Wt of Filter + Solid Phase Dry	_____g
6)	Wt(g)/Vol(mL) of Filtrate ((5) - (4))	___/___	12)	Wt of Solid Phase Dry ((11) - (7))	_____g
			13)	%Dry Solids (100*(12)/(3))	_____

Analyst EME Date 063015

Extraction Fluid Preparation and pH Check Fluid #1 Prepared Today_____ (Complete Prep Info Below)

Date prepared (if previously prepared) _____ Refer to Prep Info on Page_____

_____mL glacial acetic acid, manuf./lot #_____, added to 500 mL reagent water; _____mL ____N NaOH, manuf./lot #_____ added, then solution diluted to 1 L with reagent water.

Analyst EME Date 063015 pH of Fluid Today 7.45 Extraction Fluid Batch # DI #0

Extract Use Filter Paper Lot #: 102807-0097

____ <0.5% Solids (Filter adequate sample volume) _____mL Filtered.

____ 100% Solids

10 g of Waste added to 200 mL of fluid (fluid volume = 20 times wt of solid sample)

____ Free Liquid present (See Equation A for amount of waste to filter)

(A) X = Desired weight of solid phase on filter * 100/ (%Wet Solid)

1)	Weight Container 1 + Waste	_____g
2)	Weight Container 1 + Residue	_____g
3)	Weight of Waste Charged to ZHE ((1) - (2), or weighed directly into vessel)	_____g
4)	Weight of Pre-extraction Collection Device	_____g
5)	Weight of Device and Filtrate	_____g
6)	Weight ((5) - (4))/Volume (mL) of Filtrate	6a_____/_____6b
7)	_____g of Solid Phase was added to 8)_____mL of Fluid #1. ((3) - (6a)) (20 * (7a))	

Pressure before Tumbling 40 Pressure after Tumbling: 40

Time Started Tumbling 1515 Time Stopped 0925 Hours Extracted 18h 10m

Room Temp @ Start 23 Room Temp @ End 23

Was pre-extracted filtrate recombined with extract _____YES _____NO

If "NO" enter volume of filtrate (6) _____

Amount of Fluid (8) _____

Analyst EME Date 063015 Rev 6/08

KATAHDIN ANALYTICAL SERVICES

GCMS-P INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 06-22-15/ 9:27

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50 ng BFB ⑩	PB295	1	-1	VOABFBAQ							Y	EME		
VSTD050P22A ④	P1533	1	1	P826A09							Y			
020 ③	34	1	2								Y			
005 ②	35	1	3								Y			
001 ①	36	1	4								Y			
200 ⑥	37	1	5								Y			
100 ⑤	38	1	6								Y			
LCSA[VB165276] ⑧	39	1	7								Y			IND ⑦
VBLK A	40	1	8								N			
B	41	1	9								N			
C ⑨	42	1	10								Y			
SI4364-2 A	43	1	11		X		X				Y		<2	
SI4339-2 A	44	1	12					X			Y		<2	
SI4191-12RA B	45	1	13								Y		<2	
-2BA E	46	1	14								Y		<2	
-3RA D	47	1	15								Y		<2	
-6RA B	48	1	16								Y		<2	
-9RA B	49	1	17								Y		<2	
SI4336-4 A	50	1	18				X				Y		<2	
SI4339-1 A	51	1	19					X			Y		<2	
SI4364-1 A	52	1	20				X				Y		<2	19:12
Rinse	53	1	21								N			
Rinse	54	1	22								N			
Rinse	55	1	23								N			
Rinse	56	1	24								N			

06/23/15 REV

STANDARD	CODE
BFB	V9879
CAL. STD.	V9906, V9907
LCS/MS MIX	V9900
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9901
SS MIX	V9885

Circle Methods:

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS546

KATAHDIN ANALYTICAL SERVICES

GCMS-P INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 07-01-15/8:52

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	PREP METHOD 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	PH	COMMENTS
50ng BFB ③	PB302	1	-1	VOABFB4Q							Y	EME		
VSTD050P01A ④	P1717	1	1	P826A09							Y			
LCS A [W0165787] ①	18	1	2								Y			
VBLK A	19	1	3								N			
B	20	1	4								N			
C ②	21	1	5								Y			
SPLP-BLK ⑤ A	22	5	6		X				X		Y		Z	
SI4655-2 A	23	1	7								Y		<2	
SI4654-2 A	24	1	8								Y		5	
-3 A	25	1	9								Y		<2	
-4 A	26	1	10								Y		<2	
SI4615-2DL A	27	5	11								Y		Z	8→40ml
SI4655-1 A	28	1	12								Y		<2	
SI4498-1 A	29	1	13								Y		<2	
-2 A	30	1	14								Y		<2	
-3DL A	31	20	15								Y		<2	2→40ml
-4DL B	32	100	16								Y		<2	400→40ml
-5DL A	33	100	17								Y		<2	↓
-6 A	34	1	18								Y		<2	
SI4654-1 A	35	1	19								Y		<2	
SI4498-3DL2 A	36	2	20								Y		<2	20→40ml
-4DL2 B	37	10	21								Y		<2	4→40ml
-5DL2 A	38	10	22								Y		<2	↓ 19:18
Rinse	39	1	23								N			
Rinse	40	1	24								N			
Rinse x2	41-42	1	25-26								N			

STANDARD	CODE
BFB	V9879
CAL. STD.	V9910, V9911
LCS/MS MIX	V9912
EXTRAS MIX	V9908

STANDARD	CODE
IS MIX	V9913
SS MIX	V9915

~~Circle Methods:~~

SW846 8260	OLM 04.2
SW846 8260 SIM	OLC 03.2
SW846 8260 SIM (heated purge)	EPA 624
	EPA 524

QAMS546

SEMIVOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI4615

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
SITE 4TS-SEE2-PT	SI4615-1DL		0.00	D	0.00	D	0.00	D	0.00	D	0.00	D	0.00	D
Method Blank Sample	WG165723-1RA		82.1		73.4		78.2		81.9		68.9		93.6	
Laboratory Control S	WG165723-2RA		85.4		78.8		83.4		82.3		86.8		97.7	

		QC Limits
TPH	TERPHENYL-D14	30-125
NBZ	NITROBENZENE-D5	35-100
PHL	PHENOL-D6	40-100
2FP	2-FLUOROPHENOL	35-105
TBP	2,4,6-TRIBROMOPHENOL	35-125
2FBP	2-FLUOROBIPHENYL	45-105

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0930.D
Instrument ID : GCMS-U
Matrix : SL

SDG : SI4615
Lab Sample ID : WG165723-1RA
Date Extracted : 30-JUN-15
Date Analyzed : 02-JUL-15
Time Analyzed : 19:05

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
SITE 4TS-SEE2-PT	SI4615-1DL	U0905.D	06/30/15	19:56
Laboratory Control S	WG165723-2RA	U0966.D	07/06/15	18:35

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165723-1RA
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: U0930.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG165723

Analysis Date: 02-JUL-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	250	ug/Kgdrywt	1	330	330	160	250
Bis(2-Chloroethyl)Ether	U	250	ug/Kgdrywt	1	330	330	81.	250
2-Chlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
1,3-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	78.	250
1,4-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	86.	250
1,2-Dichlorobenzene	U	250	ug/Kgdrywt	1	330	330	88.	250
Benzyl Alcohol	U	500	ug/Kgdrywt	1	660	660	57.	500
2-Methylphenol	U	250	ug/Kgdrywt	1	330	330	200	250
2,2'-Oxybis(1-Chloropropane)	U	250	ug/Kgdrywt	1	330	330	89.	250
3&4-Methylphenol	U	250	ug/Kgdrywt	1	330	330	190	250
N-Nitroso-Di-N-Propylamine	U	250	ug/Kgdrywt	1	330	330	83.	250
Hexachloroethane	U	250	ug/Kgdrywt	1	330	330	96.	250
Nitrobenzene	U	250	ug/Kgdrywt	1	330	330	91.	250
Isophorone	U	250	ug/Kgdrywt	1	330	330	75.	250
2-Nitrophenol	U	250	ug/Kgdrywt	1	330	330	170	250
2,4-Dimethylphenol	U	250	ug/Kgdrywt	1	330	330	160	250
Bis(2-Chloroethoxy)Methane	U	250	ug/Kgdrywt	1	330	330	96.	250
2,4-Dichlorophenol	U	250	ug/Kgdrywt	1	330	330	150	250
1,2,4-Trichlorobenzene	U	250	ug/Kgdrywt	1	330	330	81.	250
Benzoic Acid	U	620	ug/Kgdrywt	1	820	820	340	620
4-Chloroaniline	U	250	ug/Kgdrywt	1	330	330	120	250
Hexachlorobutadiene	U	250	ug/Kgdrywt	1	330	330	83.	250
4-Chloro-3-Methylphenol	U	250	ug/Kgdrywt	1	330	330	170	250
2,4,6-Trichlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
2,4,5-Trichlorophenol	U	620	ug/Kgdrywt	1	820	820	160	620
2-Chloronaphthalene	U	250	ug/Kgdrywt	1	330	330	87.	250
2-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	75.	620
Dimethyl Phthalate	U	250	ug/Kgdrywt	1	330	330	78.	250
2,6-Dinitrotoluene	U	250	ug/Kgdrywt	1	330	330	79.	250
3-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	94.	620
2,4-Dinitrophenol	U	620	ug/Kgdrywt	1	820	820	380	620
4-Nitrophenol	U	620	ug/Kgdrywt	1	820	820	310	620
Dibenzofuran	U	250	ug/Kgdrywt	1	330	330	79.	250
2,4-Dinitrotoluene	U	250	ug/Kgdrywt	1	330	330	85.	250

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165723-1RA
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: U0930.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG165723

Analysis Date: 02-JUL-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Diethylphthalate	U	250	ug/Kgdrywt	1	330	330	80.	250
4-Chlorophenyl-Phenylether	U	250	ug/Kgdrywt	1	330	330	78.	250
4-Nitroaniline	U	620	ug/Kgdrywt	1	820	820	130	620
4,6-Dinitro-2-Methylphenol	U	620	ug/Kgdrywt	1	820	820	340	620
N-Nitrosodiphenylamine	U	250	ug/Kgdrywt	1	330	330	220	250
1,2-Diphenylhydrazine	U	500	ug/Kgdrywt	1	660	660	140	500
4-Bromophenyl-Phenylether	U	250	ug/Kgdrywt	1	330	330	85.	250
Hexachlorobenzene	U	250	ug/Kgdrywt	1	330	330	82.	250
Pentachlorophenol	U	620	ug/Kgdrywt	1	820	820	240	620
Carbazole	U	250	ug/Kgdrywt	1	330	330	110	250
Di-N-Butylphthalate	U	250	ug/Kgdrywt	1	330	330	100	250
Benzidine	U	1100	ug/Kgdrywt	1	1500	1500	100	1100
Butylbenzylphthalate	U	250	ug/Kgdrywt	1	330	330	93.	250
3,3'-Dichlorobenzidine	U	250	ug/Kgdrywt	1	330	330	110	250
Bis(2-Ethylhexyl)Phthalate	U	250	ug/Kgdrywt	1	330	330	98.	250
Di-N-Octylphthalate	U	250	ug/Kgdrywt	1	330	330	210	250
1,1'-biphenyl	U	250	ug/Kgdrywt	1	330	330	73.	250
2,6-Dichlorophenol	U	250	ug/Kgdrywt	1	330	330	160	250
Caprolactam	U	250	ug/Kgdrywt	1	330	330	140	250
2-Fluorophenol		73.4	%					
Phenol-D6		81.9	%					
Nitrobenzene-d5		78.2	%					
2-Fluorobiphenyl		82.1	%					
2,4,6-Tribromophenol		68.9	%					
Terphenyl-d14		93.6	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165723-2RA
Client ID: LCS
Project:
SDG: SI4615
LCS File ID: U0966.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG165723

Analysis Date: 06-JUL-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 10-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Phenol	74.2	3330	2470	ug/Kgdrywt	40-100
Bis(2-Chloroethyl)Ether	84.4	1670	1410	ug/Kgdrywt	40-105
2-Chlorophenol	75.7	3330	2520	ug/Kgdrywt	45-105
1,3-Dichlorobenzene	72.4	1670	1210	ug/Kgdrywt	40-100
1,4-Dichlorobenzene	73.0	1670	1220	ug/Kgdrywt	35-105
1,2-Dichlorobenzene	76.0	1670	1270	ug/Kgdrywt	45-100
Benzyl Alcohol	77.8	1670	1300	ug/Kgdrywt	20-125
2-Methylphenol	76.6	3330	2550	ug/Kgdrywt	40-105
2,2'-Oxybis(1-Chloropropane)	56.8	1670	948.	ug/Kgdrywt	20-115
3&4-Methylphenol	75.1	3330	2500	ug/Kgdrywt	40-105
N-Nitroso-Di-N-Propylamine	70.0	1670	1170	ug/Kgdrywt	40-115
Hexachloroethane	74.8	1670	1250	ug/Kgdrywt	35-110
Nitrobenzene	83.8	1670	1400	ug/Kgdrywt	40-115
Isophorone	63.5	1670	1060	ug/Kgdrywt	45-110
2-Nitrophenol	73.3	3330	2440	ug/Kgdrywt	40-110
2,4-Dimethylphenol	71.8	3330	2390	ug/Kgdrywt	30-105
Bis(2-Chloroethoxy)Methane	82.6	1670	1380	ug/Kgdrywt	45-110
2,4-Dichlorophenol	84.4	3330	2810	ug/Kgdrywt	45-110
1,2,4-Trichlorobenzene	80.8	1670	1350	ug/Kgdrywt	45-110
Benzoic Acid	28.3	3330	942.	ug/Kgdrywt	0-110
4-Chloroaniline	44.1	1670	736.	ug/Kgdrywt	10-100
Hexachlorobutadiene	81.4	1670	1360	ug/Kgdrywt	40-115
4-Chloro-3-Methylphenol	91.3	3330	3040	ug/Kgdrywt	45-115
2,4,6-Trichlorophenol	84.7	3330	2820	ug/Kgdrywt	45-110
2,4,5-Trichlorophenol	87.7	3330	2920	ug/Kgdrywt	50-110
2-Chloronaphthalene	66.5	1670	1110	ug/Kgdrywt	45-105
2-Nitroaniline	92.2	1670	1540	ug/Kgdrywt	45-120
Dimethyl Phthalate	86.8	1670	1450	ug/Kgdrywt	50-110
2,6-Dinitrotoluene	91.6	1670	1530	ug/Kgdrywt	50-110
3-Nitroaniline	62.3	1670	1040	ug/Kgdrywt	25-110
2,4-Dinitrophenol	45.0	3330	1500	ug/Kgdrywt	15-130
4-Nitrophenol	104.	3330	3460	ug/Kgdrywt	15-140
Dibenzofuran	91.6	1670	1530	ug/Kgdrywt	50-105
2,4-Dinitrotoluene	95.2	1670	1590	ug/Kgdrywt	50-115
Diethylphthalate	86.2	1670	1440	ug/Kgdrywt	50-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165723-2RA
Client ID: LCS
Project:
SDG: SI4615
LCS File ID: U0966.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG165723

Analysis Date: 06-JUL-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: NA
Report Date: 10-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
4-Chlorophenyl-Phenylether	92.2	1670	1540	ug/Kgdrywt	45-110
4-Nitroaniline	90.4	1670	1510	ug/Kgdrywt	35-115
4,6-Dinitro-2-Methylphenol	72.7	3330	2420	ug/Kgdrywt	30-135
N-Nitrosodiphenylamine	74.8	1670	1250	ug/Kgdrywt	50-115
1,2-Diphenylhydrazine	89.2	1670	1490	ug/Kgdrywt	50-110
4-Bromophenyl-Phenylether	96.4	1670	1610	ug/Kgdrywt	45-115
Hexachlorobenzene	90.4	1670	1510	ug/Kgdrywt	45-120
Pentachlorophenol	93.1	3330	3100	ug/Kgdrywt	25-120
Carbazole	92.8	1670	1550	ug/Kgdrywt	45-115
Di-N-Butylphthalate	100.	1670	1670	ug/Kgdrywt	55-110
Benzidine	39.0	3330	1300	ug/Kgdrywt	10-150
Butylbenzylphthalate	92.8	1670	1550	ug/Kgdrywt	50-125
3,3’-Dichlorobenzidine	76.9	3330	2560	ug/Kgdrywt	10-130
Bis(2-Ethylhexyl)Phthalate	95.2	1670	1590	ug/Kgdrywt	45-125
Di-N-Octylphthalate	95.8	1670	1600	ug/Kgdrywt	40-130
1,1’-biphenyl	87.4	1670	1460	ug/Kgdrywt	31-99
2,6-Dichlorophenol	92.5	3330	3080	ug/Kgdrywt	38-98
Caprolactam	40.0	1670	669.	ug/Kgdrywt	10-81
2-Fluorophenol	78.8				35-105
Phenol-D6	82.3				40-100
Nitrobenzene-d5	83.4				35-100
2-Fluorobiphenyl	85.4				45-105
2,4,6-Tribromophenol	86.8				35-125
Terphenyl-d14	97.7				30-125

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD394.D
Instrument ID : GCMS-U

SDG : SI4615
Date Analyzed : 25-JUN-15
Time Analyzed : 14:55

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	39.5		
68	Less than 2.0% of mass 69	0.5	1.39	1
69	Less than 100.0% of mass 198	38.7		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	51.6		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.3		
275	10.0 - 30.0% of mass 198	19.7		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	10.3	80.11	2
442	40.0 - 100.0% of mass 198	67.2		
443	17.0 - 23.0% of mass 442	12.9	19.20	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165447-4	U0829.D	06/25/15	15:14
Initial Calibration	WG165447-2	U0830.D	06/25/15	15:45
Initial Calibration	WG165447-3	U0831.D	06/25/15	16:13
Initial Calibration	WG165447-5	U0832.D	06/25/15	16:41
Initial Calibration	WG165447-6	U0833.D	06/25/15	17:08
Initial Calibration	WG165447-7	U0834.D	06/25/15	17:36
Independent Source	WG165447-8	U0835.D	06/25/15	18:03

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD396.D
Instrument ID : GCMS-U

SDG : SI4615
Date Analyzed : 30-JUN-15
Time Analyzed : 09:34

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	36.6		
68	Less than 2.0% of mass 69	0.5	1.31	1
69	Less than 100.0% of mass 198	34.8		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	48.0		
197	Less than 1.0% of mass 198	0.6		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	20.5		
365	1.0 - 100.0% of mass 198	2.6		
441	0.0 - 100.0% of mass 443	10.9	84.48	2
442	40.0 - 100.0% of mass 198	68.6		
443	17.0 - 23.0% of mass 442	13.0	18.87	3

1-Value is % mass 69 2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165652-2	U0883.D	06/30/15	09:53
SITE 4TS-SEE2-PT	SI4615-1DL	U0905.D	06/30/15	19:56

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD398.D
Instrument ID : GCMS-U

SDG : SI4615
Date Analyzed : 02-JUL-15
Time Analyzed : 14:31

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	31.8		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	35.1		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	47.9		
197	Less than 1.0% of mass 198	0.3		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	18.4		
365	1.0 - 100.0% of mass 198	2.1		
441	0.0 - 100.0% of mass 443	9.6	75.93	2
442	40.0 - 100.0% of mass 198	65.8		
443	17.0 - 23.0% of mass 442	12.6	19.13	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165876-4	U0921.D	07/02/15	14:51
Initial Calibration	WG165876-2	U0922.D	07/02/15	15:26
Initial Calibration	WG165876-3	U0923.D	07/02/15	15:53
Initial Calibration	WG165876-5	U0924.D	07/02/15	16:21
Initial Calibration	WG165876-6	U0925.D	07/02/15	16:49
Initial Calibration	WG165876-7	U0926.D	07/02/15	17:16
Independent Source	WG165876-8	U0927.D	07/02/15	17:44
Method Blank Sample	WG165723-1RA	U0930.D	07/02/15	19:05

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD399.D
Instrument ID : GCMS-U

SDG : SI4615
Date Analyzed : 06-JUL-15
Time Analyzed : 12:49

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.6		
68	Less than 2.0% of mass 69	0.6	1.61	1
69	Less than 100.0% of mass 198	36.6		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	48.4		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.5		
275	10.0 - 30.0% of mass 198	18.6		
365	1.0 - 100.0% of mass 198	2.2		
441	0.0 - 100.0% of mass 443	9.1	74.47	2
442	40.0 - 100.0% of mass 198	63.8		
443	17.0 - 23.0% of mass 442	12.2	19.14	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG166017-2	U0955.D	07/06/15	13:17
Laboratory Control S	WG165723-2RA	U0966.D	07/06/15	18:35

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165447-4
Lab File ID : U0829.D

SDG: SI4615
Analytical Date: 06/25/15 15:14
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	257303		4.52		1068463		5.91		456356		8.00	
	Upper Limit	514606		5.02		2136926		6.41		912712		8.50	
	Lower Limit	128651.5		4.02		534231.5		5.41		228178		7.50	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165652-2	213188		4.51		857580		5.90		492523		7.99	
SITE 4TS-SEE2-PT	SI4615-1DL	250361		4.51		961350		5.91		560464		8.00	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165447-4
Lab File ID : U0829.D

SDG: SI4615
Analytical Date: 06/25/15 15:14
Instrument ID: GCMS-U

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	Area	#	RT	Area	#	RT
	Std .	687611		9.80	417535		13.35	225441		16.31
	Upper Limit	1375222		10.30	835070		13.85	450882		16.81
	Lower Limit	343805.5		9.30	208767.5		12.85	112720.5		15.81
Client Sample ID	Lab Sample ID									
Continuing Calibrati	WG165652-2	847943		9.80	617313		13.36	360411		16.32
SITE 4TS-SEE2-PT	SI4615-1DL	743992		9.81	190346	*	13.36	83104	*	16.33

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165876-4
Lab File ID : U0921.D

SDG: SI4615
Analytical Date: 07/02/15 14:51
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	269021		4.50		1046771		5.90		602411		7.99	
	Upper Limit	538042		5.00		2093542		6.40		1204822		8.49	
	Lower Limit	134510.5		4.00		523385.5		5.40		301205.5		7.49	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165723-1RA	352784		4.51		1420969		5.90		821492		7.99	
Continuing Calibrati	WG166017-2	321542		4.49		1229965		5.89		734505		7.99	
Laboratory Control S	WG165723-2RA	393645		4.51		1495535		5.90		853006		7.98	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165876-4
Lab File ID : U0921.D

SDG: SI4615
Analytical Date: 07/02/15 14:51
Instrument ID: GCMS-U

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	944501		9.80		609561		13.34		313527		16.30	
	Upper Limit	1889002		10.30		1219122		13.84		627054		16.80	
	Lower Limit	472250.5		9.30		304780.5		12.84		156763.5		15.80	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165723-1RA	1288483		9.79		933130		13.34		434703		16.31	
Continuing Calibrati	WG166017-2	1158782		9.80		818192		13.35		430746		16.31	
Laboratory Control S	WG165723-2RA	1304464		9.79		901665		13.34		410064		16.30	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-1DL
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: U0905.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG165723

Analysis Date: 30-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 94.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Phenol	U	1200	ug/Kgdrywt	5	330	1600	730	1200
Bis(2-Chloroethyl)Ether	U	1200	ug/Kgdrywt	5	330	1600	380	1200
2-Chlorophenol	U	1200	ug/Kgdrywt	5	330	1600	770	1200
1,3-Dichlorobenzene	U	1200	ug/Kgdrywt	5	330	1600	370	1200
1,4-Dichlorobenzene	U	1200	ug/Kgdrywt	5	330	1600	400	1200
1,2-Dichlorobenzene	U	1200	ug/Kgdrywt	5	330	1600	410	1200
Benzyl Alcohol	U	2300	ug/Kgdrywt	5	660	3100	270	2300
2-Methylphenol	U	1200	ug/Kgdrywt	5	330	1600	940	1200
2,2'-Oxybis(1-Chloropropane)	U	1200	ug/Kgdrywt	5	330	1600	420	1200
3&4-Methylphenol	U	1200	ug/Kgdrywt	5	330	1600	880	1200
N-Nitroso-Di-N-Propylamine	U	1200	ug/Kgdrywt	5	330	1600	390	1200
Hexachloroethane	U	1200	ug/Kgdrywt	5	330	1600	450	1200
Nitrobenzene	U	1200	ug/Kgdrywt	5	330	1600	430	1200
Isophorone	U	1200	ug/Kgdrywt	5	330	1600	350	1200
2-Nitrophenol	U	1200	ug/Kgdrywt	5	330	1600	780	1200
2,4-Dimethylphenol	U	1200	ug/Kgdrywt	5	330	1600	780	1200
Bis(2-Chloroethoxy)Methane	U	1200	ug/Kgdrywt	5	330	1600	450	1200
2,4-Dichlorophenol	U	1200	ug/Kgdrywt	5	330	1600	700	1200
1,2,4-Trichlorobenzene	U	1200	ug/Kgdrywt	5	330	1600	380	1200
Benzoic Acid	U	2900	ug/Kgdrywt	5	820	3800	1600	2900
4-Chloroaniline	U	1200	ug/Kgdrywt	5	330	1600	560	1200
Hexachlorobutadiene	U	1200	ug/Kgdrywt	5	330	1600	390	1200
4-Chloro-3-Methylphenol	U	1200	ug/Kgdrywt	5	330	1600	780	1200
2,4,6-Trichlorophenol	U	1200	ug/Kgdrywt	5	330	1600	730	1200
2,4,5-Trichlorophenol	U	2900	ug/Kgdrywt	5	820	3800	730	2900
2-Chloronaphthalene	U	1200	ug/Kgdrywt	5	330	1600	410	1200
2-Nitroaniline	U	2900	ug/Kgdrywt	5	820	3800	350	2900
Dimethyl Phthalate	U	1200	ug/Kgdrywt	5	330	1600	370	1200
2,6-Dinitrotoluene	U	1200	ug/Kgdrywt	5	330	1600	370	1200
3-Nitroaniline	U	2900	ug/Kgdrywt	5	820	3800	440	2900
2,4-Dinitrophenol	U	2900	ug/Kgdrywt	5	820	3800	1800	2900
4-Nitrophenol	U	2900	ug/Kgdrywt	5	820	3800	1400	2900
Dibenzofuran	U	1200	ug/Kgdrywt	5	330	1600	370	1200
2,4-Dinitrotoluene	U	1200	ug/Kgdrywt	5	330	1600	400	1200
Diethylphthalate	U	1200	ug/Kgdrywt	5	330	1600	380	1200

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-1DL
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: U0905.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG165723

Analysis Date: 30-JUN-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: SL
% Solids: 94.
Report Date: 10-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
4-Chlorophenyl-Phenylether	U	1200	ug/Kgdrywt	5	330	1600	370	1200
4-Nitroaniline	U	2900	ug/Kgdrywt	5	820	3800	630	2900
4,6-Dinitro-2-Methylphenol	U	2900	ug/Kgdrywt	5	820	3800	1600	2900
N-Nitrosodiphenylamine	U	1200	ug/Kgdrywt	5	330	1600	1000	1200
1,2-Diphenylhydrazine	U	2300	ug/Kgdrywt	5	660	3100	670	2300
4-Bromophenyl-Phenylether	U	1200	ug/Kgdrywt	5	330	1600	400	1200
Hexachlorobenzene	U	1200	ug/Kgdrywt	5	330	1600	380	1200
Pentachlorophenol	U	2900	ug/Kgdrywt	5	820	3800	1100	2900
Carbazole	U	1200	ug/Kgdrywt	5	330	1600	520	1200
Di-N-Butylphthalate	U	1200	ug/Kgdrywt	5	330	1600	480	1200
Benzidine	U	5300	ug/Kgdrywt	5	1500	7000	470	5300
Butylbenzylphthalate	U	1200	ug/Kgdrywt	5	330	1600	440	1200
3,3'-Dichlorobenzidine	U	1200	ug/Kgdrywt	5	330	1600	540	1200
Bis(2-Ethylhexyl)Phthalate	U	1200	ug/Kgdrywt	5	330	1600	460	1200
Di-N-Octylphthalate	U	1200	ug/Kgdrywt	5	330	1600	990	1200
1,1'-biphenyl	U	1200	ug/Kgdrywt	5	330	1600	340	1200
2,6-Dichlorophenol	U	1200	ug/Kgdrywt	5	330	1600	780	1200
Caprolactam	U	1200	ug/Kgdrywt	5	330	1600	680	1200
2-Fluorophenol	D	0.00	%					
Phenol-D6	D	0.00	%					
Nitrobenzene-d5	D	0.00	%					
2-Fluorobiphenyl	D	0.00	%					
2,4,6-Tribromophenol	D	0.00	%					
Terphenyl-d14	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0830.D U0831.D U0829.D U0832.D U0833.D U0834.D **Column ID:**
Calibration Date(s): 25-JUN-15 15:14 25-JUN-15 17:36

	10.0000 Level 1	25.0000 Level 2	50.0000 Level 3	75.0000 Level 4	100.0000 Level 5	125.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Phenol	1.73565	1.66029	1.28142	1.49369	1.45863	1.48924	AVG		1.51982		10.54849	30.00000	O
Bis(2-Chloroethyl)ether	1.37833	1.22646	0.93995	1.11245	1.05805	1.01421	AVG		1.12157		14.12890	15.00000	O
2-Chlorophenol	1.43652	1.36225	1.13752	1.27639	1.23360	1.24664	AVG		1.28215		8.16617	15.00000	O
1,3-Dichlorobenzene	1.50661	1.43024	1.39594	1.35582	1.26773	1.26111	AVG		1.36958		6.96386	15.00000	O
1,4-Dichlorobenzene	1.45932	1.38990	1.33420	1.29895	1.21657	1.23672	AVG		1.32261		6.97352	30.00000	O
1,2-Dichlorobenzene	1.42821	1.33918	1.26566	1.19300	1.14842	1.09639	AVG		1.24514		9.96512	15.00000	O
Benzyl alcohol	0.91171	0.89551	0.86651	0.79621	0.69358	0.76853	AVG		0.82201		10.24323	15.00000	O
2-Methylphenol	1.31699	1.25904	1.27540	1.23267	1.13017	1.19786	AVG		1.23536		5.28420	15.00000	O
2,2'-Oxybis(1-chloropropane	167288	372227	837160	991768	1208204	1424321	QUA	0.05209	0.20832	0.05140	0.99772	0.99000	O
N-Nitroso-di-n-propylamine	0.94401	0.86044	0.84387	0.76341	0.73211	0.69984	AVG		0.80728		11.35027	15.00000	O
3&4-Methylphenol	1.35546	1.29970	1.32992	1.17377	1.16829	1.09755	AVG		1.23745		8.45724	15.00000	O
Hexachloroethane	0.68542	0.62127	0.61822	0.55581	0.51555	0.46702	AVG		0.57721		13.80207	15.00000	O
Nitrobenzene	0.28611	0.30369	0.30309	0.31215	0.25765	0.26482	AVG		0.28792		7.79552	15.00000	O
Isophorone	0.74029	0.60836	0.60909	0.59063	0.53912	0.56523	AVG		0.60879		11.46867	15.00000	O
2-Nitrophenol	0.20983	0.17564	0.16931	0.17394	0.16281	0.16917	AVG		0.17678		9.50129	30.00000	O
2,4-Dimethylphenol	0.39185	0.34073	0.32409	0.31706	0.27840	0.27901	AVG		0.32186		13.18706	15.00000	O
Bis(2-Chloroethoxy)methane	0.45767	0.36323	0.36003	0.36982	0.31805	0.33491	AVG		0.36728		13.18030	15.00000	O
Benzoic acid	11157	53900	185700	248040	329187	445643	QUA	0.12136	6.68958	-0.44176	0.99437	0.99000	O
2,4-Dichlorophenol	0.32884	0.27899	0.28943	0.27968	0.25605	0.26058	AVG		0.28226		9.23245	30.00000	O
2,6-Dichlorophenol	75201	128885	258054	321999	439286	561190	LNR	-0.08417	0.18333		0.99811	0.99000	O
1,2,4-Trichlorobenzene	0.32152	0.26904	0.25255	0.25150	0.22692	0.23408	AVG		0.25927		13.08685	15.00000	O
4-Chloroaniline	129161	224376	498329	565077	757141	947157	QUA	-0.02152	2.40442	0.81924	0.99947	0.99000	O
Hexachlorobutadiene	0.18145	0.16675	0.14730	0.14646	0.13744	0.13685	AVG		0.15271		11.62641	30.00000	O
Caprolactam	0.11210	0.09350	0.10186	0.09559	0.09087	0.09421	AVG		0.09802		7.96773	15.00000	O
4-Chloro-3-Methylphenol	0.35003	0.28974	0.29801	0.28115	0.25905	0.25661	AVG		0.28910		11.79489	30.00000	O
2,4,6-Trichlorophenol	0.37235	0.29750	0.38139	0.29015	0.31324	0.29151	AVG		0.32436		12.82351	30.00000	O
2,4,5-Trichlorophenol	0.40925	0.30889	0.37135	0.32092	0.35056	0.34513	AVG		0.35102		10.28741	15.00000	O
1,1'-Biphenyl	219013	360776	666529	1006048	1186068	1563856	QUA	-0.00889	0.88642	0.06231	0.99313	0.99000	O
2-Chloronaphthalene	1.21947	0.85276	1.13985	1.06334	1.16553	0.98577	AVG		1.07112		12.57223	15.00000	O
2-Nitroaniline	0.39529	0.28058	0.35275	0.37419	0.33428	0.32688	AVG		0.34400		11.64894	15.00000	O
Dimethyl Phthalate	1.37565	0.95180	1.15803	1.20586	1.06398	1.06930	AVG		1.13744		12.82194	15.00000	O
2,6-Dinitrotoluene	48383	112505	151293	257211	267782	344736	QUA	0.00576	2.79953	3.10305	0.99543	0.99000	O
3-Nitroaniline	0.29267	0.27653	0.26437	0.26869	0.26790	0.24366	AVG		0.26897		5.95310	15.00000	O
2,4-Dinitrophenol	0.14514	0.15944	0.15299	0.16683	0.14761	0.14729	AVG		0.15322		5.50775	15.00000	O
4-Nitrophenol	0.17082	0.20995	0.18567	0.18753	0.15409	0.14279	AVG		0.17514		13.94973	15.00000	O
Dibenzofuran	1.61251	1.35363	1.31330	1.25212	1.16038	1.28209	AVG		1.32900		11.54833	15.00000	O
2,4-Dinitrotoluene	0.39191	0.34551	0.32013	0.32539	0.28692	0.33108	AVG		0.33349		10.36672	15.00000	O

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0830.D U0831.D U0829.D U0832.D U0833.D U0834.D **Column ID:**
Calibration Date(s): 25-JUN-15 15:14 25-JUN-15 17:36

Diethylphthalate	1.02530	1.29609	1.07009	1.08663	0.98817	0.97850	AVG		1.07413		10.88548	15.00000	O
4-Chlorophenyl-phenylether	0.45563	0.49267	0.50478	0.41439	0.38807	0.31780	AVG		0.42889		16.40788	15.00000	W(
4-Nitroaniline	0.20481	0.28645	0.22393	0.25792	0.22746	0.22860	AVG		0.23820		12.23034	15.00000	O
4,6-Dinitro-2-Methylphenol	0.13560	0.13960	0.13180	0.12931	0.12214	0.11026	AVG		0.12812		8.24055	15.00000	O
N-Nitrosodiphenylamine	0.72031	0.63738	0.58965	0.56915	0.51676	0.52241	AVG		0.59261		12.97329	30.00000	O
1,2-Diphenylhydrazine	0.80099	0.84074	0.73154	0.73836	0.65606	0.68667	AVG		0.74240		9.29282	15.00000	O
4-Bromophenyl-phenylether	0.20698	0.19566	0.18052	0.16151	0.18169	0.17618	AVG		0.18376		8.59722	15.00000	O
Hexachlorobenzene	0.22078	0.20824	0.20155	0.17075	0.18796	0.17047	AVG		0.19329		10.61380	15.00000	O
Pentachlorophenol	23436	66646	89401	139931	155805	199840	QUA	-0.04729	9.56538	10.04917	0.99404	0.99000	O
Carbazole	1.01976	0.95398	0.78412	0.79398	0.81609	0.75357	AVG		0.85358		12.56132	15.00000	O
Di-n-butylphthalate	1.44180	1.26886	1.11111	0.89036	1.09904	0.91117	AVG		1.12039		18.83160	15.00000	W(
Benzidine	0.33480	0.42070	0.34461	0.33747	0.39027	0.29225	AVG		0.35335		12.84813	15.00000	O
Butylbenzylphthalate	0.70924	0.61988	0.62544	0.63318	0.75559	0.63914	AVG		0.66374		8.37101	15.00000	O
3,3'-Dichlorobenzidine	0.28161	0.25889	0.26689	0.24449	0.22885	0.22126	AVG		0.25033		9.22588	15.00000	O
bis(2-Ethylhexyl)phthalate	0.88103	0.81683	0.82969	0.83588	0.81512	0.85345	AVG		0.83867		2.98460	15.00000	O
Di-n-octylphthalate	2.12516	2.22825	2.31710	2.61803	2.47793	2.59468	AVG		2.39352		8.42165	30.00000	O
2-Fluorophenol	1.28455	1.20190	0.99638	1.22621	1.19867	1.19365	AVG		1.18356		8.25424	15.00000	
Phenol-D6	1.52566	1.44166	1.14947	1.36784	1.28712	1.31170	AVG		1.34724		9.68709	15.00000	
Nitrobenzene-D5	0.28611	0.31264	0.31612	0.32186	0.29122	0.30457	AVG		0.30542		4.65806	15.00000	
2-Fluorobiphenyl	1.21276	0.90415	1.02060	0.85790	0.98944	0.92998	AVG		0.98580		12.74103	15.00000	
2,4,6-Tribromophenol	0.13798	0.15685	0.14288	0.13370	0.12886	0.12934	AVG		0.13827		7.62358	15.00000	
Terphenyl-D14	0.83603	0.87134	0.74303	0.76197	0.83560	0.89897	AVG		0.82449		7.38609	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-u.i\U062515.b\U0835.D
Report Date: 08-Jul-2015 15:21

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: WG165447-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: INDcheck8270.spk
Quant Type: ISTD
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U062515.b\U8270C80.m
Misc Info: WG165447,WG165447,WG165447-4,SI4383-1

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	59.4	118.85	80-120
3 Pyridine	50.0	50.5	100.97	80-120
2 N-Nitrosodimethyla	50.0	49.7	99.41	80-120
5 2-Picoline	50.0	63.7	127.37*	80-120
6 N-Nitrosomethyleth	50.0	58.7	117.49	80-120
7 Methyl Methanesulf	50.0	48.7	97.49	80-120
9 N-Nitrosodiethylam	50.0	59.5	119.05	80-120
10 Ethyl Methanesulfo	50.0	55.9	111.73	80-120
11 Benzaldehyde	50.0	0.000	*	80-120
14 Aniline	50.0	57.5	115.05	80-120
13 Phenol	50.0	57.8	115.57	80-120
16 Bis(2-Chloroethyl)	50.0	59.9	119.73	80-120
17 2-Chlorophenol	50.0	57.6	115.26	80-120
18 1,3-Dichlorobenzen	50.0	56.8	113.52	80-120
20 1,4-Dichlorobenzen	50.0	57.0	113.92	80-120
22 Benzyl alcohol	50.0	50.8	101.71	80-120
21 1,2-Dichlorobenzen	50.0	56.1	112.24	80-120
25 2,2'-Oxybis(1-chlo	50.0	47.5	95.06	80-120
23 2-Methylphenol	50.0	56.6	113.19	80-120
26 Acetophenone	100	107	106.86	80-120
27 N-Nitrosopyrrolidi	50.0	58.0	115.97	80-120
30 N-Nitrosomorpholin	50.0	64.6	129.21*	80-120
28 N-Nitroso-di-n-pro	50.0	50.9	101.87	80-120
29 3&4-Methylphenol	50.0	57.1	114.19	80-120
32 Hexachloroethane	50.0	56.2	112.44	80-120
31 o-Toluidine	50.0	56.4	112.79	80-120
34 Nitrobenzene	50.0	63.5	126.93*	80-120
35 N-Nitrosopiperidin	50.0	59.1	118.30	80-120
36 Isophorone	50.0	54.8	109.69	80-120
37 2-Nitrophenol	50.0	54.6	109.21	80-120
38 2,4-Dimethylphenol	50.0	56.9	113.74	80-120
40 Bis(2-Chloroethoxy	50.0	47.7	95.35	80-120
39 O,O,O-Triethylphos	50.0	50.9	101.85	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	99.3	198.60*	80-120
42 2,4-Dichlorophenol	50.0	52.9	105.80	80-120
44 1,2,4-Trichloroben	50.0	55.6	111.26	80-120
46 Naphthalene	50.0	54.9	109.83	80-120
43 2,6-Dichlorophenol	50.0	69.2	138.37*	80-120
47 4-Chloroaniline	50.0	56.8	113.51	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062515.b\U0835.D
Report Date: 08-Jul-2015 15:21

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	59.6	119.29	80-120
49 Hexachlorobutadien	50.0	58.0	115.98	80-120
51 N-Nitroso-Di-N-But	50.0	56.5	113.04	80-120
53 Caprolactam	50.0	56.8	113.56	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	53.4	106.84	80-120
55 4-Chloro-3-Methylp	50.0	55.4	110.86	80-120
57 2-Methylnaphthalen	50.0	57.5	114.93	80-120
58 1-Methylnaphthalen	50.0	56.4	112.79	80-120
60 1,2,4,5-Tetrachlor	100	105	104.92	80-120
59 Hexachlorocyclopen	50.0	48.2	96.43	80-120
61 2,4,6-Trichlorophe	50.0	57.6	115.22	80-120
62 2,4,5-Trichlorophe	50.0	60.9	121.86*	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	59.8	119.61	80-120
65 1,1'-Biphenyl	50.0	65.4	130.74*	80-120
66 2-Chloronaphthalen	50.0	55.2	110.30	80-120
67 1-Chloronaphthalen	50.0	69.0	137.91*	80-120
69 2-Nitroaniline	50.0	58.5	117.06	80-120
70 1,4-Naphthoquinone	50.0	80.3	160.68*	80-120
72 Dimethyl Phthalate	50.0	56.3	112.70	80-120
73 1,3-Dinitrobenzene	50.0	52.4	104.91	80-120
75 Acenaphthylene	50.0	50.7	101.37	80-120
74 2,6-Dinitrotoluene	50.0	55.2	110.32	80-120
77 3-Nitroaniline	50.0	58.8	117.71	80-120
79 Acenaphthene	50.0	52.3	104.64	80-120
80 2,4-Dinitrophenol	50.0	57.7	115.39	80-120
83 Dibenzofuran	50.0	59.2	118.46	80-120
81 Pentachlorobenzene	50.0	57.9	115.82	80-120
82 4-Nitrophenol	50.0	62.8	125.55*	80-120
84 2,4-Dinitrotoluene	50.0	58.3	116.69	80-120
85 1-Naphthylamine	50.0	52.0	104.02	80-120
88 2-Naphthylamine	50.0	60.5	121.05*	80-120
87 2,3,4,6-Tetrachlor	50.0	55.7	111.43	80-120
89 Diethylphthalate	50.0	55.8	111.50	80-120
91 Fluorene	50.0	59.4	118.79	80-120
92 4-Chlorophenyl-phe	50.0	59.9	119.87	80-120
90 O,O-diethyl-o-2-py	50.0	64.1	128.13*	80-120
93 5-Nitro-O-Toluidin	50.0	66.4	132.78*	80-120
94 4-Nitroaniline	50.0	58.9	117.89	80-120
96 N-Nitrosodiphenyla	100	88.4	88.35	80-120
95 4,6-Dinitro-2-Meth	50.0	57.5	115.06	80-120
98 1,2-Diphenylhydraz	50.0	53.3	106.62	80-120
101 Sulfotepp	50.0	51.4	102.86	80-120
102 Diallate	50.0	54.9	109.88	80-120
103 Phorate	50.0	27.7	55.34*	80-120
105 4-Bromophenyl-phen	50.0	56.8	113.60	80-120
106 Phenacetin	50.0	54.4	108.73	80-120
104 1,3,5-Trinitrobenz	50.0	62.1	124.26*	80-120
107 Hexachlorobenzene	50.0	57.4	114.83	80-120
108 Dimethoate	50.0	59.1	118.26	80-120
109 Atrazine	50.0	21.9	43.82*	80-120
110 4-Aminobiphenyl	50.0	38.7	77.38*	80-120
111 Pentachlorophenol	50.0	70.6	141.17*	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U062515.b\U0835.D
Report Date: 08-Jul-2015 15:21

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
113 Pronamide	50.0	54.6	109.12	80-120
112 Pentachloronitrobe	50.0	56.1	112.14	80-120
116 Phenanthrene	50.0	58.9	117.80	80-120
115 Disulfoton	50.0	51.2	102.40	80-120
118 Anthracene	50.0	50.6	101.15	80-120
117 Dinoseb	50.0	59.2	118.51	80-120
119 Carbazole	50.0	53.9	107.86	80-120
120 Methyl Parathion	50.0	63.8	127.63*	80-120
121 Di-n-butylphthalat	50.0	58.0	116.02	80-120
122 Ethyl Parathion	50.0	55.5	111.05	80-120
123 4-Nitroquinoline-1	50.0	69.9	139.79*	80-120
124 Methapyrilene	50.0	24.9	49.84*	80-120
125 Isodrin	50.0	53.8	107.53	80-120
126 Fluoranthene	50.0	54.8	109.54	80-120
127 Benzidine	50.0	42.0	83.99	80-120
128 Pyrene	50.0	51.2	102.43	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	54.6	109.23	80-120
133 Chlorobenzilate	50.0	53.3	106.58	80-120
134 Famphur	50.0	0.000	*	80-120
135 3,3'-Dimethylbenzi	50.0	50.4	100.75	80-120
136 Butylbenzylphthala	50.0	54.4	108.71	80-120
137 Bis(2-ethylhexyl)a	50.0	51.1	102.24	80-120
138 2-Acetylaminofluor	50.0	55.5	110.94	80-120
140 Benzo(a)anthracene	50.0	53.4	106.85	80-120
139 3,3'-Dichlorobenzi	50.0	52.8	105.66	80-120
141 Chrysene	50.0	54.6	109.25	80-120
143 bis(2-Ethylhexyl)p	50.0	57.8	115.50	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	60.3	120.66*	80-120
147 Benzo(b)fluoranthe	50.0	53.8	107.65	80-120
146 7,12-Dimethylbenz(	50.0	56.9	113.86	80-120
148 Benzo(k)fluoranthe	50.0	58.0	116.03	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	50.8	101.54	80-120
151 3-Methylcholanthre	50.0	60.2	120.35*	80-120
152 Dibenz(a,j)acridin	50.0	50.0	99.99	80-120
153 Indeno(1,2,3-cd)py	50.0	52.6	105.25	80-120
155 Dibenzo(a,h)anthra	50.0	52.7	105.43	80-120
156 Benzo(g,h,i)peryle	50.0	51.1	102.17	80-120

SURROGATE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	35-105
$ 12 Phenol-D6	100	0.000	*	40-100
$ 33 Nitrobenzene-D5	50.0	0.000	*	35-100
$ 63 2-Fluorobiphenyl	50.0	0.000	*	45-105
$ 100 2,4,6-Tribromophe	100	0.000	*	35-125
$ 129 Terphenyl-D14	50.0	0.000	*	30-125

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0922.D U0923.D U0921.D U0924.D U0925.D U0926.D **Column ID:**
Calibration Date(s): 02-JUL-15 14:51 02-JUL-15 17:16

	Level 1 10.0000	Level 2 25.0000	Level 3 50.0000	Level 4 75.0000	Level 5 100.0000	Level 6 125.0000	Crv New	b	m1	m2	%RSD	Max %RSD	
Phenol	1.45899	1.38517	1.73212	1.41223	1.41662	1.44376	AVG		1.47482		8.72349	30.00000	O
Bis(2-Chloroethyl)ether	1.18867	1.06806	1.30514	1.00592	1.01637	0.98435	AVG		1.09475		11.55578	15.00000	O
2-Chlorophenol	1.26457	1.28326	1.50841	1.24911	1.22348	1.18780	AVG		1.28610		8.85485	15.00000	O
1,3-Dichlorobenzene	1.33444	1.39697	1.63134	1.35954	1.30454	1.25833	AVG		1.38086		9.52223	15.00000	O
1,4-Dichlorobenzene	1.36536	1.34271	1.58303	1.30832	1.26340	1.20542	AVG		1.34471		9.67133	30.00000	O
1,2-Dichlorobenzene	1.31492	1.30699	1.50780	1.25120	1.20747	1.15547	AVG		1.29064		9.47420	15.00000	O
Benzyl alcohol	0.75426	0.76579	0.92714	0.74417	0.74434	0.72157	AVG		0.77621		9.70875	15.00000	O
2-Methylphenol	1.03287	1.06576	1.29207	1.08656	1.08901	1.05793	AVG		1.10404		8.54916	15.00000	O
2,2'-Oxybis(1-chloropropane	1.41068	1.43520	1.75469	1.42276	1.37988	1.34865	AVG		1.45864		10.17234	15.00000	O
N-Nitroso-di-n-propylamine	0.73898	0.76251	0.89380	0.74235	0.71113	0.68147	AVG		0.75504		9.74525	15.00000	O
3&4-Methylphenol	1.15571	1.13060	1.44135	1.16082	1.12146	1.07839	AVG		1.18139		11.06505	15.00000	O
Hexachloroethane	0.58836	0.56970	0.66815	0.53902	0.50154	0.46866	AVG		0.55590		12.64202	15.00000	O
Nitrobenzene	0.30052	0.29592	0.34707	0.25939	0.25728	0.26015	AVG		0.28672		12.31688	15.00000	O
Isophorone	0.56288	0.55613	0.64705	0.53890	0.52483	0.52781	AVG		0.55960		8.11772	15.00000	O
2-Nitrophenol	0.17844	0.17707	0.21375	0.16938	0.17674	0.16505	AVG		0.18007		9.60949	30.00000	O
2,4-Dimethylphenol	0.32570	0.32725	0.36047	0.29847	0.29402	0.26173	AVG		0.31127		10.94215	15.00000	O
Bis(2-Chloroethoxy)methane	0.35709	0.31934	0.35952	0.32608	0.28820	0.32038	AVG		0.32844		8.12364	15.00000	O
Benzoic acid	0.11332	0.10937	0.17604	0.14645	0.14832	0.13251	AVG		0.13767		18.03725	15.00000	W(
2,4-Dichlorophenol	0.28246	0.28582	0.33354	0.28086	0.27430	0.26236	AVG		0.28655		8.53869	30.00000	O
2,6-Dichlorophenol	0.24981	0.23422	0.26236	0.20507	0.21023	0.19690	AVG		0.22643		11.66680	15.00000	O
1,2,4-Trichlorobenzene	0.29373	0.27915	0.32036	0.26099	0.25453	0.24388	AVG		0.27544		10.27968	15.00000	O
4-Chloroaniline	0.41849	0.40161	0.44002	0.35461	0.33792	0.30198	AVG		0.37577		14.05495	15.00000	O
Hexachlorobutadiene	0.17564	0.17449	0.19233	0.15605	0.13736	0.13601	AVG		0.16198		14.02384	30.00000	O
Caprolactam	0.09030	0.09054	0.10605	0.09179	0.09211	0.08918	AVG		0.09333		6.77528	15.00000	O
4-Chloro-3-Methylphenol	0.26836	0.27313	0.31041	0.25386	0.24444	0.23356	AVG		0.26396		10.26137	30.00000	O
2,4,6-Trichlorophenol	0.36896	0.34970	0.38972	0.32301	0.31502	0.31747	AVG		0.34398		8.94208	30.00000	O
2,4,5-Trichlorophenol	0.38337	0.35645	0.42822	0.33835	0.34975	0.33916	AVG		0.36588		9.47793	15.00000	O
1,1'-Biphenyl	1.26907	1.19761	1.39682	0.96861	0.95477	0.91892	AVG		1.11763		17.69245	15.00000	W(
2-Chloronaphthalene	1.26015	1.24437	1.44116	1.03925	1.20788	1.10891	AVG		1.21695		11.39929	15.00000	O
2-Nitroaniline	0.26990	0.26418	0.31360	0.26017	0.27396	0.25002	AVG		0.27197		8.09422	15.00000	O
Dimethyl Phthalate	1.25588	1.18541	1.36297	1.08237	1.09884	1.08484	AVG		1.17838		9.63246	15.00000	O
2,6-Dinitrotoluene	0.27782	0.26674	0.32337	0.24031	0.26676	0.24148	AVG		0.26942		11.28668	15.00000	O
3-Nitroaniline	0.26717	0.26944	0.32902	0.27138	0.26739	0.27678	AVG		0.28020		8.62833	15.00000	O
2,4-Dinitrophenol	0.12431	0.15357	0.19621	0.15816	0.17136	0.16286	AVG		0.16108		14.58550	15.00000	O
4-Nitrophenol	0.21018	0.20419	0.22737	0.17916	0.19213	0.17392	AVG		0.19783		10.15466	15.00000	O
Dibenzofuran	1.49552	1.36674	1.53856	1.29207	1.19434	1.22360	AVG		1.35180		10.49056	15.00000	O
2,4-Dinitrotoluene	0.37513	0.35480	0.42749	0.33909	0.33026	0.34634	AVG		0.36219		9.79277	15.00000	O

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0922.D U0923.D U0921.D **Column ID:**
U0924.D U0925.D U0926.D **Calibration Date(s):** 02-JUL-15 14:51
02-JUL-15 17:16

Diethylphthalate	1.36625	1.19972	1.32727	1.00073	1.01779	1.03808	AVG		1.15831		14.05583	15.00000	O
4-Chlorophenyl-phenylether	0.55456	0.52233	0.59259	0.43243	0.43125	0.38308	AVG		0.48604		16.92662	15.00000	W(
4-Nitroaniline	0.25323	0.25219	0.29379	0.24642	0.26092	0.24051	AVG		0.25784		7.32942	15.00000	O
4,6-Dinitro-2-Methylphenol	0.12007	0.12980	0.15769	0.12559	0.12401	0.12338	AVG		0.13009		10.67580	15.00000	O
N-Nitrosodiphenylamine	0.65761	0.60924	0.67856	0.60051	0.54334	0.50427	AVG		0.59892		11.06125	30.00000	O
1,2-Diphenylhydrazine	0.63492	0.61825	0.75073	0.58469	0.65142	0.63688	AVG		0.64615		8.68130	15.00000	O
4-Bromophenyl-phenylether	0.20081	0.18184	0.21210	0.18089	0.17324	0.17291	AVG		0.18697		8.53363	15.00000	O
Hexachlorobenzene	0.20377	0.19586	0.22173	0.18876	0.17182	0.16638	AVG		0.19139		10.73219	15.00000	O
Pentachlorophenol	0.11186	0.10258	0.12534	0.09518	0.09832	0.08278	AVG		0.10268		14.24080	30.00000	O
Carbazole	0.96662	0.88662	1.00689	0.78121	0.77969	0.72256	AVG		0.85726		13.31594	15.00000	O
Di-n-butylphthalate	1.33725	1.23217	1.34065	0.98797	1.04953	0.98643	AVG		1.15567		14.53478	15.00000	O
Benzidine	0.18618	0.26042	0.32903	0.25812	0.24421	0.21566	AVG		0.24894		19.43145	15.00000	W(
Butylbenzylphthalate	0.75632	0.67282	0.77963	0.64029	0.67574	0.67092	AVG		0.69929		7.89702	15.00000	O
3,3'-Dichlorobenzidine	0.24116	0.25503	0.31799	0.24130	0.21708	0.20903	AVG		0.24693		15.69259	15.00000	W(
bis(2-Ethylhexyl)phthalate	1.02687	0.89427	1.03700	0.84800	0.90057	0.90757	AVG		0.93572		8.27915	15.00000	O
Di-n-octylphthalate	2.75433	2.52295	3.20834	2.91459	3.46029	3.57848	AVG		3.07316		13.44036	30.00000	O
2-Fluorophenol	1.03478	1.07071	1.34890	1.11626	1.07078	1.08823	AVG		1.12161		10.20592	15.00000	
Phenol-D6	1.24664	1.29293	1.54439	1.28209	1.24543	1.23481	AVG		1.30771		9.03606	15.00000	
Nitrobenzene-D5	0.29937	0.29684	0.34754	0.28367	0.28420	0.27903	AVG		0.29844		8.49216	15.00000	
2-Fluorobiphenyl	1.14549	1.06997	1.28624	0.95986	1.01881	0.99914	AVG		1.07992		11.08444	15.00000	
2,4,6-Tribromophenol	0.15646	0.14318	0.15969	0.12437	0.12519	0.12195	AVG		0.13847		12.27313	15.00000	
Terphenyl-D14	0.87301	0.76478	0.85961	0.72608	0.74568	0.77737	AVG		0.79109		7.70452	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-u.i\U070215B.b\U0927.D
Report Date: 07-Jul-2015 10:01

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG165876-8
Level: LOW
Data Type: MS DATA
SpikeList File: INDcheck8270.spk
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U070215B.b\U8270C81.m
Misc Info: WG165876,WG165876,WG165876-4,SI4615-2

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	53.7	107.35	80-120
3 Pyridine	50.0	46.5	92.95	80-120
2 N-Nitrosodimethyla	50.0	42.5	85.05	80-120
5 2-Picoline	50.0	61.6	123.25*	80-120
6 N-Nitrosomethyleth	50.0	52.6	105.23	80-120
7 Methyl Methanesulf	50.0	45.1	90.25	80-120
9 N-Nitrosodiethylam	50.0	53.3	106.53	80-120
10 Ethyl Methanesulfo	50.0	51.0	102.08	80-120
11 Benzaldehyde	50.0	12.5	25.06*	80-120
14 Aniline	50.0	49.0	97.93	80-120
13 Phenol	50.0	47.5	94.95	80-120
16 Bis(2-Chloroethyl)	50.0	53.2	106.39	80-120
17 2-Chlorophenol	50.0	51.9	103.88	80-120
18 1,3-Dichlorobenzen	50.0	51.5	103.05	80-120
20 1,4-Dichlorobenzen	50.0	51.0	102.05	80-120
22 Benzyl alcohol	50.0	47.0	94.03	80-120
21 1,2-Dichlorobenzen	50.0	51.8	103.69	80-120
25 2,2'-Oxybis(1-chlo	50.0	44.8	89.56	80-120
23 2-Methylphenol	50.0	51.3	102.61	80-120
26 Acetophenone	100	98.4	98.38	80-120
27 N-Nitrosopyrrolidi	50.0	52.8	105.59	80-120
30 N-Nitrosomorpholin	50.0	51.3	102.59	80-120
28 N-Nitroso-di-n-pro	50.0	46.1	92.28	80-120
29 3&4-Methylphenol	50.0	51.7	103.42	80-120
32 Hexachloroethane	50.0	50.1	100.17	80-120
31 o-Toluidine	50.0	50.0	100.08	80-120
34 Nitrobenzene	50.0	53.7	107.36	80-120
35 N-Nitrosopiperidin	50.0	58.9	117.80	80-120
36 Isophorone	50.0	53.2	106.45	80-120
37 2-Nitrophenol	50.0	53.3	106.66	80-120
38 2,4-Dimethylphenol	50.0	52.3	104.59	80-120
40 Bis(2-Chloroethoxy	50.0	55.7	111.36	80-120
39 O,O,O-Triethylphos	50.0	51.5	102.94	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	102	203.20*	80-120
42 2,4-Dichlorophenol	50.0	52.5	104.94	80-120
44 1,2,4-Trichloroben	50.0	53.6	107.18	80-120
46 Naphthalene	50.0	56.0	112.09	80-120
43 2,6-Dichlorophenol	50.0	56.8	113.64	80-120
47 4-Chloroaniline	50.0	48.7	97.45	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U070215B.b\U0927.D
Report Date: 07-Jul-2015 10:01

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	54.2	108.40	80-120
49 Hexachlorobutadien	50.0	54.8	109.58	80-120
51 N-Nitroso-Di-N-But	50.0	57.1	114.26	80-120
53 Caprolactam	50.0	48.2	96.40	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	48.2	96.38	80-120
55 4-Chloro-3-Methylp	50.0	54.8	109.69	80-120
57 2-Methylnaphthalen	50.0	53.1	106.29	80-120
58 1-Methylnaphthalen	50.0	56.5	112.98	80-120
60 1,2,4,5-Tetrachlor	100	96.6	96.62	80-120
59 Hexachlorocyclopen	50.0	39.9	79.80*	80-120
61 2,4,6-Trichlorophe	50.0	54.5	109.01	80-120
62 2,4,5-Trichlorophe	50.0	53.2	106.48	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	54.8	109.70	80-120
65 1,1'-Biphenyl	50.0	50.9	101.79	80-120
66 2-Chloronaphthalen	50.0	47.6	95.12	80-120
67 1-Chloronaphthalen	50.0	54.7	109.38	80-120
69 2-Nitroaniline	50.0	51.1	102.20	80-120
70 1,4-Naphthoquinone	50.0	69.8	139.67*	80-120
72 Dimethyl Phthalate	50.0	50.7	101.41	80-120
73 1,3-Dinitrobenzene	50.0	50.2	100.36	80-120
75 Acenaphthylene	50.0	48.3	96.67	80-120
74 2,6-Dinitrotoluene	50.0	49.1	98.19	80-120
77 3-Nitroaniline	50.0	48.0	96.11	80-120
79 Acenaphthene	50.0	51.0	101.92	80-120
80 2,4-Dinitrophenol	50.0	52.6	105.29	80-120
83 Dibenzofuran	50.0	56.4	112.70	80-120
81 Pentachlorobenzene	50.0	51.2	102.39	80-120
82 4-Nitrophenol	50.0	47.6	95.22	80-120
84 2,4-Dinitrotoluene	50.0	48.4	96.79	80-120
85 1-Naphthylamine	50.0	50.6	101.14	80-120
88 2-Naphthylamine	50.0	52.3	104.54	80-120
87 2,3,4,6-Tetrachlor	50.0	49.1	98.21	80-120
89 Diethylphthalate	50.0	49.5	99.08	80-120
91 Fluorene	50.0	48.0	96.07	80-120
92 4-Chlorophenyl-phe	50.0	50.8	101.57	80-120
90 O,O-diethyl-o-2-py	50.0	52.1	104.29	80-120
93 5-Nitro-O-Toluidin	50.0	55.5	111.08	80-120
94 4-Nitroaniline	50.0	50.3	100.52	80-120
96 N-Nitrosodiphenyla	100	85.8	85.79	80-120
95 4,6-Dinitro-2-Meth	50.0	54.3	108.52	80-120
98 1,2-Diphenylhydraz	50.0	51.9	103.74	80-120
101 Sulfotepp	50.0	52.1	104.27	80-120
102 Diallate	50.0	55.0	110.11	80-120
103 Phorate	50.0	26.7	53.38*	80-120
105 4-Bromophenyl-phen	50.0	54.3	108.61	80-120
106 Phenacetin	50.0	51.9	103.87	80-120
104 1,3,5-Trinitrobenz	50.0	53.4	106.72	80-120
107 Hexachlorobenzene	50.0	54.4	108.78	80-120
108 Dimethoate	50.0	51.5	102.95	80-120
109 Atrazine	50.0	22.6	45.24*	80-120
110 4-Aminobiphenyl	50.0	45.6	91.25	80-120
111 Pentachlorophenol	50.0	59.4	118.74	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U070215B.b\U0927.D
Report Date: 07-Jul-2015 10:01

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
113 Pronamide	50.0	51.9	103.78	80-120
112 Pentachloronitrobe	50.0	53.1	106.25	80-120
116 Phenanthrene	50.0	52.0	104.03	80-120
115 Disulfoton	50.0	47.2	94.45	80-120
118 Anthracene	50.0	48.8	97.71	80-120
117 Dinoseb	50.0	58.3	116.69	80-120
119 Carbazole	50.0	51.8	103.61	80-120
120 Methyl Parathion	50.0	58.5	116.92	80-120
121 Di-n-butylphthalat	50.0	51.8	103.61	80-120
122 Ethyl Parathion	50.0	50.3	100.62	80-120
123 4-Nitroquinoline-1	50.0	56.4	112.86	80-120
124 Methapyrilene	50.0	21.7	43.40*	80-120
125 Isodrin	50.0	52.7	105.32	80-120
126 Fluoranthene	50.0	53.0	106.03	80-120
127 Benzidine	50.0	50.0	100.10	80-120
128 Pyrene	50.0	46.5	93.10	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	54.7	109.40	80-120
133 Chlorobenzilate	50.0	50.6	101.25	80-120
134 Famphur	50.0	83.9	167.74*	80-120
135 3,3'-Dimethylbenzi	50.0	67.9	135.77*	80-120
136 Butylbenzylphthala	50.0	49.5	98.92	80-120
137 Bis(2-ethylhexyl)a	50.0	44.1	88.30	80-120
138 2-Acetylaminofluor	50.0	53.8	107.63	80-120
140 Benzo(a)anthracene	50.0	50.1	100.30	80-120
139 3,3'-Dichlorobenzi	50.0	51.6	103.14	80-120
141 Chrysene	50.0	51.2	102.30	80-120
143 bis(2-Ethylhexyl)p	50.0	49.9	99.83	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	54.9	109.79	80-120
147 Benzo(b)fluoranthe	50.0	52.0	104.08	80-120
146 7,12-Dimethylbenz(	50.0	54.5	109.08	80-120
148 Benzo(k)fluoranthe	50.0	54.1	108.18	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	48.6	97.29	80-120
151 3-Methylcholanthre	50.0	56.2	112.34	80-120
152 Dibenz(a,j)acridin	50.0	42.9	85.72	80-120
153 Indeno(1,2,3-cd)py	50.0	47.0	93.91	80-120
155 Dibenzo(a,h)anthra	50.0	45.6	91.11	80-120
156 Benzo(g,h,i)peryle	50.0	45.3	90.62	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	20-110
$ 12 Phenol-D6	100	0.000	*	10-115
$ 33 Nitrobenzene-D5	50.0	0.000	*	40-110
$ 63 2-Fluorobiphenyl	50.0	0.000	*	50-110
$ 100 2,4,6-Tribromophe	100	0.000	*	40-125
$ 129 Terphenyl-D14	50.0	0.000	*	50-135

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY **SDG:** SI4615
Lab ID : WG165652-2 **Analytical Date:** 06/30/15 09:53
Lab File ID : U0883.D **Instrument ID:** GCMS-U
Initial Calibration Date(s): 06/25/15 15:14 06/25/15 17:36 **Column ID:**

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
13 Phenol	1.51982	1.60381	1.60381	0.010	5.52609	20.01000	Averaged	
16 Bis(2-Chloroethyl)ether	1.12157	1.24013	1.24013	0.010	10.57045	20.00000	Averaged	
17 2-Chlorophenol	1.28215	1.40520	1.40520	0.010	9.59658	20.00000	Averaged	
18 1,3-Dichlorobenzene	1.36958	1.42202	1.42202	0.010	3.82911	20.00000	Averaged	
20 1,4-Dichlorobenzene	1.32261	1.37561	1.37561	0.010	4.00694	20.01000	Averaged	
21 1,2-Dichlorobenzene	1.24514	1.32762	1.32762	0.010	6.62416	20.00000	Averaged	
22 Benzyl alcohol	0.82201	0.89513	0.89513	0.010	8.89546	20.00000	Averaged	
23 2-Methylphenol	1.23536	1.25945	1.25945	0.010	1.95050	20.00000	Averaged	
25 2,2'-Oxybis(1-chloropropane	50.00000	48.01814	2.49298	0.010	-3.96372	20.00000	Quadratic	
28 N-Nitroso-di-n-propylamine	0.80728	0.82610	0.82610	0.050	2.33041	20.00000	Averaged	
29 3&4-Methylphenol	1.23745	1.32537	1.32537	0.010	7.10470	20.00000	Averaged	
32 Hexachloroethane	0.57721	0.60660	0.60660	0.010	5.09105	20.00000	Averaged	
34 Nitrobenzene	0.28792	0.30213	0.30213	0.010	4.93671	20.00000	Averaged	
36 Isophorone	0.60879	0.61002	0.61002	0.010	0.20358	20.00000	Averaged	
37 2-Nitrophenol	0.17678	0.18080	0.18080	0.010	2.27338	20.01000	Averaged	
38 2,4-Dimethylphenol	0.32186	0.35017	0.35017	0.010	8.79593	20.00000	Averaged	
40 Bis(2-Chloroethoxy)methane	0.36728	0.37497	0.37497	0.010	2.09247	20.00000	Averaged	
41 Benzoic acid	50.00000	62.74630	0.17563	0.010	25.49261	20.00000	Quadratic	*
42 2,4-Dichlorophenol	0.28226	0.29384	0.29384	0.010	4.10054	20.01000	Averaged	
43 2,6-Dichlorophenol	50.00000	58.74979	0.22776	0.010	17.49957	20.00000	Linear	
44 1,2,4-Trichlorobenzene	0.25927	0.27505	0.27505	0.010	6.08543	20.00000	Averaged	
47 4-Chloroaniline	50.00000	53.06112	0.38530	0.010	6.12223	20.00000	Quadratic	
49 Hexachlorobutadiene	0.15271	0.17052	0.17052	0.010	11.66596	20.01000	Averaged	
53 Caprolactam	0.09802	0.10404	0.10404	0.010	6.14179	20.00000	Averaged	
55 4-Chloro-3-Methylphenol	0.28910	0.30291	0.30291	0.010	4.77769	20.01000	Averaged	
61 2,4,6-Trichlorophenol	0.32436	0.37936	0.37936	0.010	16.95783	20.01000	Averaged	
62 2,4,5-Trichlorophenol	0.35102	0.41017	0.41017	0.010	16.85260	20.00000	Averaged	
65 1,1'-Biphenyl	50.00000	55.05396	1.13666	0.010	10.10792	20.00000	Quadratic	
66 2-Chloronaphthalene	1.07112	1.03383	1.03383	0.010	-3.48148	20.00000	Averaged	
69 2-Nitroaniline	0.34400	0.34091	0.34091	0.010	-0.89661	20.00000	Averaged	
72 Dimethyl Phthalate	1.13744	1.22092	1.22092	0.010	7.33935	20.00000	Averaged	
74 2,6-Dinitrotoluene	50.00000	48.86158	0.25636	0.010	-2.27685	20.00000	Quadratic	
77 3-Nitroaniline	0.26897	0.28117	0.28117	0.010	4.53398	20.00000	Averaged	
80 2,4-Dinitrophenol	0.15322	0.19327	0.19327	0.050	26.14416	20.00000	Averaged	*
82 4-Nitrophenol	0.17514	0.23334	0.23334	0.050	33.23153	20.00000	Averaged	*
83 Dibenzofuran	1.32900	1.44924	1.44924	0.010	9.04715	20.00000	Averaged	
84 2,4-Dinitrotoluene	0.33349	0.37262	0.37262	0.010	11.73497	20.00000	Averaged	
89 Diethylphthalate	1.07413	1.18314	1.18314	0.010	10.14875	20.00000	Averaged	
92 4-Chlorophenyl-phenylether	0.42889	0.53405	0.53405	0.010	24.51872	20.00000	Averaged	*
94 4-Nitroaniline	0.23820	0.28555	0.28555	0.010	19.88217	20.00000	Averaged	
95 4,6-Dinitro-2-Methylphenol	0.12812	0.14174	0.14174	0.010	10.63624	20.00000	Averaged	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4615
Lab ID : WG165652-2
Analytical Date: 06/30/15 09:53
Lab File ID : U0883.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 06/25/15 15:14 06/25/15 17:36
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
96 N-Nitrosodiphenylamine	0.59261	0.60568	0.60568	0.010	2.20542	20.01000	Averaged	
98 1,2-Diphenylhydrazine	0.74240	0.63426	0.63426	0.010	-14.56623	20.00000	Averaged	
105 4-Bromophenyl-phenylether	0.18376	0.18655	0.18655	0.010	1.52200	20.00000	Averaged	
107 Hexachlorobenzene	0.19329	0.20697	0.20697	0.010	7.07755	20.00000	Averaged	
111 Pentachlorophenol	50.00000	62.65389	0.11698	0.010	25.30779	20.01000	Quadratic	*
119 Carbazole	0.85358	0.85889	0.85889	0.010	0.62184	20.00000	Averaged	
121 Di-n-butylphthalate	1.12039	1.19050	1.19050	0.010	6.25782	20.00000	Averaged	
127 Benzidine	0.35335	0.29165	0.29165	0.010	-17.46235	20.00000	Averaged	
136 Butylbenzylphthalate	0.66374	0.58803	0.58803	0.010	-11.40676	20.00000	Averaged	
139 3,3'-Dichlorobenzidine	0.25033	0.26101	0.26101	0.010	4.26364	20.00000	Averaged	
143 bis(2-Ethylhexyl)phthalate	0.83867	0.78592	0.78592	0.010	-6.28965	20.00000	Averaged	
144 Di-n-octylphthalate	2.39352	2.05861	2.05861	0.010	-13.99236	20.01000	Averaged	
8 2-Fluorophenol	1.18356	1.25350	1.25350	0.010	5.90952	20.00000	Averaged	
12 Phenol-D6	1.34724	1.41171	1.41171	0.010	4.78537	20.00000	Averaged	
33 Nitrobenzene-D5	0.30542	0.31206	0.31206	0.010	2.17514	20.00000	Averaged	
63 2-Fluorobiphenyl	0.98580	1.12950	1.12950	0.010	14.57625	20.00000	Averaged	
100 2,4,6-Tribromophenol	0.13827	0.17786	0.17786	0.010	28.63451	20.00000	Averaged	*
129 Terphenyl-D14	0.82449	0.71636	0.71636	0.010	-13.11483	20.00000	Averaged	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY **SDG:** SI4615
Lab ID : WG166017-2 **Analytical Date:** 07/06/15 13:17
Lab File ID : U0955.D **Instrument ID:** GCMS-U
Initial Calibration Date(s): 07/02/15 14:51 07/02/15 17:16 **Column ID:**

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
13 Phenol	1.47482	1.38843	1.38843	0.010	-5.85738	20.01000	Averaged	
16 Bis(2-Chloroethyl)ether	1.09475	1.01230	1.01230	0.010	-7.53146	20.00000	Averaged	
17 2-Chlorophenol	1.28610	1.21913	1.21913	0.010	-5.20768	20.00000	Averaged	
18 1,3-Dichlorobenzene	1.38086	1.30568	1.30568	0.010	-5.44467	20.00000	Averaged	
20 1,4-Dichlorobenzene	1.34471	1.28272	1.28272	0.010	-4.60967	20.01000	Averaged	
21 1,2-Dichlorobenzene	1.29064	1.20353	1.20353	0.010	-6.74973	20.00000	Averaged	
22 Benzyl alcohol	0.77621	0.72122	0.72122	0.010	-7.08514	20.00000	Averaged	
23 2-Methylphenol	1.10404	1.03514	1.03514	0.010	-6.24035	20.00000	Averaged	
25 2,2'-Oxybis(1-chloropropane	1.45864	1.36495	1.36495	0.010	-6.42330	20.00000	Averaged	
28 N-Nitroso-di-n-propylamine	0.75504	0.69319	0.69319	0.050	-8.19108	20.00000	Averaged	
29 3&4-Methylphenol	1.18139	1.12637	1.12637	0.010	-4.65735	20.00000	Averaged	
32 Hexachloroethane	0.55590	0.52658	0.52658	0.010	-5.27520	20.00000	Averaged	
34 Nitrobenzene	0.28672	0.25997	0.25997	0.010	-9.32901	20.00000	Averaged	
36 Isophorone	0.55960	0.53813	0.53813	0.010	-3.83596	20.00000	Averaged	
37 2-Nitrophenol	0.18007	0.16846	0.16846	0.010	-6.44957	20.01000	Averaged	
38 2,4-Dimethylphenol	0.31127	0.29684	0.29684	0.010	-4.63695	20.00000	Averaged	
40 Bis(2-Chloroethoxy)methane	0.32844	0.32328	0.32328	0.010	-1.56868	20.00000	Averaged	
41 Benzoic acid	0.13767	0.15046	0.15046	0.010	9.28762	20.00000	Averaged	
42 2,4-Dichlorophenol	0.28655	0.28303	0.28303	0.010	-1.22847	20.01000	Averaged	
43 2,6-Dichlorophenol	0.22643	0.20877	0.20877	0.010	-7.80185	20.00000	Averaged	
44 1,2,4-Trichlorobenzene	0.27544	0.26426	0.26426	0.010	-4.05774	20.00000	Averaged	
47 4-Chloroaniline	0.37577	0.33826	0.33826	0.010	-9.98228	20.00000	Averaged	
49 Hexachlorobutadiene	0.16198	0.15430	0.15430	0.010	-4.74040	20.01000	Averaged	
53 Caprolactam	0.09333	0.08948	0.08948	0.010	-4.12482	20.00000	Averaged	
55 4-Chloro-3-Methylphenol	0.26396	0.25442	0.25442	0.010	-3.61266	20.01000	Averaged	
61 2,4,6-Trichlorophenol	0.34398	0.32431	0.32431	0.010	-5.71841	20.01000	Averaged	
62 2,4,5-Trichlorophenol	0.36588	0.34397	0.34397	0.010	-5.98936	20.00000	Averaged	
65 1,1'-Biphenyl	1.11763	1.02559	1.02559	0.010	-8.23533	20.00000	Averaged	
66 2-Chloronaphthalene	1.21695	0.90109	0.90109	0.010	-25.95520	20.00000	Averaged	*
69 2-Nitroaniline	0.27197	0.24038	0.24038	0.010	-11.61812	20.00000	Averaged	
72 Dimethyl Phthalate	1.17838	1.09613	1.09613	0.010	-6.98030	20.00000	Averaged	
74 2,6-Dinitrotoluene	0.26942	0.24893	0.24893	0.010	-7.60392	20.00000	Averaged	
77 3-Nitroaniline	0.28020	0.24521	0.24521	0.010	-12.48808	20.00000	Averaged	
80 2,4-Dinitrophenol	0.16108	0.16596	0.16596	0.050	3.03075	20.00000	Averaged	
82 4-Nitrophenol	0.19783	0.19507	0.19507	0.050	-1.39084	20.00000	Averaged	
83 Dibenzofuran	1.35180	1.26493	1.26493	0.010	-6.42621	20.00000	Averaged	
84 2,4-Dinitrotoluene	0.36219	0.33754	0.33754	0.010	-6.80350	20.00000	Averaged	
89 Diethylphthalate	1.15831	1.04195	1.04195	0.010	-10.04532	20.00000	Averaged	
92 4-Chlorophenyl-phenylether	0.48604	0.47718	0.47718	0.010	-1.82187	20.00000	Averaged	
94 4-Nitroaniline	0.25784	0.22897	0.22897	0.010	-11.19977	20.00000	Averaged	
95 4,6-Dinitro-2-Methylphenol	0.13009	0.12862	0.12862	0.010	-1.13507	20.00000	Averaged	

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4615
Lab ID : WG166017-2
Analytical Date: 07/06/15 13:17
Lab File ID : U0955.D
Instrument ID: GCMS-U
Initial Calibration Date(s): 07/02/15 14:51 07/02/15 17:16
Column ID:

Compound	RRF/Amount	RF50	CCAL RRF50	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
96 N-Nitrosodiphenylamine	0.59892	0.55803	0.55803	0.010	-6.82709	20.01000	Averaged
98 1,2-Diphenylhydrazine	0.64615	0.57948	0.57948	0.010	-10.31726	20.00000	Averaged
105 4-Bromophenyl-phenylether	0.18697	0.17458	0.17458	0.010	-6.62433	20.00000	Averaged
107 Hexachlorobenzene	0.19139	0.17644	0.17644	0.010	-7.81066	20.00000	Averaged
111 Pentachlorophenol	0.10268	0.10898	0.10898	0.010	6.13708	20.01000	Averaged
119 Carbazole	0.85726	0.82904	0.82904	0.010	-3.29287	20.00000	Averaged
121 Di-n-butylphthalate	1.15567	1.07124	1.07124	0.010	-7.30516	20.00000	Averaged
127 Benzidine	0.24894	0.22566	0.22566	0.010	-9.35106	20.00000	Averaged
136 Butylbenzylphthalate	0.69929	0.62583	0.62583	0.010	-10.50388	20.00000	Averaged
139 3,3'-Dichlorobenzidine	0.24693	0.23552	0.23552	0.010	-4.62329	20.00000	Averaged
143 bis(2-Ethylhexyl)phthalate	0.93572	0.83774	0.83774	0.010	-10.47044	20.00000	Averaged
144 Di-n-octylphthalate	3.07316	2.46436	2.46436	0.010	-19.81029	20.01000	Averaged
8 2-Fluorophenol	1.12161	1.00956	1.00956	0.010	-9.99030	20.00000	Averaged
12 Phenol-D6	1.30771	1.23087	1.23087	0.010	-5.87617	20.00000	Averaged
33 Nitrobenzene-D5	0.29844	0.26958	0.26958	0.010	-9.67104	20.00000	Averaged
63 2-Fluorobiphenyl	1.07992	1.04450	1.04450	0.010	-3.27990	20.00000	Averaged
100 2,4,6-Tribromophenol	0.13847	0.13107	0.13107	0.010	-5.34639	20.00000	Averaged
129 Terphenyl-D14	0.79109	0.70365	0.70365	0.010	-11.05302	20.00000	Averaged

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

S/S
SON
NO GPC

KATAHDIN ANALYTICAL SERVICES, INC.

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method:	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)	SW846 3580 (OIL / WIPES)
Analytical Method:	SW846 8270 ✓	OTHER		
Standards	Surrogate IO (1): SV 2721	Spike IO (1): SIM SV 2716	Spike IO (3):	
	Surrogate ID (2):	Spike ID (2): SV 2715		
Solvents / Chemicals / Consumables	Solvent Lot # (Mecl2): DM624	Solvent Lot # (Acetone): DM724	Sodium Sulfate (granular) Lot # 29465001	
	Filter Paper Lot # (SON) 96181401	Filter Paper Lot # (KD) 96181511	Sodium Sulfate (powder) Lot # 27975002	
Misc.	Nitrogen Bath Temperature: 35°C	Sonicator Horns Tuned: AMP 40%	Balance ID: Mettler PJ400	
Prep Start Time: 10:45	Prep Stop Time: 11:20	Sox Start Time: —	Sox End Time: —	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction WPCB	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Post-GPC Tray SV8942	Comments
6-30-15	TMS	W61165723-1 W61165724-1	29.97	1mL	NR	✓	✓	—			6-30-15	KF	1mL	A1	SV-R323620
↓	↓	W61165723-2	29.95	↓	1mL	↓					↓	↓	↓	A2	SIM-R323624
↓	↓	W61165724-2	30.01	↓	↓		✓				↓	↓	↓	A3	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction WPCB	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Post-GPC Tray	Comments
6-30-15	TMS	SI46151F	33.86	1mL	NR	✓	✓	—			6-30-15	KF	5mL	C4	Strong fuel odor

Reviewed By_____ Date_____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 062575

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165447-1	50ng DFTPP	U0394	1	1	DFTPP390	2.0	~~2.0~~ JCL	OK
-4	SSTD050 U0625	U0829		2	U8270C80	1.0	~~1.0~~	✓
-2	010	30		3				✓
-3	025	31		4				✓
-5	075	32		5				✓
-6	100	33		6				✓
-7	125	34		7				✓
-8	150	35		8				OK
3550	WG165365-1	36		9				OK
	-2	37		10				OK
	-3	38		11				OK
	SI44408-15	39		12				OK
	-16	40		13				OK
	-13	41		14				1561
	-1	42		15				1561
	WG165365-4	43		16				1556 SS6T
	-5	44		17				1561 ~~DL1:2~~
	SI44408-5	45		18				1556 DL1:2
	WG165365-6	46		19				1556 SS6T
	-7	47		20				1556
	SI44408-3	48		21				1556
	-7	49		22				1556
	SI44463-1DL	50	2	23				15456 SS8,4,6T
	-3DL	51	2	24				15456 SS3,4,6T
	-5DL	52	2	25				15456 SS4T
	SI44408-9	53	1	26				1556
	-11	54		27				1556
	-12	55		28				1556 DOC
			1	29				

STANDARD	CODE	
	Me Cl2	56-63
DFTPP	52611	
CAL. STD.	52640	STK497
IS MIX	STK5001	

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 063015

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165652-1	50ng DFTPP	UD396	1	1	DFTPP390	2.0	JLM	OK
-2	SSTD050 U0630	U0883		2	U8270C80	1.0		OK
3550	WG165509-1	84		3				156↑
3550	WG165643-1	85		4				155B↑
3550	WG165509-2	86		5				OK
↓	↓ -3	87		6				OK
3550	WG165643-2	88		7				OK
	↓ -3	89		8				OK
	SI4525-1	90		9				OK
	-2	91		10				OK
	-3	92		11				156↓
	-4	93		12				OK
	-5	94		13				554↑
	-6	95		14				OK
	-7	96		15				OK
	-8	97		16				OK
	-9	98		17				OK
	-10	99		18				OK
3550	WG165723-1	U0900		19				154↑
	↓ -2	01		20				NO IS
	SI4492-7	02		21				OK
	-9	03		22				OK
	↓ -5	04		23				OK
	SI4383-1	08		27				156↓ 554↑
	SI4492-12	06		25				155B↓
	↓ -13	07	↓	26				155B↓
	SI4615-1DL	05	JLM 205	24				155B↓ 50/250
	SI4492-3	09	1	28				OOC 155B↓

STANDARD	CODE
DFTPP	52611
CAL. STD.	52640 STK4917
IS MIX	STK495201

JLM

REVIEWED AND APPROVED BY: _____

DATE: _____

DATE OF DFTPP INJECTION: 070215B

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165876-1	50ng DFTPP	UD398	1	1	DFTPP 390	2.0	JCH	OK
876-4	SSTD050 UU702	U0921		2	U8270C81	1.0		✓
-2	010	22		3				✓
3	025	23		4				✓
-5	075	24		5				✓
-6	100	25		6				✓
-7	125	26		7				✓
-8	150	27		8				OK
	WG165509-1RA	28		9				OK
	WG165643-1RA	29		10				OK
	WG165723-1RA	30		11				OK
	WG165688-1	31		12				OK
	-4	32		13				OK
	-2	33		14				OK
	-3	34		15				OK
	SI4615-2	35		16				OK
	SI4654-1	36		17				SS1 ↓
	-2	37		18				OK
	-3	38		19				OK
	SI4545-3	39		20				OK
	WG165509-4	40		21				OK
	-5	41		22				(SS6) ↓
	SI4492-3	42		23				(SS6) ↓
	-6	43		24				(SS6) ↓
	SI4545-2	44		25				(SS6) ↓ SS6 ↓
	-1	45		26				(SS6) ↓
	SI~~4615~~4492-6	46		27				—
	hellx	47-51		28				

STANDARD	CODE
DFTPP	52641
CAL. STD.	52640 STK4917
IS MIX	STK4021

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

DATE OF DFTPP INJECTION: 070615

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG166017-1	50 ng DFTPP	UD399	1	1	DFTPP390	2.0	JCM	OK
2	SSTD050 UD70L	UD955	1	2	U8270C81	1.0		OK
3990	JI4678-1DL	56	2	3				– DL1:4 100/200
	-5DL	57		4				OK
	-9DL	58		5				– 1564 DL1:5
	-13DL	59		6				– DL1:5
	-17DL	60		7				OK
	-2L	61	1	8				OK
	-1DL	62	4	9				OK 50/200
	-9DL	63	5	10				OK 50/250
	-13DL	64	5	11				OK
	MeCl2	65	1	12				—
3950	WG165723-2DL	66		13				OK
3910	JI4654-2DL	67		14				SS1

JCM 070615

STANDARD	CODE
DFTPP	52641
CAL. STD.	52640 JTK4917
IS MIX	JTK5001

REVIEWED AND APPROVED BY: _____
DATE: _____

SIM SEMIVOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** SL
Lab Code: KAS **SDG:** SI4615

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SITE 4TS-SEE2-PT	SI4615-1DL		0.00	D	0.00	D	0.00	D
Method Blank Sample	WG165724-1RA		74.5		74.1		89.5	
Laboratory Control S	WG165724-2RA		103.	*	82.5		84.7	

		QC Limits
PYR	PYRENE-D10	31-128
FLO	FLUORENE-D10	20-96
2MN	2-METHYLNAPHTHALENE-D10	19-94

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : N6959.D
Instrument ID : GCMS-N
Matrix : SL

SDG : SI4615
Lab Sample ID : WG165724-1RA
Date Extracted : 30-JUN-15
Date Analyzed : 01-JUL-15
Time Analyzed : 21:04

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
SITE 4TS-SEE2-PT	SI4615-1DL	N6932.D	06/30/15	21:17
Laboratory Control S	WG165724-2RA	N6960.D	07/01/15	21:31

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165724-1RA
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: N6959.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG165724

Analysis Date: 01-JUL-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA
Report Date: 07-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	10	ug/Kgdrywt	1	20	20.	2.6	10.
Acenaphthylene	U	10	ug/Kgdrywt	1	20	20.	1.2	10.
Acenaphthene	U	10	ug/Kgdrywt	1	20	20.	1.5	10.
Fluorene	U	10	ug/Kgdrywt	1	20	20.	3.2	10.
Phenanthrene	U	10	ug/Kgdrywt	1	20	20.	1.8	10.
Anthracene	U	10	ug/Kgdrywt	1	20	20.	1.2	10.
Fluoranthene	U	10	ug/Kgdrywt	1	20	20.	1.8	10.
Pyrene	U	10	ug/Kgdrywt	1	20	20.	2.1	10.
Benzo(a)anthracene	U	10	ug/Kgdrywt	1	20	20.	1.9	10.
Chrysene	U	10	ug/Kgdrywt	1	20	20.	1.7	10.
Benzo(b)Fluoranthene	U	10	ug/Kgdrywt	1	20	20.	2.4	10.
Benzo(k)fluoranthene	U	10	ug/Kgdrywt	1	20	20.	3.1	10.
Benzo(a)pyrene	U	10	ug/Kgdrywt	1	20	20.	3.3	10.
Indeno(1,2,3-cd)pyrene	U	10	ug/Kgdrywt	1	20	20.	1.9	10.
Dibenzo(a,h)anthracene	U	10	ug/Kgdrywt	1	20	20.	1.8	10.
Benzo(g,h,i)perylene	U	10	ug/Kgdrywt	1	20	20.	2.0	10.
2-Methylnaphthalene	U	10	ug/Kgdrywt	1	20	20.	2.2	10.
2-Methylnaphthalene-D10		74.5	%					
Fluorene-D10		74.1	%					
Pyrene-D10		89.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS Recovery Report

Client:
Lab ID: WG165724-2RA
Client ID: LCS
Project:
SDG: SI4615
LCS File ID: N6960.D

Sample Date:
Received Date:
Extract Date: 30-JUN-15
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG165724

Analysis Date: 01-JUL-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: NA
Report Date: 07-JUL-15

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Naphthalene	82.2	66.7	54.8	ug/Kgdrywt	10-129
Acenaphthylene	70.3	66.7	46.9	ug/Kgdrywt	25-94
Acenaphthene	75.0	66.7	50.0	ug/Kgdrywt	33-98
Fluorene	76.9	66.7	51.3	ug/Kgdrywt	40-92
Phenanthrene	83.2	66.7	55.5	ug/Kgdrywt	46-96
Anthracene	81.4	66.7	54.3	ug/Kgdrywt	34-96
Fluoranthene	85.4	66.7	57.0	ug/Kgdrywt	38-116
Pyrene	84.6	66.7	56.4	ug/Kgdrywt	35-111
Benzo(a)anthracene	81.8	66.7	54.6	ug/Kgdrywt	48-100
Chrysene	97.9	66.7	65.3	ug/Kgdrywt	46-101
Benzo(b)Fluoranthene	79.6	66.7	53.1	ug/Kgdrywt	53-100
Benzo(k)fluoranthene	95.6	66.7	63.8	ug/Kgdrywt	49-96
Benzo(a)pyrene	71.8	66.7	47.9	ug/Kgdrywt	61-101
Indeno(1,2,3-cd)pyrene	83.4	66.7	55.6	ug/Kgdrywt	50-105
Dibenzo(a,h)anthracene	85.4	66.7	57.0	ug/Kgdrywt	55-105
Benzo(g,h,i)perylene	84.2	66.7	56.2	ug/Kgdrywt	53-103
2-Methylnaphthalene	80.0	66.7	53.4	ug/Kgdrywt	10-152
2-Methylnaphthalene-D10	* 103.				19-94
Fluorene-D10	82.5				20-96
Pyrene-D10	84.7				31-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND958.D
Instrument ID : GCMS-N

SDG : SI4615
Date Analyzed : 23-JUN-15
Time Analyzed : 12:11

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	32.1		
68	Less than 2.0% of mass 69	0.7	1.60	1
69	Less than 100.0% of mass 198	40.7		
70	Less than 2.0% of mass 69	0.2	0.55	1
127	40.0 - 60.0% of mass 198	60.0		
197	Less than 1.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	22.8		
365	1.0 - 100.0% of mass 198	2.3		
441	0.0 - 100.0% of mass 443	11.0	73.31	2
442	40.0 - 100.0% of mass 198	78.5		
443	17.0 - 23.0% of mass 442	15.0	19.11	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165324-4	N6778.D	06/23/15	13:03
Initial Calibration	WG165324-2	N6779.D	06/23/15	13:31
Initial Calibration	WG165324-3	N6780.D	06/23/15	13:59
Initial Calibration	WG165324-5	N6781.D	06/23/15	14:27
Initial Calibration	WG165324-6	N6782.D	06/23/15	14:55
Initial Calibration	WG165324-7	N6783.D	06/23/15	15:23
Independent Source	WG165324-8	N6784.D	06/23/15	15:51

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND962.D
Instrument ID : GCMS-N

SDG : SI4615
Date Analyzed : 30-JUN-15
Time Analyzed : 10:09

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	31.0		
68	Less than 2.0% of mass 69	0.5	1.21	1
69	Less than 100.0% of mass 198	39.3		
70	Less than 2.0% of mass 69	0.2	0.51	1
127	40.0 - 60.0% of mass 198	57.2		
197	Less than 1.0% of mass 198	0.1		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	23.6		
365	1.0 - 100.0% of mass 198	2.4		
441	0.0 - 100.0% of mass 443	11.8	75.01	2
442	40.0 - 100.0% of mass 198	80.8		
443	17.0 - 23.0% of mass 442	15.7	19.44	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165645-2	N6909.D	06/30/15	10:28
SITE 4TS-SEE2-PT	SI4615-1DL	N6932.D	06/30/15	21:17

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND963.D
Instrument ID : GCMS-N

SDG : SI4615
Date Analyzed : 01-JUL-15
Time Analyzed : 15:23

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	30.2		
68	Less than 2.0% of mass 69	0.6	1.56	1
69	Less than 100.0% of mass 198	38.8		
70	Less than 2.0% of mass 69	0.2	0.46	1
127	40.0 - 60.0% of mass 198	56.6		
197	Less than 1.0% of mass 198	0.3		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	24.9		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	13.3	73.96	2
442	40.0 - 100.0% of mass 198	91.3		
443	17.0 - 23.0% of mass 442	17.9	19.65	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165774-4	N6949.D	07/01/15	16:38
Initial Calibration	WG165774-2	N6950.D	07/01/15	17:06
Initial Calibration	WG165774-3	N6951.D	07/01/15	17:34
Initial Calibration	WG165774-5	N6952.D	07/01/15	18:03
Initial Calibration	WG165774-6	N6953.D	07/01/15	18:31
Initial Calibration	WG165774-7	N6954.D	07/01/15	18:59
Independent Source	WG165774-8	N6955.D	07/01/15	19:27
Method Blank Sample	WG165724-1RA	N6959.D	07/01/15	21:04
Laboratory Control S	WG165724-2RA	N6960.D	07/01/15	21:31

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI4615
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	88250		4.40		265068		5.77		116126		7.83	
	Upper Limit	176500		4.90		530136		6.27		232252		8.33	
	Lower Limit	44125		3.90		132534		5.27		58063		7.33	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165645-2	80156		4.29		245252		5.65		112359		7.71	
SITE 4TS-SEE2-PT	SI4615-1DL	68373		4.30		204114		5.66		83245		7.71	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165324-4
Lab File ID : N6778.D

SDG: SI4615
Analytical Date: 06/23/15 13:03
Instrument ID: GCMS-N

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	156981		9.62		75747		12.97		36246		15.72	
	Upper Limit	313962		10.12		151494		13.47		72492		16.22	
	Lower Limit	78490.5		9.12		37873.5		12.47		18123		15.22	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165645-2	155035		9.50		67106		12.81		33041		15.46	
SITE 4TS-SEE2-PT	SI4615-1DL	97773		9.50		49806		12.82		21887		15.48	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165774-4
Lab File ID : N6949.D

SDG: SI4615
Analytical Date: 07/01/15 16:38
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	87594		4.26		261730		5.63		113044		7.68	
	Upper Limit	175188		4.76		523460		6.13		226088		8.18	
	Lower Limit	43797		3.76		130865		5.13		56522		7.18	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165724-1RA	81078		4.26		236239		5.63		108844		7.69	
Laboratory Control S	WG165724-2RA	81351		4.26		235791		5.62		107558		7.68	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165774-4
Lab File ID : N6949.D

SDG: SI4615
Analytical Date: 07/01/15 16:38
Instrument ID: GCMS-N

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	168425		9.47		100807		12.77		66317		15.43	
	Upper Limit	336850		9.97		201614		13.27		132634		15.93	
	Lower Limit	84212.5		8.97		50403.5		12.27		33158.5		14.93	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165724-1RA	156534		9.47		83463		12.78		43262		15.45	
Laboratory Control S	WG165724-2RA	163006		9.46		103921		12.77		62131		15.43	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-1DL
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: N6932.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 30-JUN-15
Extracted By: JMS
Extraction Method: SW846 3550
Lab Prep Batch: WG165724

Analysis Date: 30-JUN-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: SL
% Solids: 94.
Report Date: 07-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	94	ug/Kgdrywt	10	20	190	24.	94.
Acenaphthylene	U	94	ug/Kgdrywt	10	20	190	11.	94.
Acenaphthene	J	60	ug/Kgdrywt	10	20	190	14.	94.
Fluorene	J	100	ug/Kgdrywt	10	20	190	30.	94.
Phenanthrene		440	ug/Kgdrywt	10	20	190	17.	94.
Anthracene	J	170	ug/Kgdrywt	10	20	190	11.	94.
Fluoranthene	J	100	ug/Kgdrywt	10	20	190	17.	94.
Pyrene		1200	ug/Kgdrywt	10	20	190	20.	94.
Benzo(a)anthracene		300	ug/Kgdrywt	10	20	190	18.	94.
Chrysene		540	ug/Kgdrywt	10	20	190	16.	94.
Benzo(b)Fluoranthene		200	ug/Kgdrywt	10	20	190	22.	94.
Benzo(k)fluoranthene	U	94	ug/Kgdrywt	10	20	190	29.	94.
Benzo(a)pyrene		300	ug/Kgdrywt	10	20	190	31.	94.
Indeno(1,2,3-cd)pyrene	J	74	ug/Kgdrywt	10	20	190	18.	94.
Dibenzo(a,h)anthracene	J	48	ug/Kgdrywt	10	20	190	17.	94.
Benzo(g,h,i)perylene	J	180	ug/Kgdrywt	10	20	190	19.	94.
2-Methylnaphthalene	U	94	ug/Kgdrywt	10	20	190	21.	94.
2-Methylnaphthalene-D10	D	0.00	%					
Fluorene-D10	D	0.00	%					
Pyrene-D10	D	0.00	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6779.D N6780.D N6778.D **Column ID:**
N6781.D N6782.D N6783.D **Calibration Date(s):** 23-JUN-15 13:03
23-JUN-15 15:23

	0.200000(Level 1	0.500000(Level 2	1.0000 Level 3	3.0000 Level 4	7.0000 Level 5	10.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Naphthalene	1.14657	0.96464	1.00870	0.97468	0.94567	0.88692	AVG		0.98786		8.86019	15.00000	O
2-Methylnaphthalene	60910	143297	275312	724702	1544385	2210172	LNR	-0.25197	0.63698		0.99737	0.99000	O
Acenaphthylene	2.22876	2.37478	2.40908	2.27085	2.35204	2.20386	AVG		2.30656		3.63289	15.00000	O
Acenaphthene	1.37272	1.45465	1.47437	1.39113	1.45032	1.32283	AVG		1.41100		4.14486	15.00000	O
Fluorene	1.39907	1.50265	1.51958	1.44270	1.52562	1.40814	AVG		1.46629		3.87447	15.00000	O
Phenanthrene	1.25216	1.23333	1.28818	1.22719	1.28422	1.21678	AVG		1.25031		2.40849	15.00000	O
Anthracene	1.50554	1.61772	1.53726	1.33509	1.42329	1.27865	AVG		1.44959		8.84014	15.00000	O
Fluoranthene	1.25300	1.20210	1.24336	1.11653	1.24233	1.16556	AVG		1.20381		4.48136	15.00000	O
Pyrene	49747	118527	258919	728876	1818636	2584079	QUA	-0.03154	0.35532	0.00654	0.99994	0.99000	O
Benzo(a)anthracene	27521	56401	132357	366200	1069947	1681282	LNR	-0.04547	1.25158		0.99949	0.99000	O
Chrysene	40645	84668	138690	434554	1133242	1688346	LNR	-0.27845	1.26064		0.99861	0.99000	O
Benzo(b)fluoranthene	18197	34502	75742	213765	703846	998280	QUA	0.05333	0.59674	0.00295	0.99109	0.99000	O
Benzo(k)fluoranthene	23958	53018	104578	316787	780100	1296802	LNR	-0.15933	1.87606		0.99926	0.99000	O
Benzo(a)pyrene	1.75015	1.62696	1.30023	1.23861	1.35856	1.30267	AVG		1.42953		14.54197	15.00000	O
Indeno(1,2,3-cd)pyrene	1.16040	0.94659	0.95291	0.84337	0.88721	0.82105	AVG		0.93525		13.08892	15.00000	O
Dibenzo(a,h)anthracene	0.80886	0.66139	0.68002	0.60210	0.64051	0.60032	AVG		0.66553		11.57493	15.00000	O
Benzo(g,h,i)perylene	7694	19553	41765	129813	338222	494804	LNR	-0.18495	0.74765		0.99618	0.99000	O
2-Methylnaphthalene-D10	1.09203	1.13690	1.13834	1.07092	1.10734	1.01694	AVG		1.09374		4.18158	15.00000	
Fluorene-D10	0.89557	0.92877	0.93832	0.88861	0.91713	0.85627	AVG		0.90411		3.33644	15.00000	
Pyrene-D10	23587	66268	142886	419789	1048907	1494345	LNR	-0.29475	1.13914		0.99509	0.99000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N062315.b\N6784.D
Report Date: 24-Jun-2015 10:51

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG165324-8
Level: LOW
Data Type: MS DATA
SpikeList File: SIM_IND_CHK.spk
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N062315.b\NSPSIM45.m
Misc Info: WG165324,WG165324,WG164324-4

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	2.53	126.35*	80-120
3 Benzaldehyde	2.00	1.77	88.57	80-120
4 Phenol	2.00	2.25	112.68	80-120
5 Bis(2-Chloroethyl)	2.00	2.14	107.22	80-120
6 2-Chlorophenol	2.00	2.13	106.73	80-120
7 1,3-Dichlorobenzen	2.00	1.84	92.21	80-120
9 1,4-Dichlorobenzen	2.00	2.26	113.04	80-120
10 1,2-Dichlorobenzen	2.00	2.18	108.83	80-120
11 2,2'-Oxybis(1-chlo	2.00	1.95	97.30	80-120
12 2-Methylphenol	2.00	1.98	99.13	80-120
13 Acetophenone	2.00	2.09	104.41	80-120
14 N-Nitroso-di-n-pro	2.00	1.97	98.53	80-120
16 Hexachloroethane	2.00	2.04	101.82	80-120
15 3&4-Methylphenol	2.00	2.46	123.08*	80-120
17 Nitrobenzene	2.00	2.61	130.61*	80-120
18 Isophorone	2.00	2.33	116.47	80-120
19 2-Nitrophenol	2.00	2.06	102.76	80-120
20 2,4-Dimethylphenol	2.00	1.97	98.32	80-120
21 bis(2-Chloroethoxy	2.00	2.17	108.45	80-120
22 2,4-Dichlorophenol	2.00	2.08	103.83	80-120
23 1,2,4-Trichloroben	2.00	2.18	109.15	80-120
25 Naphthalene	2.00	2.14	107.06	80-120
26 4-Chloroaniline	2.00	2.10	105.16	80-120
27 Hexachlorobutadien	2.00	2.15	107.44	80-120
28 Caprolactam	2.00	2.00	100.00	80-120
29 4-Chloro-3-Methylp	2.00	2.07	103.67	80-120
31 2-Methylnaphthalen	2.00	2.19	109.72	80-120
32 1-Methylnaphthalen	2.00	2.46	122.85*	80-120
34 1,2,4,5-Tetrachlor	2.00	1.92	96.28	80-120
33 Hexachlorocyclopen	2.00	1.26	63.04*	80-120
36 2,4,6-Trichlorophe	2.00	1.84	91.86	80-120
37 2,4,5-Trichlorophe	2.00	2.08	104.07	80-120
39 2-Chloronaphthalen	2.00	1.99	99.46	80-120
38 1,1'-Biphenyl	2.00	1.98	99.12	80-120
40 2-Nitroaniline	2.00	2.03	101.59	80-120
41 Dimethyl Phthalate	2.00	2.06	102.80	80-120
43 Acenaphthylene	2.00	1.75	87.71	80-120
42 2,6-Dinitrotoluene	2.00	1.88	93.93	80-120
44 3-Nitroaniline	2.00	2.08	103.95	80-120
46 Acenaphthene	2.00	2.03	101.73	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N062315.b\N6784.D
Report Date: 24-Jun-2015 10:51

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 2,4-Dinitrophenol	2.00	1.33	66.50*	80-120
48 Dibenzofuran	2.00	2.02	101.30	80-120
49 2,4-Dinitrotoluene	2.00	1.96	97.87	80-120
50 4-Nitrophenol	2.00	1.67	83.66	80-120
51 2,3,4,6-Tetrachlor	2.00	1.57	78.72*	80-120
52 Diethylphthalate	2.00	2.16	107.99	80-120
54 Fluorene	2.00	1.98	99.24	80-120
56 4-Nitroaniline	2.00	2.49	124.55*	80-120
57 4,6-Dinitro-2-Meth	2.00	1.81	90.39	80-120
58 N-Nitrosodiphenyla	2.00	1.60	80.24	80-120
59 4-Bromophenyl-phen	2.00	1.96	98.19	80-120
60 Hexachlorobenzene	2.00	1.92	95.76	80-120
61 Atrazine	2.00	1.74	86.93	80-120
62 Pentachlorophenol	2.00	1.77	88.66	80-120
64 Phenanthrene	2.00	1.90	94.98	80-120
65 Anthracene	2.00	2.03	101.62	80-120
66 Carbazole	2.00	2.00	99.96	80-120
67 Di-n-butylphthalat	2.00	2.13	106.62	80-120
68 Fluoranthene	2.00	1.96	98.04	80-120
70 Pyrene	2.00	1.92	96.03	80-120
71 Butylbenzylphthala	2.00	1.83	91.33	80-120
72 Benzo(a)anthracene	2.00	1.92	95.98	80-120
75 Chrysene	2.00	2.13	106.34	80-120
73 3,3'-Dichlorobenzi	2.00	2.18	109.20	80-120
76 bis(2-Ethylhexyl)p	2.00	1.72	85.90	80-120
77 Di-n-octylphthalat	2.00	1.78	88.98	80-120
78 Benzo(b)fluoranthe	2.00	1.68	83.84	80-120
79 Benzo(k)fluoranthe	2.00	2.17	108.47	80-120
80 Benzo(a)pyrene	2.00	1.73	86.35	80-120
82 Indeno(1,2,3-cd)py	2.00	1.81	90.36	80-120
83 Dibenzo(a,h)anthra	2.00	1.83	91.58	80-120
84 Benzo(g,h,i)peryle	2.00	2.03	101.53	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	10-93
$ 30 2-Methylnaphthale	2.00	0.000	*	43-92
$ 35 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 53 Fluorene-D10	2.00	0.000	*	29-101
$ 69 Pyrene-D10	2.00	0.000	*	53-166

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6950.D N6951.D N6949.D N6952.D N6953.D N6954.D **Column ID:**
Calibration Date(s): 01-JUL-15 16:38 01-JUL-15 18:59

	0.200000(Level 1	0.500000(Level 2	1.0000 Level 3	3.0000 Level 4	7.0000 Level 5	10.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Naphthalene	1.03054	1.06815	1.06475	1.07911	0.97223	0.90661	AVG		1.02023		6.65724	15.00000	O
2-Methylnaphthalene	59069	143166	252853	742822	1611083	2225128	LNR	-0.24884	0.63843		0.99668	0.99000	O
Acenaphthylene	2.37147	2.45232	2.44602	2.50973	2.21377	2.21190	AVG		2.36753		5.39098	15.00000	O
Acenaphthene	1.44267	1.49555	1.48068	1.48512	1.37881	1.36242	AVG		1.44088		3.99181	15.00000	O
Fluorene	1.47177	1.52848	1.52060	1.59329	1.45627	1.44923	AVG		1.50327		3.66320	15.00000	O
Phenanthrene	1.36254	1.36720	1.38869	1.33410	1.25768	1.26247	AVG		1.32878		4.21507	15.00000	O
Anthracene	1.50667	1.44352	1.40375	1.36962	1.30690	1.29405	AVG		1.38742		5.86924	15.00000	O
Fluoranthene	1.42616	1.26126	1.35366	1.22918	1.19731	1.21421	AVG		1.28030		7.06304	15.00000	O
Pyrene	59706	135440	296805	878545	2048868	2814246	LNR	-0.21447	1.89565		0.99875	0.99000	O
Benzo(a)anthracene	42765	88032	237171	580394	1370167	1939666	LNR	-0.23450	1.28972		0.99871	0.99000	O
Chrysene	55540	95658	235767	623974	1354794	1901591	LNR	-0.34828	1.26110		0.99766	0.99000	O
Benzo(b)fluoranthene	35313	56877	189815	400877	980356	1401745	LNR	-0.18564	1.61353		0.99879	0.99000	O
Benzo(k)fluoranthene	39764	72857	189590	508524	1027967	1473660	LNR	-0.32167	1.69173		0.99703	0.99000	O
Benzo(a)pyrene	1.93439	1.46752	1.66628	1.42715	1.32841	1.36024	AVG		1.53066		15.06975	15.00000	W(
Indeno(1,2,3-cd)pyrene	1.23602	0.99634	1.00954	0.91174	0.87581	0.94866	AVG		0.99635		12.82012	15.00000	O
Dibenzo(a,h)anthracene	0.80383	0.72749	0.74348	0.66694	0.64156	0.70503	AVG		0.71472		8.07594	15.00000	O
Benzo(g,h,i)perylene	1.14057	0.95593	0.91703	0.81828	0.76806	0.82282	AVG		0.90378		14.94741	15.00000	O
2-Methylnaphthalene-D10	1.13020	1.13944	1.13011	1.13157	1.01075	1.01305	AVG		1.09252		5.72502	15.00000	
Fluorene-D10	0.92719	0.93766	0.92643	0.96330	0.88998	0.89038	AVG		0.92249		3.07422	15.00000	
Pyrene-D10	1.38409	1.36335	1.21043	1.17640	1.13528	1.10114	AVG		1.22845		9.65575	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N070115.b\N6955.D
Report Date: 07-Jul-2015 12:55

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: WG165774-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: SIM_IND_CHK.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N070115.b\NSPSIM46.m
Misc Info: WG165774,WG165774,WG165774-4,SI4615-2

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	1.59	79.44*	80-120
3 Benzaldehyde	2.00	1.86	92.79	80-120
4 Phenol	2.00	1.90	95.15	80-120
5 Bis(2-Chloroethyl)	2.00	2.12	106.06	80-120
6 2-Chlorophenol	2.00	1.94	96.83	80-120
7 1,3-Dichlorobenzen	2.00	1.99	99.62	80-120
9 1,4-Dichlorobenzen	2.00	2.00	100.21	80-120
10 1,2-Dichlorobenzen	2.00	1.92	95.83	80-120
11 2,2'-Oxybis(1-chlo	2.00	1.64	82.11	80-120
12 2-Methylphenol	2.00	2.23	111.57	80-120
13 Acetophenone	2.00	1.89	94.44	80-120
14 N-Nitroso-di-n-pro	2.00	1.73	86.74	80-120
16 Hexachloroethane	2.00	1.98	99.09	80-120
15 3&4-Methylphenol	2.00	1.87	93.42	80-120
17 Nitrobenzene	2.00	2.16	108.14	80-120
18 Isophorone	2.00	2.02	101.04	80-120
19 2-Nitrophenol	2.00	1.93	96.41	80-120
20 2,4-Dimethylphenol	2.00	1.84	92.17	80-120
21 bis(2-Chloroethoxy	2.00	2.00	100.12	80-120
22 2,4-Dichlorophenol	2.00	1.95	97.63	80-120
23 1,2,4-Trichloroben	2.00	2.03	101.75	80-120
25 Naphthalene	2.00	2.02	100.79	80-120
26 4-Chloroaniline	2.00	1.94	97.23	80-120
27 Hexachlorobutadien	2.00	1.95	97.65	80-120
28 Caprolactam	2.00	1.86	92.91	80-120
29 4-Chloro-3-Methylp	2.00	1.82	91.26	80-120
31 2-Methylnaphthalen	2.00	1.98	99.15	80-120
32 1-Methylnaphthalen	2.00	1.97	98.49	80-120
34 1,2,4,5-Tetrachlor	2.00	1.86	93.03	80-120
33 Hexachlorocyclopen	2.00	1.25	62.72*	80-120
36 2,4,6-Trichlorophe	2.00	1.81	90.58	80-120
37 2,4,5-Trichlorophe	2.00	1.83	91.40	80-120
39 2-Chloronaphthalen	2.00	1.86	92.81	80-120
38 1,1'-Biphenyl	2.00	1.87	93.64	80-120
40 2-Nitroaniline	2.00	1.86	92.89	80-120
41 Dimethyl Phthalate	2.00	1.89	94.63	80-120
43 Acenaphthylene	2.00	1.64	82.11	80-120
42 2,6-Dinitrotoluene	2.00	1.70	84.80	80-120
44 3-Nitroaniline	2.00	1.93	96.39	80-120
46 Acenaphthene	2.00	1.88	93.94	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N070115.b\N6955.D
Report Date: 07-Jul-2015 12:55

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 2,4-Dinitrophenol	2.00	1.40	69.89*	80-120
48 Dibenzofuran	2.00	1.82	91.00	80-120
49 2,4-Dinitrotoluene	2.00	1.75	87.63	80-120
50 4-Nitrophenol	2.00	1.57	78.52*	80-120
51 2,3,4,6-Tetrachlor	2.00	1.52	75.82*	80-120
52 Diethylphthalate	2.00	1.96	98.20	80-120
54 Fluorene	2.00	1.82	90.82	80-120
56 4-Nitroaniline	2.00	2.33	116.50	80-120
57 4,6-Dinitro-2-Meth	2.00	1.57	78.39*	80-120
58 N-Nitrosodiphenyla	2.00	1.50	74.89*	80-120
59 4-Bromophenyl-phen	2.00	1.76	88.20	80-120
60 Hexachlorobenzene	2.00	1.80	90.09	80-120
61 Atrazine	2.00	1.64	82.22	80-120
62 Pentachlorophenol	2.00	1.63	81.68	80-120
64 Phenanthrene	2.00	1.80	89.94	80-120
65 Anthracene	2.00	1.80	90.29	80-120
66 Carbazole	2.00	1.79	89.71	80-120
67 Di-n-butylphthalat	2.00	2.03	101.41	80-120
68 Fluoranthene	2.00	1.72	85.95	80-120
70 Pyrene	2.00	2.04	101.94	80-120
71 Butylbenzylphthala	2.00	1.97	98.39	80-120
72 Benzo(a)anthracene	2.00	1.68	83.84	80-120
75 Chrysene	2.00	2.12	106.05	80-120
73 3,3'-Dichlorobenzi	2.00	1.88	94.05	80-120
76 bis(2-Ethylhexyl)p	2.00	1.91	95.61	80-120
77 Di-n-octylphthalat	2.00	1.87	93.59	80-120
78 Benzo(b)fluoranthe	2.00	1.38	68.85*	80-120
79 Benzo(k)fluoranthe	2.00	2.25	112.57	80-120
80 Benzo(a)pyrene	2.00	1.34	67.00*	80-120
82 Indeno(1,2,3-cd)py	2.00	1.61	80.50	80-120
83 Dibenzo(a,h)anthra	2.00	1.61	80.67	80-120
84 Benzo(g,h,i)peryle	2.00	1.64	81.77	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	10-93
$ 30 2-Methylnaphthale	2.00	0.000	*	43-92
$ 35 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 53 Fluorene-D10	2.00	0.000	*	29-101
$ 69 Pyrene-D10	2.00	0.000	*	53-166

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4615
Lab ID : WG165645-2
Analytical Date: 06/30/15 10:28
Lab File ID : N6909.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 06/23/15 13:03 06/23/15 15:23
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
25 Naphthalene	0.98786	1.07229	1.07229	0.010	8.54621	20.00000	Averaged	
31 2-Methylnaphthalene	1.00000	0.98272	0.75437	0.010	-1.72843	20.00000	Linear	
43 Acenaphthylene	2.30656	2.37259	2.37259	0.010	2.86291	20.00000	Averaged	
46 Acenaphthene	1.41100	1.42924	1.42924	0.010	1.29251	20.01000	Averaged	
54 Fluorene	1.46629	1.44673	1.44673	0.010	-1.33445	20.00000	Averaged	
64 Phenanthrene	1.25031	1.32030	1.32030	0.010	5.59745	20.00000	Averaged	
65 Anthracene	1.44959	1.33590	1.33590	0.010	-7.84307	20.00000	Averaged	
68 Fluoranthene	1.20381	1.21262	1.21262	0.010	0.73207	20.01000	Averaged	
70 Pyrene	1.00000	1.12916	3.03657	0.010	12.91601	20.00000	Quadratic	
72 Benzo(a)anthracene	1.00000	1.30454	1.67826	0.010	30.45420	20.00000	Linear	*
75 Chrysene	1.00000	1.10108	1.66888	0.010	10.10826	20.00000	Linear	
78 Benzo(b)fluoranthene	1.00000	1.33890	2.14381	0.010	33.89024	20.00000	Quadratic	*
79 Benzo(k)fluoranthene	1.00000	0.82434	1.78564	0.010	-17.56630	20.00000	Linear	
80 Benzo(a)pyrene	1.42953	1.44228	1.44228	0.010	0.89205	20.01000	Averaged	
82 Indeno(1,2,3-cd)pyrene	0.93525	0.94418	0.94418	0.010	0.95482	20.00000	Averaged	
83 Dibenzo(a,h)anthracene	0.66553	0.68150	0.68150	0.010	2.39990	20.00000	Averaged	
84 Benzo(g,h,i)perylene	1.00000	1.05201	0.89716	0.010	5.20112	20.00000	Linear	
30 2-Methylnaphthalene-D10	1.09374	1.09936	1.09936	0.010	0.51355	20.00000	Averaged	
53 Fluorene-D10	0.90411	0.88360	0.88360	0.010	-2.26909	20.00000	Averaged	
69 Pyrene-D10	1.00000	1.16136	1.59157	0.010	16.13624	20.00000	Linear	

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

S/S SON NO GPC

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method:	SW846 3550 (SONIC.) ✓	SW846 3540 (SOX)	SW846 3545 (ASE)	SW846 3580 (OIL / WIPES)
Analytical Method:	SW846 8270 ✓	OTHER		
Standards	Surrogate ID (1): SV2721	Spike ID (1): SIM SV2716	Spike ID (3):	
	Surrogate ID (2):	Spike ID (2): SV2715		
Solvents / Chemicals / Consumables	Solvent Lot # (Mecl2): DM824	Solvent Lot # (Acetone): DM724	Sodium Sulfate (granular) Lot # 29645001	
	Filter Paper Lot # (SON) 96181401	Filter Paper Lot # (KD) 96181511	Sodium Sulfate (powder) Lot # 27975002	
Misc.	Nitrogen Bath Temperature: 35°C	Sonicator Horns Tuned: AMPE 40%	Balance ID: Mettler PJ400	
Prep Start Time: 10:45	Prep Stop Time: 11:20	Sox Start Time: —	Sox End Time: —	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SCAN	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray SV8042	Comments
6-30-15	TMS	WG165723-1 WG165724-1	29.97	1mL	NR	✓	✓	—			6-30-15	KF	1mL	A1	SV-R323623
↓	↓	WG165723-2	29.95	↓	1mL	↓					↓	↓	↓	A2	SIM-R323624
		WG165724-2	30.01	↓	↓		✓							A3	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SCAN	Fraction SIM	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Rep log 20	Comments
6-30-15	TMS	SI46151F	33.86	1mL	NR	✓	✓	—			6-30-15	KF	5mL	CY	Strong fuel odor

Reviewed By_____ Date_____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 062315

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165314-1	50ng DFTPP	ND958	1	1	DFTPPSVM	2.0	JLG	OK
-4	SSTD1.00 ND623	N6778		2	NSP SVMS			✓
-2	0.2	79		3				✓
-3	0.5	80		4				✓
-5	3.0	81		5				✓
-6	7.0	82		6				✓
-7	10.	83		7				✓
-8	IND	84		8				OK
3510	WG165249-1	85		9				OK
	-4	86		10				OK SPLP PB8125A
	-82	87		11				OK
	-83	88		12				OK
	-85	89		13				OK 513862 SPLP
	-6	90		14				OK 5514
	SI4291-2	91		15				~~OK~~ not run; power loss SPLP
	-4	92		16				
	-6	93		17				
	-9	94		18				
	SI4332-1	95		19				
	-3	96		20				
	-5	97		21				
	-7	98		22				
	-9	99		23				
	-10	N6800		24				
	-11	01		25				
3550	SI4226-7DL	02	8	26				50/400
	-8DL	03	7	27				50/350
	~~SI~~ WG165008-1	04	1	28				EPLH

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52637
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

cont next page

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 063015

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165645-1	50ng DFTPP	ND962	1	1	DFTPPSIM	~~JLH~~	JLH	OK
-2	SSTD1.00 ~~Std~~ 0630	N6909		2	NSPSIM45	200		OK
3550	WG165520-1	10		3				OK
3510	WG165669-1	11		4				OK
3550	WG165510-2	12		5				OK
	-3	13		6				OK
3510	WG165669-2	14		7				OK
	-3	15		8				OK
	SI4545-10	16		9				OK
	-12	17		10				OK
	-14	18		11				OK
	-16	19		12				OK
	SI4612-1	20		13				OK
	-3	21		14				OK
	-5	22		15				OK
	-7	23		16				OK
	-9	24		17				OK
	-11	25		18				OK
3550	WG165724-1	26		19				OK
	-2	27		20				MB IS
	SI4408-15	28		21				OK
	-16	29		22				OK
	SI4479-2	30		23				IS1-5V 55V
	SI4383-1	31		24				OK DL1:6
	SI4615-1DL	32	10	25				OK 50/500
	SI4408-13	33	1	26				OK DL1:3
	-7	34		27				OOC DL1:20
	-9	35		28				DL1:25

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52640
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

Cont'd next page

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 070715 JW 07.07.15

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165774-1	50ng DFTPP	ND963	1	1	DFTPPSM	2.0	JW	OK
-4	SSTD1.00 NOTOL	ND949		2	NSPSM46			✓
-2	0.2	50		3				✓
-3	0.5	51		4				✓
-5	3.0	52		5				✓
-6	7.0	53		6				✓
-7	10	54		7				✓
-8	IND	55		8				OK
	meCl2	56-57	1	9				—
350	WG165669-1RA	578	1	11				OK
3550	WG165724-1RA	579	1	12				OK
	1 -2RA	580	1	13				SSLT OK
	SE4383-1DL	601	6	14				— DL1:8 50/300
	SE4408-1DL	602	40	15				OK 50/200 → 50/400
	-3DL	603	100	16				OK (50/500)X2
	-5DL	634	50	17				OK 50/250 → 50/500
	-7DL	645	20	18				OK 50/100
	-9DL	646	15	19				OK 50/750
	-11DL	667	30	20				OK 25/750
	-12DL	678	10	21				OK DL1:15 50/500
	-13DL	689	3	22				OK 100/300
	-9	70	1	23				1561
	-11	71	1	24				1556
	-3	72		25				1561
	-7	73		26				502
	meCl2	75		9				

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52640
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

Katahdin Analytical Services 0000169

SPLP SEMIVOLATILE DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4615

Client Sample ID	Lab Sample ID	Col. ID	2FBP	#	2FP	#	NBZ	#	PHL	#	TBP	#	TPH	#
SITE 4TS-SEE2-PT	SI4615-2		75.4		20.5		66.5		14.4		61.5		100.	
Method Blank Sample	WG165688-1		72.7		26.0		71.4		18.7		56.5		94.3	
Laboratory Control S	WG165688-2		71.4		29.1		63.7		19.6		77.2		88.8	
Laboratory Control S	WG165688-3		69.4		24.4		62.9		17.5		64.7		93.3	
TCLP Blank	WG165688-4		74.8		35.1		71.6		23.8		70.8		109.	

		QC Limits
2FBP	2-FLUOROBIPHENYL	50-110
2FP	2-FLUOROPHENOL	20-110
PHL	PHENOL-D6	10-115
TPH	TERPHENYL-D14	50-135
NBZ	NITROBENZENE-D5	40-110
TBP	2,4,6-TRIBROMOPHENOL	40-125

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : U0931.D
Instrument ID : GCMS-U
Matrix : AQ

SDG : SI4615
Lab Sample ID : WG165688-1
Date Extracted : 01-JUL-15
Date Analyzed : 02-JUL-15
Time Analyzed : 19:32

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
TCLP Blank	WG165688-4	U0932.D	07/02/15	20:00
Laboratory Control S	WG165688-2	U0933.D	07/02/15	20:27
Laboratory Control S	WG165688-3	U0934.D	07/02/15	20:54
SITE 4TS-SEE2-PT	SI4615-2	U0935.D	07/02/15	21:21

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165688-1
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: U0931.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165688

Analysis Date: 02-JUL-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 07-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	7.5	ug/L	1	10	10.	1.0	7.5
Phenol	U	7.5	ug/L	1	10	10.	1.8	7.5
2-Methylphenol	U	7.5	ug/L	1	10	10.	3.8	7.5
Acetophenone	U	7.5	ug/L	1	10	10.	3.9	7.5
Isophorone	U	7.5	ug/L	1	10	10.	1.7	7.5
2,4-Dimethylphenol	U	7.5	ug/L	1	10	10.	4.4	7.5
Caprolactam	U	7.5	ug/L	1	10	10.	0.40	7.5
4-Chloro-3-Methylphenol	U	7.5	ug/L	1	10	10.	3.6	7.5
2-Chloronaphthalene	U	7.5	ug/L	1	10	10.	2.8	7.5
Dimethyl Phthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Acenaphthylene	U	7.5	ug/L	1	10	10.	1.5	7.5
3-Nitroaniline	U	19	ug/L	1	25	25.	1.5	19.
Acenaphthene	U	7.5	ug/L	1	10	10.	1.5	7.5
Diethylphthalate	U	7.5	ug/L	1	10	10.	2.0	7.5
Fluorene	U	7.5	ug/L	1	10	10.	2.1	7.5
4-Bromophenyl-Phenylether	U	7.5	ug/L	1	10	10.	1.9	7.5
Carbazole	U	7.5	ug/L	1	10	10.	2.1	7.5
2-Fluorophenol		26.0	%					
Phenol-d6		18.7	%					
Nitrobenzene-d5		71.4	%					
2-Fluorobiphenyl		72.7	%					
2,4,6-Tribromophenol		56.5	%					
Terphenyl-d14		94.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165688-4
Client ID: SPLP Blank
Project:
SDG: SI4615
Lab File ID: U0932.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165688

Analysis Date: 02-JUL-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 09-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	U	8.1	ug/L	1	10	11.	1.1	8.1
Phenol	U	8.1	ug/L	1	10	11.	1.9	8.1
2-Methylphenol	U	8.1	ug/L	1	10	11.	4.1	8.1
Acetophenone	U	8.1	ug/L	1	10	11.	4.2	8.1
Isophorone	U	8.1	ug/L	1	10	11.	1.8	8.1
2,4-Dimethylphenol	U	8.1	ug/L	1	10	11.	4.7	8.1
Caprolactam	U	8.1	ug/L	1	10	11.	0.43	8.1
4-Chloro-3-Methylphenol	U	8.1	ug/L	1	10	11.	3.9	8.1
2-Chloronaphthalene	U	8.1	ug/L	1	10	11.	3.0	8.1
Dimethyl Phthalate	U	8.1	ug/L	1	10	11.	2.2	8.1
Acenaphthylene	U	8.1	ug/L	1	10	11.	1.6	8.1
3-Nitroaniline	U	20.	ug/L	1	25	27.	1.6	20.
Acenaphthene	U	8.1	ug/L	1	10	11.	1.6	8.1
Diethylphthalate	U	8.1	ug/L	1	10	11.	2.2	8.1
Fluorene	U	8.1	ug/L	1	10	11.	2.2	8.1
4-Bromophenyl-Phenylether	U	8.1	ug/L	1	10	11.	2.0	8.1
Carbazole	U	8.1	ug/L	1	10	11.	2.2	8.1
2-Fluorophenol		35.1	%					
Phenol-d6		23.8	%					
Nitrobenzene-d5		71.6	%					
2-Fluorobiphenyl		74.8	%					
2,4,6-Tribromophenol		70.8	%					
Terphenyl-d14		109.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165688-2
LCSD ID: WG165688-3
Project:
SDG: SI4615
Report Date: 07-JUL-15
LCS File ID: U0933.D

Received Date:
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165688
LCSD File ID: U0934.D

Analysis Date: 02-JUL-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Benzaldehyde	50.0	74.4	149.	74.8	150.	ug/L	0	30	10-189
Phenol	100.	19.6	19.6	17.2	17.2	ug/L	13	30	0-115
2-Methylphenol	100.	46.4	46.4	46.6	46.6	ug/L	0	30	40-110
Acetophenone	50.0	32.3	64.6	32.5	65.0	ug/L	1	30	49-102
Isophorone	50.0	26.1	52.2	25.5	51.0	ug/L	2	30	50-110
2,4-Dimethylphenol	100.	61.8	61.8	58.8	58.8	ug/L	5	30	30-110
Caprolactam	50.0	5.26	10.5	6.07	12.1	ug/L	14	30	10-86
4-Chloro-3-Methylphenol	100.	74.5	74.5	69.9	69.9	ug/L	6	30	45-110
2-Chloronaphthalene	50.0	27.5	55.0	26.7	53.4	ug/L	3	30	50-105
Dimethyl Phthalate	50.0	39.7	79.4	38.7	77.4	ug/L	2	30	25-125
Acenaphthylene	50.0	37.4	74.8	36.1	72.2	ug/L	4	30	50-105
3-Nitroaniline	50.0	34.9	69.8	32.4	64.8	ug/L	7	30	20-125
Acenaphthene	50.0	36.8	73.6	35.1	70.2	ug/L	5	30	45-110
Diethylphthalate	50.0	42.6	85.2	39.9	79.8	ug/L	6	30	45-120
Fluorene	50.0	35.8	71.6	32.2	64.4	ug/L	10	30	50-110
4-Bromophenyl-Phenylether	50.0	43.4	86.8	43.0	86.0	ug/L	1	30	50-115
Carbazole	50.0	43.8	87.6	44.6	89.2	ug/L	2	30	50-115
2-Fluorophenol			29.1		24.4				20-110
Phenol-d6			19.6		17.5				10-115
Nitrobenzene-d5			63.7		62.9				40-110
2-Fluorobiphenyl			71.4		69.4				50-110
2,4,6-Tribromophenol			77.2		64.7				40-125
Terphenyl-d14			88.8		93.3				50-135

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : UD398.D
Instrument ID : GCMS-U

SDG : SI4615
Date Analyzed : 02-JUL-15
Time Analyzed : 14:31

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	31.8		
68	Less than 2.0% of mass 69	0.0	0.0	1
69	Less than 100.0% of mass 198	35.1		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	40.0 - 60.0% of mass 198	47.9		
197	Less than 1.0% of mass 198	0.3		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 30.0% of mass 198	18.4		
365	1.0 - 100.0% of mass 198	2.1		
441	0.0 - 100.0% of mass 443	9.6	75.93	2
442	40.0 - 100.0% of mass 198	65.8		
443	17.0 - 23.0% of mass 442	12.6	19.13	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165876-4	U0921.D	07/02/15	14:51
Initial Calibration	WG165876-2	U0922.D	07/02/15	15:26
Initial Calibration	WG165876-3	U0923.D	07/02/15	15:53
Initial Calibration	WG165876-5	U0924.D	07/02/15	16:21
Initial Calibration	WG165876-6	U0925.D	07/02/15	16:49
Initial Calibration	WG165876-7	U0926.D	07/02/15	17:16
Independent Source	WG165876-8	U0927.D	07/02/15	17:44
Method Blank Sample	WG165688-1	U0931.D	07/02/15	19:32
TCLP Blank	WG165688-4	U0932.D	07/02/15	20:00
Laboratory Control S	WG165688-2	U0933.D	07/02/15	20:27
Laboratory Control S	WG165688-3	U0934.D	07/02/15	20:54
SITE 4TS-SEE2-PT	SI4615-2	U0935.D	07/02/15	21:21

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165876-4
Lab File ID : U0921.D

SDG: SI4615
Analytical Date: 07/02/15 14:51
Instrument ID: GCMS-U

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	269021		4.50		1046771		5.90		602411		7.99	
	Upper Limit	538042		5.00		2093542		6.40		1204822		8.49	
	Lower Limit	134510.5		4.00		523385.5		5.40		301205.5		7.49	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165688-1	323446		4.50		1260875		5.89		731294		7.99	
TCLP Blank	WG165688-4	307478		4.50		1210499		5.89		698884		7.99	
Laboratory Control S	WG165688-2	301438		4.50		1108976		5.89		646708		7.98	
Laboratory Control S	WG165688-3	336898		4.50		1267015		5.90		755671		7.98	
SITE 4TS-SEE2-PT	SI4615-2	335083		4.50		1303863		5.89		709368		7.98	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165876-4
Lab File ID : U0921.D

SDG: SI4615
Analytical Date: 07/02/15 14:51
Instrument ID: GCMS-U

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	944501		9.80		609561		13.34		313527		16.30	
	Upper Limit	1889002		10.30		1219122		13.84		627054		16.80	
	Lower Limit	472250.5		9.30		304780.5		12.84		156763.5		15.80	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG165688-1	1161341		9.79		752972		13.34		353168		16.31	
TCLP Blank	WG165688-4	1109999		9.79		700351		13.34		331364		16.31	
Laboratory Control S	WG165688-2	990229		9.79		687637		13.34		333578		16.31	
Laboratory Control S	WG165688-3	1157407		9.79		797580		13.34		365465		16.31	
SITE 4TS-SEE2-PT	SI4615-2	1042039		9.79		592183		13.34		308314		16.31	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-2
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: U0935.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165688

Analysis Date: 02-JUL-15
Analyst: JCG
Analysis Method: SW846 8270D
Matrix: AQ
% Solids: NA
Report Date: 07-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Benzaldehyde	J	1.8	ug/L	1	10	10.	1.0	7.8
Phenol	U	7.8	ug/L	1	10	10.	1.9	7.8
2-Methylphenol	U	7.8	ug/L	1	10	10.	4.0	7.8
Acetophenone	U	7.8	ug/L	1	10	10.	4.1	7.8
Isophorone	U	7.8	ug/L	1	10	10.	1.8	7.8
2,4-Dimethylphenol	U	7.8	ug/L	1	10	10.	4.6	7.8
Caprolactam	U	7.8	ug/L	1	10	10.	0.42	7.8
4-Chloro-3-Methylphenol	U	7.8	ug/L	1	10	10.	3.8	7.8
2-Chloronaphthalene	U	7.8	ug/L	1	10	10.	2.9	7.8
Dimethyl Phthalate	U	7.8	ug/L	1	10	10.	2.1	7.8
Acenaphthylene	U	7.8	ug/L	1	10	10.	1.6	7.8
3-Nitroaniline	U	20	ug/L	1	25	26.	1.6	20.
Acenaphthene	U	7.8	ug/L	1	10	10.	1.6	7.8
Diethylphthalate	U	7.8	ug/L	1	10	10.	2.1	7.8
Fluorene	U	7.8	ug/L	1	10	10.	2.2	7.8
4-Bromophenyl-Phenylether	U	7.8	ug/L	1	10	10.	2.0	7.8
Carbazole	U	7.8	ug/L	1	10	10.	2.2	7.8
2-Fluorophenol		20.5	%					
Phenol-d6		14.4	%					
Nitrobenzene-d5		66.5	%					
2-Fluorobiphenyl		75.4	%					
2,4,6-Tribromophenol		61.5	%					
Terphenyl-d14		100.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-U
Lab File IDs : U0922.D U0923.D U0921.D U0924.D U0925.D U0926.D **Column ID:**
Calibration Date(s): 02-JUL-15 14:51 02-JUL-15 17:16

	10.0000 Level 1	25.0000 Level 2	50.0000 Level 3	75.0000 Level 4	100.0000 Level 5	125.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Benzaldehyde	0.23340	0.21380	0.23977	0.17152	0.14767	0.14992	AVG		0.19268		21.55361	15.00000	W(
Phenol	1.45899	1.38517	1.73212	1.41223	1.41662	1.44376	AVG		1.47482		8.72349	30.00000	O
2-Methylphenol	1.03287	1.06576	1.29207	1.08656	1.08901	1.05793	AVG		1.10404		8.54916	15.00000	O
Acetophenone	0.40853	0.38404	0.44980	0.37683	0.37356	0.36165	AVG		0.39240		8.19270	15.00000	O
Isophorone	0.56288	0.55613	0.64705	0.53890	0.52483	0.52781	AVG		0.55960		8.11772	15.00000	O
2,4-Dimethylphenol	0.32570	0.32725	0.36047	0.29847	0.29402	0.26173	AVG		0.31127		10.94215	15.00000	O
Caprolactam	0.09030	0.09054	0.10605	0.09179	0.09211	0.08918	AVG		0.09333		6.77528	15.00000	O
4-Chloro-3-Methylphenol	0.26836	0.27313	0.31041	0.25386	0.24444	0.23356	AVG		0.26396		10.26137	30.00000	O
2-Chloronaphthalene	1.26015	1.24437	1.44116	1.03925	1.20788	1.10891	AVG		1.21695		11.39929	15.00000	O
Dimethyl Phthalate	1.25588	1.18541	1.36297	1.08237	1.09884	1.08484	AVG		1.17838		9.63246	15.00000	O
Acenaphthylene	1.65576	1.58292	1.73907	1.39319	1.31276	1.30996	AVG		1.49894		12.33278	15.00000	O
3-Nitroaniline	0.26717	0.26944	0.32902	0.27138	0.26739	0.27678	AVG		0.28020		8.62833	15.00000	O
Acenaphthene	1.02067	0.93662	1.09206	0.82987	0.90033	0.81765	AVG		0.93287		11.54610	30.00000	O
Diethylphthalate	1.36625	1.19972	1.32727	1.00073	1.01779	1.03808	AVG		1.15831		14.05583	15.00000	O
Fluorene	202549	427632	913101	1249917	1637685	1722098	QUA	0.06468	0.44981	0.28457	0.99241	0.99000	O
4-Bromophenyl-phenylether	0.20081	0.18184	0.21210	0.18089	0.17324	0.17291	AVG		0.18697		8.53363	15.00000	O
Carbazole	0.96662	0.88662	1.00689	0.78121	0.77969	0.72256	AVG		0.85726		13.31594	15.00000	O
2-Fluorophenol	1.03478	1.07071	1.34890	1.11626	1.07078	1.08823	AVG		1.12161		10.20592	15.00000	
Phenol-D6	1.24664	1.29293	1.54439	1.28209	1.24543	1.23481	AVG		1.30771		9.03606	15.00000	
Nitrobenzene-D5	0.29937	0.29684	0.34754	0.28367	0.28420	0.27903	AVG		0.29844		8.49216	15.00000	
2-Fluorobiphenyl	1.14549	1.06997	1.28624	0.95986	1.01881	0.99914	AVG		1.07992		11.08444	15.00000	
2,4,6-Tribromophenol	0.15646	0.14318	0.15969	0.12437	0.12519	0.12195	AVG		0.13847		12.27313	15.00000	
Terphenyl-D14	0.87301	0.76478	0.85961	0.72608	0.74568	0.77737	AVG		0.79109		7.70452	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-u.i\U070215B.b\U0927.D
Report Date: 07-Jul-2015 10:01

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: WG165876-8
Level: LOW
Data Type: MS DATA
SpikeList File: INDcheck8270.spk
Sublist File: all_DOD.sub
Method File: \\target_server\gg\chem\gcms-u.i\U070215B.b\U8270C81.m
Misc Info: WG165876,WG165876,WG165876-4,SI4615-2

Client SDG: 021497
Fraction: SV

Operator: JCG
SampleType: INDCHECK
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 1,4-Dioxane	50.0	53.7	107.35	80-120
3 Pyridine	50.0	46.5	92.95	80-120
2 N-Nitrosodimethyla	50.0	42.5	85.05	80-120
5 2-Picoline	50.0	61.6	123.25*	80-120
6 N-Nitrosomethyleth	50.0	52.6	105.23	80-120
7 Methyl Methanesulf	50.0	45.1	90.25	80-120
9 N-Nitrosodiethylam	50.0	53.3	106.53	80-120
10 Ethyl Methanesulfo	50.0	51.0	102.08	80-120
11 Benzaldehyde	50.0	12.5	25.06*	80-120
14 Aniline	50.0	49.0	97.93	80-120
13 Phenol	50.0	47.5	94.95	80-120
16 Bis(2-Chloroethyl)	50.0	53.2	106.39	80-120
17 2-Chlorophenol	50.0	51.9	103.88	80-120
18 1,3-Dichlorobenzen	50.0	51.5	103.05	80-120
20 1,4-Dichlorobenzen	50.0	51.0	102.05	80-120
22 Benzyl alcohol	50.0	47.0	94.03	80-120
21 1,2-Dichlorobenzen	50.0	51.8	103.69	80-120
25 2,2'-Oxybis(1-chlo	50.0	44.8	89.56	80-120
23 2-Methylphenol	50.0	51.3	102.61	80-120
26 Acetophenone	100	98.4	98.38	80-120
27 N-Nitrosopyrrolidi	50.0	52.8	105.59	80-120
30 N-Nitrosomorpholin	50.0	51.3	102.59	80-120
28 N-Nitroso-di-n-pro	50.0	46.1	92.28	80-120
29 3&4-Methylphenol	50.0	51.7	103.42	80-120
32 Hexachloroethane	50.0	50.1	100.17	80-120
31 o-Toluidine	50.0	50.0	100.08	80-120
34 Nitrobenzene	50.0	53.7	107.36	80-120
35 N-Nitrosopiperidin	50.0	58.9	117.80	80-120
36 Isophorone	50.0	53.2	106.45	80-120
37 2-Nitrophenol	50.0	53.3	106.66	80-120
38 2,4-Dimethylphenol	50.0	52.3	104.59	80-120
40 Bis(2-Chloroethoxy	50.0	55.7	111.36	80-120
39 O,O,O-Triethylphos	50.0	51.5	102.94	80-120
50 A,A-Dimethylphene	50.0	0.000	*	80-120
41 Benzoic acid	50.0	102	203.20*	80-120
42 2,4-Dichlorophenol	50.0	52.5	104.94	80-120
44 1,2,4-Trichloroben	50.0	53.6	107.18	80-120
46 Naphthalene	50.0	56.0	112.09	80-120
43 2,6-Dichlorophenol	50.0	56.8	113.64	80-120
47 4-Chloroaniline	50.0	48.7	97.45	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U070215B.b\U0927.D
Report Date: 07-Jul-2015 10:01

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
48 Hexachloropropene	50.0	54.2	108.40	80-120
49 Hexachlorobutadien	50.0	54.8	109.58	80-120
51 N-Nitroso-Di-N-But	50.0	57.1	114.26	80-120
53 Caprolactam	50.0	48.2	96.40	80-120
52 p-Phenylenediamine	50.0	0.000	*	80-120
56 Isosafrole	50.0	48.2	96.38	80-120
55 4-Chloro-3-Methylp	50.0	54.8	109.69	80-120
57 2-Methylnaphthalen	50.0	53.1	106.29	80-120
58 1-Methylnaphthalen	50.0	56.5	112.98	80-120
60 1,2,4,5-Tetrachlor	100	96.6	96.62	80-120
59 Hexachlorocyclopen	50.0	39.9	79.80*	80-120
61 2,4,6-Trichlorophe	50.0	54.5	109.01	80-120
62 2,4,5-Trichlorophe	50.0	53.2	106.48	80-120
54 Diethyl Adipate	50.0	0.000	*	80-120
64 Safrole	50.0	54.8	109.70	80-120
65 1,1'-Biphenyl	50.0	50.9	101.79	80-120
66 2-Chloronaphthalen	50.0	47.6	95.12	80-120
67 1-Chloronaphthalen	50.0	54.7	109.38	80-120
69 2-Nitroaniline	50.0	51.1	102.20	80-120
70 1,4-Naphthoquinone	50.0	69.8	139.67*	80-120
72 Dimethyl Phthalate	50.0	50.7	101.41	80-120
73 1,3-Dinitrobenzene	50.0	50.2	100.36	80-120
75 Acenaphthylene	50.0	48.3	96.67	80-120
74 2,6-Dinitrotoluene	50.0	49.1	98.19	80-120
77 3-Nitroaniline	50.0	48.0	96.11	80-120
79 Acenaphthene	50.0	51.0	101.92	80-120
80 2,4-Dinitrophenol	50.0	52.6	105.29	80-120
83 Dibenzofuran	50.0	56.4	112.70	80-120
81 Pentachlorobenzene	50.0	51.2	102.39	80-120
82 4-Nitrophenol	50.0	47.6	95.22	80-120
84 2,4-Dinitrotoluene	50.0	48.4	96.79	80-120
85 1-Naphthylamine	50.0	50.6	101.14	80-120
88 2-Naphthylamine	50.0	52.3	104.54	80-120
87 2,3,4,6-Tetrachlor	50.0	49.1	98.21	80-120
89 Diethylphthalate	50.0	49.5	99.08	80-120
91 Fluorene	50.0	48.0	96.07	80-120
92 4-Chlorophenyl-phe	50.0	50.8	101.57	80-120
90 O,O-diethyl-o-2-py	50.0	52.1	104.29	80-120
93 5-Nitro-O-Toluidin	50.0	55.5	111.08	80-120
94 4-Nitroaniline	50.0	50.3	100.52	80-120
96 N-Nitrosodiphenyla	100	85.8	85.79	80-120
95 4,6-Dinitro-2-Meth	50.0	54.3	108.52	80-120
98 1,2-Diphenylhydraz	50.0	51.9	103.74	80-120
101 Sulfotepp	50.0	52.1	104.27	80-120
102 Diallate	50.0	55.0	110.11	80-120
103 Phorate	50.0	26.7	53.38*	80-120
105 4-Bromophenyl-phen	50.0	54.3	108.61	80-120
106 Phenacetin	50.0	51.9	103.87	80-120
104 1,3,5-Trinitrobenz	50.0	53.4	106.72	80-120
107 Hexachlorobenzene	50.0	54.4	108.78	80-120
108 Dimethoate	50.0	51.5	102.95	80-120
109 Atrazine	50.0	22.6	45.24*	80-120
110 4-Aminobiphenyl	50.0	45.6	91.25	80-120
111 Pentachlorophenol	50.0	59.4	118.74	80-120

Data File: \\target_server\gg\chem\gcms-u.i\U070215B.b\U0927.D
Report Date: 07-Jul-2015 10:01

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
113 Pronamide	50.0	51.9	103.78	80-120
112 Pentachloronitrobe	50.0	53.1	106.25	80-120
116 Phenanthrene	50.0	52.0	104.03	80-120
115 Disulfoton	50.0	47.2	94.45	80-120
118 Anthracene	50.0	48.8	97.71	80-120
117 Dinoseb	50.0	58.3	116.69	80-120
119 Carbazole	50.0	51.8	103.61	80-120
120 Methyl Parathion	50.0	58.5	116.92	80-120
121 Di-n-butylphthalat	50.0	51.8	103.61	80-120
122 Ethyl Parathion	50.0	50.3	100.62	80-120
123 4-Nitroquinoline-1	50.0	56.4	112.86	80-120
124 Methapyrilene	50.0	21.7	43.40*	80-120
125 Isodrin	50.0	52.7	105.32	80-120
126 Fluoranthene	50.0	53.0	106.03	80-120
127 Benzidine	50.0	50.0	100.10	80-120
128 Pyrene	50.0	46.5	93.10	80-120
130 Aramite	50.0	0.000	*	80-120
131 p-Dimethylaminoazo	50.0	54.7	109.40	80-120
133 Chlorobenzilate	50.0	50.6	101.25	80-120
134 Famphur	50.0	83.9	167.74*	80-120
135 3,3'-Dimethylbenzi	50.0	67.9	135.77*	80-120
136 Butylbenzylphthala	50.0	49.5	98.92	80-120
137 Bis(2-ethylhexyl)a	50.0	44.1	88.30	80-120
138 2-Acetylaminofluor	50.0	53.8	107.63	80-120
140 Benzo(a)anthracene	50.0	50.1	100.30	80-120
139 3,3'-Dichlorobenzi	50.0	51.6	103.14	80-120
141 Chrysene	50.0	51.2	102.30	80-120
143 bis(2-Ethylhexyl)p	50.0	49.9	99.83	80-120
132 Kepone	50.0	0.000	*	80-120
144 Di-n-octylphthalat	50.0	54.9	109.79	80-120
147 Benzo(b)fluoranthe	50.0	52.0	104.08	80-120
146 7,12-Dimethylbenz(	50.0	54.5	109.08	80-120
148 Benzo(k)fluoranthe	50.0	54.1	108.18	80-120
145 Hexachlorophene	50.0	0.000	*	80-120
149 Benzo(a)pyrene	50.0	48.6	97.29	80-120
151 3-Methylcholanthre	50.0	56.2	112.34	80-120
152 Dibenz(a,j)acridin	50.0	42.9	85.72	80-120
153 Indeno(1,2,3-cd)py	50.0	47.0	93.91	80-120
155 Dibenzo(a,h)anthra	50.0	45.6	91.11	80-120
156 Benzo(g,h,i)peryle	50.0	45.3	90.62	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 8 2-Fluorophenol	100	0.000	*	20-110
$ 12 Phenol-D6	100	0.000	*	10-115
$ 33 Nitrobenzene-D5	50.0	0.000	*	40-110
$ 63 2-Fluorobiphenyl	50.0	0.000	*	50-110
$ 100 2,4,6-Tribromophe	100	0.000	*	40-125
$ 129 Terphenyl-D14	50.0	0.000	*	50-135

Logbooks and Supporting Documents

S/S SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV8721		Spike ID (1): SV8715		
	Surrogate ID (2):		Spike ID (2): SM: SV8722		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM804		H_2SO_4 Lot # 71333		NaOH Lot # 62531
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 27965002		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) 52		pH (2nd Extraction) 211
Prep Start Time: 0950	Prep End Time: 1225		CLLE Start Time: —		CLLE End Time: —

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV 0472	Initials	Comments
7-1-15	KF	WG165688-1 ~~WG165689-1~~	1000	1mL	NR	✓	✓	1mL	7-1-15	B7	WAJ	SV# 323845 SIM# 323846
		WG165688-2			1mL	✓				B8		
		-3				✓				B9		
		WG165689-2					✓			B10		
		-3					✓			C1		
		~~WG165688-4~~ WG165689-4	930		NR	✓	✓			C2		SPLP Blank PBT2064A
										TMS 7-7-15		

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000098

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV 0472	Initials	Comments
7-1-15	KF	S14615-2E	~~930~~ 960	1mL	NR	✓	✓	1mL	7-1-15	C3	WAJ	SPLP
		S14632-2c	~~960~~ 970			✓				C4		lots of sediment - em-S.S.-C4
		-3c	970							C5		
		-4c	900			✓				C6		
		S14654-1J	1000			✓				C7		em-S.S.
		-2J	1050							C8		
		-3J	1060							C9		
		S14612-22E	1060				✓			C10		
		S14675-6F	950				✓			D1		
		-8F	980							D2		
		-18F	1010							D3		
											JMS 7/10	

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013

QAEX284

0000099

DATE OF DFTPP INJECTION: 070215B

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5973-U

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165876-1	50ng DFTPP	UD398	1	1	DFTPP390	2.0	JCH	OK
876-4	SSTD050 UU702	U0921		2	U8270C81	1.0		✓
-2	010	22		3				✓
3	025	23		4				✓
-5	075	24		5				✓
-6	100	25		6				✓
-7	125	26		7				✓
-8	IMB	27		8				OK
	WG165509-1RA	28		9				OK
	WG165643-1RA	29		10				OK
	WG165723-1RA	30		11				OK
	WG165688-1	31		12				OK
	-4	32		13				OK
	-2	33		14				OK
	-3	34		15				OK
	STI4615-2	35		16				OK
	STI4654-1	36		17				OK
	-2	37		18				SS1 ↓
	-3	38		19				OK
	STI4545-3	39		20				OK
	WG165509-4	40		21				OK
	-5	41		22				OK
	STI4492-3	42		23				(SS6) ↓
	-6	43		24				(SS6) ↓
	STI4545-2	44		25				(SS6) ↓
	-1	45		26				(SS6) ↓ SS6 ↓
	STI4492-6	46		27				(SS6) ↓
	hold	47-51		28				—

STANDARD	CODE
DFTPP	52641
CAL. STD.	52642 STK4917
IS MIX	STK5021

REVIEWED AND APPROVED BY: _____
DATE: _____

SPLP SEMIVOLATILE SIM DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** Navy Clean WE08 NWIRP Bethpage, NY **Matrix:** AQ
Lab Code: KAS **SDG:** SI4615

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	DBP	#	FLO	#	PYR	#
SITE 4TS-SEE2-PT	SI4615-2RA		55.9		65.4		79.8		81.0	
Method Blank Sample	WG165689-1RA		63.6		53.5		61.3		72.2	
Laboratory Control S	WG165689-2RA		57.7		63.2		59.2		70.0	
Laboratory Control S	WG165689-3RA		54.9		57.5		58.4		80.6	
SPLP Blank	WG165689-4RA		67.3		68.4		67.2		78.9	

		QC Limits
DBP	2,4-DIBROMOPHENOL	10-130
2MN	2-METHYLNAPHTHALENE-D10	43-92
FLO	FLUORENE-D10	29-101
PYR	PYRENE-D10	53-166

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : N6980.D
Instrument ID : GCMS-N
Matrix : AQ

SDG : SI4615
Lab Sample ID : WG165689-1RA
Date Extracted : 01-JUL-15
Date Analyzed : 02-JUL-15
Time Analyzed : 15:35

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG165689-2RA	N6981.D	07/02/15	16:03
Laboratory Control S	WG165689-3RA	N6982.D	07/02/15	16:32
SPLP Blank	WG165689-4RA	N7021.D	07/06/15	13:30
SITE 4TS-SEE2-PT	SI4615-2RA	N7022.D	07/06/15	13:58

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165689-1RA
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: N6980.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165689

Analysis Date: 02-JUL-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 07-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.10	ug/L	1	.2	0.20	0.041	0.10
2-Chlorophenol	U	0.50	ug/L	1	1	1.0	0.28	0.50
2,2'-Oxybis(1-Chloropropane)	U	0.15	ug/L	1	.2	0.20	0.12	0.15
3&4-Methylphenol	U	0.50	ug/L	1	1	1.0	0.44	0.50
N-Nitroso-Di-N-Propylamine	U	0.10	ug/L	1	.2	0.20	0.072	0.10
Hexachloroethane	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Nitrobenzene	U	0.15	ug/L	1	.2	0.20	0.13	0.15
2-Nitrophenol	U	1.0	ug/L	1	2	2.0	0.81	1.0
Bis(2-Chloroethoxy)Methane	U	0.25	ug/L	1	.5	0.50	0.18	0.25
2,4-Dichlorophenol	U	1.0	ug/L	1	2	2.0	0.89	1.0
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
4-Chloroaniline	U	1.5	ug/L	1	3	3.0	1.4	1.5
Hexachlorobutadiene	U	0.10	ug/L	1	.2	0.20	0.087	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
Hexachlorocyclopentadiene	U	0.10	ug/L	1	.2	0.20	0.067	0.10
2,4,6-Trichlorophenol	U	0.50	ug/L	1	1	1.0	0.12	0.50
2,4,5-Trichlorophenol	U	0.50	ug/L	1	1	1.0	0.078	0.50
1,1'-Biphenyl	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Nitroaniline	U	0.15	ug/L	1	.2	0.20	0.12	0.15
2,6-Dinitrotoluene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
2,4-Dinitrophenol	U	0.50	ug/L	1	1	1.0	0.24	0.50
4-Nitrophenol	U	0.50	ug/L	1	1	1.0	0.23	0.50
Dibenzofuran	U	0.10	ug/L	1	.2	0.20	0.068	0.10
2,4-Dinitrotoluene	U	0.10	ug/L	1	.2	0.20	0.035	0.10
4-Chlorophenyl-Phenylether	U	0.25	ug/L	1	.5	0.50	0.16	0.25
4-Nitroaniline	U	0.10	ug/L	1	.2	0.20	0.065	0.10
4,6-Dinitro-2-Methylphenol	U	0.75	ug/L	1	1	1.0	0.50	0.75
N-Nitrosodiphenylamine	U	0.10	ug/L	1	.2	0.20	0.071	0.10
1,2,4,5-Tetrachlorobenzene	U	0.10	ug/L	1	.2	0.20	0.037	0.10
Hexachlorobenzene	U	0.10	ug/L	1	.2	0.20	0.055	0.10
Atrazine	U	0.10	ug/L	1	.2	0.20	0.038	0.10
Pentachlorophenol	U	0.50	ug/L	1	1	1.0	0.33	0.50
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165689-1RA
Client ID: Method Blank Sample
Project:
SDG: SI4615
Lab File ID: N6980.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165689

Analysis Date: 02-JUL-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 07-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-N-Butylphthalate	U	1.0	ug/L	1	2	2.0	0.83	1.0
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Butylbenzylphthalate	U	0.50	ug/L	1	1	1.0	0.13	0.50
3,3'-Dichlorobenzidine	U	0.10	ug/L	1	.2	0.20	0.056	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Bis(2-Ethylhexyl)Phthalate	U	0.50	ug/L	1	1	1.0	0.50	0.50
Di-N-Octylphthalate	U	0.50	ug/L	1	1	1.0	0.079	0.50
Benzo(b)Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2,3,4,6-Tetrachlorophenol	U	0.50	ug/L	1	1	1.0	0.071	0.50
2-Methylnaphthalene-D10		63.6	%					
Fluorene-D10		61.3	%					
Pyrene-D10		72.2	%					
2,4-Dibromophenol		53.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165689-4RA
Client ID: SPLP Blank
Project:
SDG: SI4615
Lab File ID: N7021.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165689

Analysis Date: 06-JUL-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 07-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	U	0.11	ug/L	1	.2	0.22	0.044	0.11
2-Chlorophenol	U	0.54	ug/L	1	1	1.1	0.30	0.54
2,2'-Oxybis(1-Chloropropane)	U	0.16	ug/L	1	.2	0.22	0.13	0.16
3&4-Methylphenol	U	0.54	ug/L	1	1	1.1	0.47	0.54
N-Nitroso-Di-N-Propylamine	U	0.11	ug/L	1	.2	0.22	0.077	0.11
Hexachloroethane	U	0.11	ug/L	1	.2	0.22	0.078	0.11
Nitrobenzene	U	0.16	ug/L	1	.2	0.22	0.14	0.16
2-Nitrophenol	U	1.1	ug/L	1	2	2.2	0.87	1.1
Bis(2-Chloroethoxy)Methane	U	0.27	ug/L	1	.5	0.54	0.19	0.27
2,4-Dichlorophenol	U	1.1	ug/L	1	2	2.2	0.96	1.1
Naphthalene	U	0.11	ug/L	1	.2	0.22	0.069	0.11
4-Chloroaniline	U	1.6	ug/L	1	3	3.2	1.5	1.6
Hexachlorobutadiene	U	0.11	ug/L	1	.2	0.22	0.094	0.11
2-Methylnaphthalene	U	0.11	ug/L	1	.2	0.22	0.083	0.11
Hexachlorocyclopentadiene	U	0.11	ug/L	1	.2	0.22	0.072	0.11
2,4,6-Trichlorophenol	U	0.54	ug/L	1	1	1.1	0.13	0.54
2,4,5-Trichlorophenol	U	0.54	ug/L	1	1	1.1	0.084	0.54
1,1'-Biphenyl	U	0.11	ug/L	1	.2	0.22	0.070	0.11
2-Nitroaniline	U	0.16	ug/L	1	.2	0.22	0.13	0.16
2,6-Dinitrotoluene	U	0.11	ug/L	1	.2	0.22	0.075	0.11
2,4-Dinitrophenol	U	0.54	ug/L	1	1	1.1	0.26	0.54
4-Nitrophenol	U	0.54	ug/L	1	1	1.1	0.25	0.54
Dibenzofuran	U	0.11	ug/L	1	.2	0.22	0.073	0.11
2,4-Dinitrotoluene	U	0.11	ug/L	1	.2	0.22	0.038	0.11
4-Chlorophenyl-Phenylether	U	0.27	ug/L	1	.5	0.54	0.17	0.27
4-Nitroaniline	U	0.11	ug/L	1	.2	0.22	0.070	0.11
4,6-Dinitro-2-Methylphenol	U	0.81	ug/L	1	1	1.1	0.54	0.81
N-Nitrosodiphenylamine	U	0.11	ug/L	1	.2	0.22	0.076	0.11
1,2,4,5-Tetrachlorobenzene	U	0.11	ug/L	1	.2	0.22	0.040	0.11
Hexachlorobenzene	U	0.11	ug/L	1	.2	0.22	0.059	0.11
Atrazine	U	0.11	ug/L	1	.2	0.22	0.041	0.11
Pentachlorophenol	U	0.54	ug/L	1	1	1.1	0.35	0.54
Phenanthrene	U	0.11	ug/L	1	.2	0.22	0.055	0.11
Anthracene	U	0.11	ug/L	1	.2	0.22	0.047	0.11

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client:
Lab ID: WG165689-4RA
Client ID: SPLP Blank
Project:
SDG: SI4615
Lab File ID: N7021.D

Sample Date:
Received Date:
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165689

Analysis Date: 06-JUL-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 07-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Di-N-Butylphthalate	U	1.1	ug/L	1	2	2.2	0.89	1.1
Fluoranthene	U	0.11	ug/L	1	.2	0.22	0.078	0.11
Pyrene	U	0.11	ug/L	1	.2	0.22	0.063	0.11
Butylbenzylphthalate	U	0.54	ug/L	1	1	1.1	0.14	0.54
3,3'-Dichlorobenzidine	U	0.11	ug/L	1	.2	0.22	0.060	0.11
Benzo(a)anthracene	U	0.11	ug/L	1	.2	0.22	0.049	0.11
Chrysene	U	0.11	ug/L	1	.2	0.22	0.039	0.11
Bis(2-Ethylhexyl)Phthalate	U	0.54	ug/L	1	1	1.1	0.54	0.54
Di-N-Octylphthalate	U	0.54	ug/L	1	1	1.1	0.085	0.54
Benzo(b)Fluoranthene	U	0.11	ug/L	1	.2	0.22	0.096	0.11
Benzo(k)fluoranthene	U	0.11	ug/L	1	.2	0.22	0.053	0.11
Benzo(a)pyrene	U	0.11	ug/L	1	.2	0.22	0.071	0.11
Indeno(1,2,3-cd)pyrene	U	0.11	ug/L	1	.2	0.22	0.056	0.11
Dibenzo(a,h)anthracene	U	0.11	ug/L	1	.2	0.22	0.075	0.11
Benzo(g,h,i)perylene	U	0.11	ug/L	1	.2	0.22	0.070	0.11
2,3,4,6-Tetrachlorophenol	U	0.54	ug/L	1	1	1.1	0.076	0.54
2-Methylnaphthalene-D10		67.3	%					
Fluorene-D10		67.2	%					
Pyrene-D10		78.9	%					
2,4-Dibromophenol		68.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165689-2RA
LCSD ID: WG165689-3RA
Project:
SDG: SI4615
Report Date: 07-JUL-15
LCS File ID: N6981.D

Received Date:
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165689
LCSD File ID: N6982.D

Analysis Date: 02-JUL-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Bis(2-Chloroethyl)Ether	2.00	0.801	40.0*	1.05	52.5*	ug/L	27	30	56-87
2-Chlorophenol	4.00	2.19	54.8	1.84	46.0	ug/L	17	30	30-112
2,2'-Oxybis(1-Chloropropane)	2.00	0.937	46.8*	0.914	45.7*	ug/L	2	30	57-90
3&4-Methylphenol	4.00	1.75	43.8	1.53	38.2	ug/L	13	30	31-78
N-Nitroso-Di-N-Propylamine	2.00	0.777	38.8*	0.760	38.0*	ug/L	2	30	43-86
Hexachloroethane	2.00	1.16	58.0	1.13	56.5	ug/L	3	30	48-80
Nitrobenzene	2.00	1.59	79.5	1.52	76.0	ug/L	4	30	43-89
2-Nitrophenol	4.00	2.60	65.0	2.29	57.2	ug/L	13	30	30-113
Bis(2-Chloroethoxy)Methane	2.00	1.22	61.0	1.11	55.5	ug/L	9	30	53-93
2,4-Dichlorophenol	4.00	2.73	68.2	2.35	58.8	ug/L	15	30	31-106
Naphthalene	2.00	1.20	60.0	1.16	58.0	ug/L	3	30	46-84
4-Chloroaniline	2.00	1.07	53.5	0.998	49.9	ug/L	7	30	38-122
Hexachlorobutadiene	2.00	1.29	64.5	1.24	62.0	ug/L	4	30	48-95
2-Methylnaphthalene	2.00	1.21	60.5	1.17	58.5	ug/L	3	30	51-114
Hexachlorocyclopentadiene	2.00	0.700	35.0	0.722	36.1	ug/L	3	30	10-96
2,4,6-Trichlorophenol	4.00	2.58	64.5	2.09	52.2	ug/L	21	30	19-139
2,4,5-Trichlorophenol	4.00	2.58	64.5	2.37	59.2	ug/L	8	30	20-133
1,1'-Biphenyl	2.00	1.15	57.5	1.10	55.0*	ug/L	4	30	56-96
2-Nitroaniline	2.00	1.21	60.5	1.14	57.0	ug/L	6	30	54-105
2,6-Dinitrotoluene	2.00	1.09	54.5	1.06	53.0	ug/L	3	30	47-86
2,4-Dinitrophenol	4.00	2.26	56.5	1.72	43.0	ug/L	27	30	10-95
4-Nitrophenol	4.00	1.10	27.5	0.768	19.2	ug/L	36*	30	10-160
Dibenzofuran	2.00	1.14	57.0	1.10	55.0*	ug/L	4	30	56-98
2,4-Dinitrotoluene	2.00	1.16	58.0	1.20	60.0	ug/L	3	30	48-95
4-Chlorophenyl-Phenylether	2.00	1.18	59.0	1.17	58.5	ug/L	1	30	57-95
4-Nitroaniline	2.00	1.75	87.5	1.70	85.0	ug/L	3	30	42-152
4,6-Dinitro-2-Methylphenol	4.00	2.65	66.2	2.14	53.5	ug/L	21	30	10-77
N-Nitrosodiphenylamine	2.00	1.01	50.5	0.983	49.2	ug/L	3	30	48-82
1,2,4,5-Tetrachlorobenzene	2.00	1.16	58.0	1.12	56.0	ug/L	4	30	30-150
Hexachlorobenzene	2.00	1.56	78.0	1.46	73.0	ug/L	7	30	62-90
Atrazine	2.00	1.59	79.5	1.51	75.5	ug/L	5	30	66-126
Pentachlorophenol	4.00	3.68	92.0*	2.86	71.5*	ug/L	25	30	10-66
Phenanthrene	2.00	1.35	67.5*	1.32	66.0*	ug/L	2	30	73-100
Anthracene	2.00	1.55	77.5	1.59	79.5	ug/L	2	30	70-95

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

LCS/LCSD Recovery Report

LCS ID: WG165689-2RA
LCSD ID: WG165689-3RA
Project:
SDG: SI4615
Report Date: 07-JUL-15
LCS File ID: N6981.D

Received Date:
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: SW846 3510
Lab Prep Batch: WG165689
LCSD File ID: N6982.D

Analysis Date: 02-JUL-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Di-N-Butylphthalate	2.00	2.13	106.	2.01	100.	ug/L	6	30	46-163
Fluoranthene	2.00	1.68	84.0	1.62	81.0	ug/L	4	30	81-109
Pyrene	2.00	1.51	75.5	1.64	82.0	ug/L	8	30	71-104
Butylbenzylphthalate	2.00	1.69	84.5	1.75	87.5	ug/L	3	30	30-119
3,3'-Dichlorobenzidine	2.00	3.41	170.*	2.86	143.*	ug/L	18	30	10-118
Benzo(a)anthracene	2.00	1.45	72.5	1.34	67.0*	ug/L	8	30	70-110
Chrysene	2.00	1.94	97.0*	1.87	93.5	ug/L	4	30	70-95
Bis(2-Ethylhexyl)Phthalate	2.00	1.79	89.5*	1.74	87.0*	ug/L	3	30	97-188
Di-N-Octylphthalate	2.00	1.45	72.5	1.72	86.0	ug/L	17	30	56-122
Benzo(b)Fluoranthene	2.00	1.30	65.0*	1.18	59.0*	ug/L	10	30	67-102
Benzo(k)fluoranthene	2.00	1.90	95.0	1.95	97.5	ug/L	2	30	68-103
Benzo(a)pyrene	2.00	1.55	77.5	1.48	74.0	ug/L	5	30	63-98
Indeno(1,2,3-cd)pyrene	2.00	1.74	87.0	1.58	79.0	ug/L	10	30	61-112
Dibenzo(a,h)anthracene	2.00	1.77	88.5	1.64	82.0	ug/L	8	30	66-108
Benzo(g,h,i)perylene	2.00	1.85	92.5	1.70	85.0	ug/L	8	30	62-106
2,3,4,6-Tetrachlorophenol	4.00	2.52	63.0	2.11	52.8	ug/L	18	30	10-101
2-Methylnaphthalene-D10			57.7		54.9				43-92
Fluorene-D10			59.2		58.4				29-101
Pyrene-D10			70.0		80.6				53-166
2,4-Dibromophenol			63.2		57.5				10-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND963.D
Instrument ID : GCMS-N

SDG : SI4615
Date Analyzed : 01-JUL-15
Time Analyzed : 15:23

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	30.2		
68	Less than 2.0% of mass 69	0.6	1.56	1
69	Less than 100.0% of mass 198	38.8		
70	Less than 2.0% of mass 69	0.2	0.46	1
127	40.0 - 60.0% of mass 198	56.6		
197	Less than 1.0% of mass 198	0.3		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 30.0% of mass 198	24.9		
365	1.0 - 100.0% of mass 198	2.5		
441	0.0 - 100.0% of mass 443	13.3	73.96	2
442	40.0 - 100.0% of mass 198	91.3		
443	17.0 - 23.0% of mass 442	17.9	19.65	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG165774-4	N6949.D	07/01/15	16:38
Initial Calibration	WG165774-2	N6950.D	07/01/15	17:06
Initial Calibration	WG165774-3	N6951.D	07/01/15	17:34
Initial Calibration	WG165774-5	N6952.D	07/01/15	18:03
Initial Calibration	WG165774-6	N6953.D	07/01/15	18:31
Initial Calibration	WG165774-7	N6954.D	07/01/15	18:59
Independent Source	WG165774-8	N6955.D	07/01/15	19:27

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND964.D
Instrument ID : GCMS-N

SDG : SI4615
Date Analyzed : 02-JUL-15
Time Analyzed : 14:07

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	31.7		
68	Less than 2.0% of mass 69	0.3	0.70	1
69	Less than 100.0% of mass 198	40.4		
70	Less than 2.0% of mass 69	0.2	0.45	1
127	40.0 - 60.0% of mass 198	57.1		
197	Less than 1.0% of mass 198	0.5		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.5		
275	10.0 - 30.0% of mass 198	23.8		
365	1.0 - 100.0% of mass 198	2.3		
441	0.0 - 100.0% of mass 443	11.6	74.08	2
442	40.0 - 100.0% of mass 198	82.4		
443	17.0 - 23.0% of mass 442	15.7	19.08	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG165856-2	N6978.D	07/02/15	14:38
Method Blank Sample	WG165689-1RA	N6980.D	07/02/15	15:35
Laboratory Control S	WG165689-2RA	N6981.D	07/02/15	16:03
Laboratory Control S	WG165689-3RA	N6982.D	07/02/15	16:32

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
Lab File ID : ND965.D
Instrument ID : GCMS-N

SDG : SI4615
Date Analyzed : 06-JUL-15
Time Analyzed : 11:59

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	35.1		
68	Less than 2.0% of mass 69	0.7	1.59	1
69	Less than 100.0% of mass 198	42.5		
70	Less than 2.0% of mass 69	0.2	0.57	1
127	40.0 - 60.0% of mass 198	58.7		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.9		
275	10.0 - 30.0% of mass 198	22.8		
365	1.0 - 100.0% of mass 198	2.1		
441	0.0 - 100.0% of mass 443	10.1	70.27	2
442	40.0 - 100.0% of mass 198	73.2		
443	17.0 - 23.0% of mass 442	14.3	19.55	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG166006-2	N7020.D	07/06/15	12:48
SPLP Blank	WG165689-4RA	N7021.D	07/06/15	13:30
SITE 4TS-SEE2-PT	SI4615-2RA	N7022.D	07/06/15	13:58

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165774-4
Lab File ID : N6949.D

SDG: SI4615
Analytical Date: 07/01/15 16:38
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	87594		4.26		261730		5.63		113044		7.68	
	Upper Limit	175188		4.76		523460		6.13		226088		8.18	
	Lower Limit	43797		3.76		130865		5.13		56522		7.18	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165856-2	47914		4.25		155732		5.61		67646		7.66	
Method Blank Sample	WG165689-1RA	75847		4.25		221158		5.62		101761		7.67	
Laboratory Control S	WG165689-2RA	71009		4.25		205078		5.61		96229		7.67	
Laboratory Control S	WG165689-3RA	72622		4.25		215549		5.61		101591		7.67	
Continuing Calibrati	WG166006-2	84113		4.25		257309		5.61		112056		7.67	
SPLP Blank	WG165689-4RA	88358		4.25		255931		5.64		115236		7.68	
SITE 4TS-SEE2-PT	SI4615-2RA	80130		4.25		233021		5.63		113641		7.66	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Beth
Lab ID : WG165774-4
Lab File ID : N6949.D

SDG: SI4615
Analytical Date: 07/01/15 16:38
Instrument ID: GCMS-N

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	168425		9.47		100807		12.77		66317		15.43	
	Upper Limit	336850		9.97		201614		13.27		132634		15.93	
	Lower Limit	84212.5		8.97		50403.5		12.27		33158.5		14.93	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG165856-2	96335		9.45		58513		12.75		40168		15.40	
Method Blank Sample	WG165689-1RA	160639		9.46		86470		12.76		57365		15.40	
Laboratory Control S	WG165689-2RA	136840		9.45		96399		12.75		61130		15.40	
Laboratory Control S	WG165689-3RA	148963		9.45		91699		12.76		51443		15.41	
Continuing Calibrati	WG166006-2	155946		9.47		77646		12.78		51475		15.44	
SPLP Blank	WG165689-4RA	183705		9.49		94761		12.80		54430		15.44	
SITE 4TS-SEE2-PT	SI4615-2RA	163085		9.43		96033		12.74		51037		15.41	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 0.50 minutes of internal standard RT
RT Lower Limit = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.

* Compound recovery outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-2RA
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: N7022.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165689

Analysis Date: 06-JUL-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 09-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Bis(2-Chloroethyl)Ether	ULL	0.10	ug/L	1	.2	0.21	0.043	0.10
2-Chlorophenol	U	0.52	ug/L	1	1	1.0	0.29	0.52
2,2'-Oxybis(1-Chloropropane)	ULL	0.16	ug/L	1	.2	0.21	0.12	0.16
3&4-Methylphenol	U	0.52	ug/L	1	1	1.0	0.46	0.52
N-Nitroso-Di-N-Propylamine	ULL	0.10	ug/L	1	.2	0.21	0.075	0.10
Hexachloroethane	U	0.10	ug/L	1	.2	0.21	0.076	0.10
Nitrobenzene	U	0.16	ug/L	1	.2	0.21	0.14	0.16
2-Nitrophenol	U	1.0	ug/L	1	2	2.1	0.84	1.0
Bis(2-Chloroethoxy)Methane	U	0.26	ug/L	1	.5	0.52	0.19	0.26
2,4-Dichlorophenol	U	1.0	ug/L	1	2	2.1	0.93	1.0
Naphthalene	U	0.10	ug/L	1	.2	0.21	0.067	0.10
4-Chloroaniline	U	1.6	ug/L	1	3	3.1	1.4	1.6
Hexachlorobutadiene	U	0.10	ug/L	1	.2	0.21	0.091	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.21	0.080	0.10
Hexachlorocyclopentadiene	U	0.10	ug/L	1	.2	0.21	0.070	0.10
2,4,6-Trichlorophenol	U	0.52	ug/L	1	1	1.0	0.12	0.52
2,4,5-Trichlorophenol	U	0.52	ug/L	1	1	1.0	0.081	0.52
1,1'-Biphenyl	UL	0.10	ug/L	1	.2	0.21	0.068	0.10
2-Nitroaniline	U	0.16	ug/L	1	.2	0.21	0.12	0.16
2,6-Dinitrotoluene	U	0.10	ug/L	1	.2	0.21	0.073	0.10
2,4-Dinitrophenol	U	0.52	ug/L	1	1	1.0	0.25	0.52
4-Nitrophenol	U	0.52	ug/L	1	1	1.0	0.24	0.52
Dibenzofuran	UL	0.10	ug/L	1	.2	0.21	0.071	0.10
2,4-Dinitrotoluene	U	0.10	ug/L	1	.2	0.21	0.036	0.10
4-Chlorophenyl-Phenylether	U	0.26	ug/L	1	.5	0.52	0.17	0.26
4-Nitroaniline	U	0.10	ug/L	1	.2	0.21	0.068	0.10
4,6-Dinitro-2-Methylphenol	U	0.78	ug/L	1	1	1.0	0.52	0.78
N-Nitrosodiphenylamine	U	0.10	ug/L	1	.2	0.21	0.074	0.10
1,2,4,5-Tetrachlorobenzene	U	0.10	ug/L	1	.2	0.21	0.038	0.10
Hexachlorobenzene	U	0.10	ug/L	1	.2	0.21	0.057	0.10
Atrazine	U	0.10	ug/L	1	.2	0.21	0.040	0.10
Pentachlorophenol	ULL	0.52	ug/L	1	1	1.0	0.34	0.52
Phenanthrene	LL	0.47	ug/L	1	.2	0.21	0.053	0.10
Anthracene	J	0.071	ug/L	1	.2	0.21	0.046	0.10
Di-N-Butylphthalate	U	1.0	ug/L	1	2	2.1	0.86	1.0

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: ENSAFE
Lab ID: SI4615-2RA
Client ID: SITE 4TS-SEE2-PT
Project: Navy Clean WE08 NWIRP Bethpage, N
SDG: SI4615
Lab File ID: N7022.D

Sample Date: 26-JUN-15
Received Date: 27-JUN-15
Extract Date: 01-JUL-15
Extracted By: KF
Extraction Method: 3510/1312
Lab Prep Batch: WG165689

Analysis Date: 06-JUL-15
Analyst: JCG
Analysis Method: SW846 M8270D
Matrix: AQ
% Solids: NA
Report Date: 09-JUL-15

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Fluoranthene	U	0.10	ug/L	1	.2	0.21	0.076	0.10
Pyrene	J	0.13	ug/L	1	.2	0.21	0.061	0.10
Butylbenzylphthalate	U	0.52	ug/L	1	1	1.0	0.14	0.52
3,3'-Dichlorobenzidine	ULL	0.10	ug/L	1	.2	0.21	0.058	0.10
Benzo(a)anthracene	UL	0.10	ug/L	1	.2	0.21	0.048	0.10
Chrysene	UL	0.10	ug/L	1	.2	0.21	0.038	0.10
Bis(2-Ethylhexyl)Phthalate	ULL	0.52	ug/L	1	1	1.0	0.52	0.52
Di-N-Octylphthalate	U	0.52	ug/L	1	1	1.0	0.082	0.52
Benzo(b)Fluoranthene	ULL	0.10	ug/L	1	.2	0.21	0.093	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.21	0.051	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.21	0.069	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.21	0.054	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.21	0.073	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.21	0.068	0.10
2,3,4,6-Tetrachlorophenol	U	0.52	ug/L	1	1	1.0	0.074	0.52
2-Methylnaphthalene-D10		55.9	%					
Fluorene-D10		79.8	%					
Pyrene-D10		81.0	%					
2,4-Dibromophenol		65.4	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Standards Data Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6950.D N6951.D N6949.D N6952.D N6953.D N6954.D **Column ID:**
Calibration Date(s): 01-JUL-15 16:38 01-JUL-15 18:59

	0.200000(Level 1	0.500000(Level 2	1.0000 Level 3	3.0000 Level 4	7.0000 Level 5	10.0000 Level 6	New Crv	b	m1	m2	%RSD	Max %RSD	
Bis(2-Chloroethyl)ether	38839	92584	168539	471400	844576	1236576	QUA	-0.15953	0.74114	0.00429	0.99528	0.99000	O
2-Chlorophenol	1.25475	1.30908	1.33524	1.32789	1.32867	1.33406	AVG		1.31495		2.35397	15.00000	O
2,2'-Oxybis(1-chloropropane	0.82295	0.90565	0.89048	0.94679	0.95168	0.92008	AVG		0.90627		5.19585	15.00000	O
N-Nitroso-di-n-propylamine	0.67054	0.82759	0.82866	0.83160	0.81123	0.80185	AVG		0.79524		7.81934	15.00000	O
3&4-Methylphenol	1.10935	1.03461	1.14956	1.17202	1.16959	1.19914	AVG		1.13905		5.19859	15.00000	O
Hexachloroethane	0.43517	0.47364	0.46354	0.50892	0.51550	0.49884	AVG		0.48260		6.37424	15.00000	O
Nitrobenzene	34198	76524	146341	391381	852671	1161743	LNR	-0.30237	0.33353		0.99582	0.99000	O
2-Nitrophenol	0.19979	0.21545	0.22571	0.22486	0.21233	0.19972	AVG		0.21298		5.39274	15.00000	O
bis(2-Chloroethoxy)methane	0.38514	0.46687	0.47392	0.46273	0.43145	0.38744	AVG		0.43459		9.23817	15.00000	O
2,4-Dichlorophenol	0.26886	0.28882	0.30825	0.30108	0.28963	0.26895	AVG		0.28760		5.63355	15.00000	O
Naphthalene	1.03054	1.06815	1.06475	1.07911	0.97223	0.90661	AVG		1.02023		6.65724	15.00000	O
4-Chloroaniline	0.37426	0.43093	0.41975	0.46401	0.43324	0.40516	AVG		0.42122		7.15002	15.00000	O
Hexachlorobutadiene	0.22063	0.21388	0.20198	0.19896	0.18545	0.17180	AVG		0.19878		9.05768	15.00000	O
2-Methylnaphthalene	59069	143166	252853	742822	1611083	2225128	LNR	-0.24884	0.63843		0.99668	0.99000	O
Hexachlorocyclopentadiene	1468	5879	20432	88641	269033	402272	QUA	0.26725	4.53830	-0.30879	0.99880	0.99000	O
1,2,4,5-Tetrachlorobenzene	0.70386	0.73945	0.73205	0.74707	0.66873	0.68204	AVG		0.71220		4.53753	15.00000	O
2,4,6-Trichlorophenol	0.34080	0.40390	0.44261	0.44994	0.43271	0.43999	AVG		0.41832		9.84690	15.00000	O
2,4,5-Trichlorophenol	0.52956	0.51404	0.52415	0.50265	0.47796	0.48571	AVG		0.50568		4.10814	15.00000	O
1,1'-Biphenyl	1.84677	1.90763	1.87990	1.92017	1.72531	1.72139	AVG		1.83353		4.85428	15.00000	O
2-Nitroaniline	0.30486	0.33352	0.36188	0.37490	0.35037	0.36313	AVG		0.34811		7.29125	15.00000	O
2,6-Dinitrotoluene	0.39117	0.40283	0.41730	0.42665	0.40723	0.40255	AVG		0.40795		3.05087	15.00000	O
2,4-Dinitrophenol	7340	22268	56814	103319	177883	270791	QUA	0.60930	6.81553	-0.77848	0.99301	0.99000	O
Dibenzofuran	1.88759	1.96143	1.95271	2.01683	1.86217	1.88160	AVG		1.92705		3.09027	15.00000	O
2,4-Dinitrotoluene	0.40278	0.42872	0.48315	0.51800	0.49649	0.51209	AVG		0.47354		9.94857	15.00000	O
4-Nitrophenol	0.20121	0.22639	0.28137	0.27682	0.28692	0.29816	AVG		0.26181		14.7795(	15.00000	O
2,3,4,6-Tetrachlorophenol	0.34099	0.38573	0.41758	0.42598	0.42604	0.43799	AVG		0.40572		8.95196	15.00000	O
4-Chlorophenyl-phenylether	0.74992	0.77123	0.77239	0.78726	0.71292	0.72647	AVG		0.75337		3.84749	15.00000	O
4-Nitroaniline	0.25177	0.25221	0.24735	0.22816	0.21429	0.23927	AVG		0.23884		6.30864	15.00000	O
4,6-Dinitro-2-Methylphenol	13855	40618	85355	159565	252518	373052	QUA	0.39086	7.15634	-0.60888	0.99702	0.99000	O
N-Nitrosodiphenylamine	0.82329	0.82551	0.81583	0.80818	0.72747	0.72709	AVG		0.78789		6.00897	15.00000	O
Hexachlorobenzene	0.30222	0.29918	0.28531	0.28166	0.26664	0.26174	AVG		0.28279		5.82658	15.00000	O
Atrazine	0.17558	0.18342	0.20214	0.19613	0.18574	0.18432	AVG		0.18789		5.10307	15.00000	O
Pentachlorophenol	0.15248	0.15933	0.20528	0.16548	0.16161	0.16680	AVG		0.16849		11.1119[	15.00000	O
Phenanthrene	1.36254	1.36720	1.38869	1.33410	1.25768	1.26247	AVG		1.32878		4.21507	15.00000	O
Anthracene	1.50667	1.44352	1.40375	1.36962	1.30690	1.29405	AVG		1.38742		5.86924	15.00000	O
Di-n-butylphthalate	2.03606	2.05193	1.94542	1.96722	1.91147	1.85954	AVG		1.96194		3.74036	15.00000	O
Fluoranthene	1.42616	1.26126	1.35366	1.22918	1.19731	1.21421	AVG		1.28030		7.06304	15.00000	O

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SI4615
Project : Navy Clean WE08 NWIRP Bethpage, NY **Instrument ID:** GCMS-N
Lab File IDs : N6950.D N6951.D N6949.D N6952.D N6953.D N6954.D **Column ID:**
Calibration Date(s): 01-JUL-15 16:38 01-JUL-15 18:59

Pyrene	59706	135440	296805	878545	2048868	2814246	LNR	-0.21447	1.89565		0.99875	0.99000	O
Butylbenzylphthalate	1.46079	1.48048	1.29815	1.25716	1.21850	1.18532	AVG		1.31673		9.50864	15.00000	O
Benzo(a)anthracene	42765	88032	237171	580394	1370167	1939666	LNR	-0.23450	1.28972		0.99871	0.99000	O
3,3'-Dichlorobenzidine	0.35308	0.33545	0.34721	0.35795	0.32794	0.32999	AVG		0.34194		3.67365	15.00000	O
Chrysene	55540	95658	235767	623974	1354794	1901591	LNR	-0.34828	1.26110		0.99766	0.99000	O
bis(2-Ethylhexyl)phthalate	2.24419	2.15937	2.02213	1.80510	1.72382	1.65562	AVG		1.93504		12.51129	15.00000	O
Di-n-octylphthalate	5.69552	5.79722	4.35973	4.74771	4.50065	4.25591	AVG		4.89279		13.94294	15.00000	O
Benzo(b)fluoranthene	35313	56877	189815	400877	980356	1401745	LNR	-0.18564	1.61353		0.99879	0.99000	O
Benzo(k)fluoranthene	39764	72857	189590	508524	1027967	1473660	LNR	-0.32167	1.69173		0.99703	0.99000	O
Benzo(a)pyrene	1.93439	1.46752	1.66628	1.42715	1.32841	1.36024	AVG		1.53066		15.06975	15.00000	W(
Indeno(1,2,3-cd)pyrene	1.23602	0.99634	1.00954	0.91174	0.87581	0.94866	AVG		0.99635		12.82012	15.00000	O
Dibenzo(a,h)anthracene	0.80383	0.72749	0.74348	0.66694	0.64156	0.70503	AVG		0.71472		8.07594	15.00000	O
Benzo(g,h,i)perylene	1.14057	0.95593	0.91703	0.81828	0.76806	0.82282	AVG		0.90378		14.94741	15.00000	O
2-Methylnaphthalene-D10	1.13020	1.13944	1.13011	1.13157	1.01075	1.01305	AVG		1.09252		5.72502	15.00000	
2,4-Dibromophenol	0.39248	0.41191	0.42621	0.42786	0.40278	0.41252	AVG		0.41229		3.28842	15.00000	
Fluorene-D10	0.92719	0.93766	0.92643	0.96330	0.88998	0.89038	AVG		0.92249		3.07422	15.00000	
Pyrene-D10	1.38409	1.36335	1.21043	1.17640	1.13528	1.10114	AVG		1.22845		9.65575	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N070115.b\N6955.D
Report Date: 07-Jul-2015 12:55

Katahdin Analytical Services

RECOVERY REPORT

Client Name:
Client SDG: 021497
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: WG165774-8
Level: LOW
Operator: JCG
Data Type: MS DATA
SampleType: INDCHECK
SpikeList File: SIM_IND_CHK.spk
Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N070115.b\NSPSIM46.m
Misc Info: WG165774,WG165774,WG165774-4,SI4615-2

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2 1,4-Dioxane	2.00	1.59	79.44*	80-120
3 Benzaldehyde	2.00	1.86	92.79	80-120
4 Phenol	2.00	1.90	95.15	80-120
5 Bis(2-Chloroethyl)	2.00	2.12	106.06	80-120
6 2-Chlorophenol	2.00	1.94	96.83	80-120
7 1,3-Dichlorobenzen	2.00	1.99	99.62	80-120
9 1,4-Dichlorobenzen	2.00	2.00	100.21	80-120
10 1,2-Dichlorobenzen	2.00	1.92	95.83	80-120
11 2,2'-Oxybis(1-chlo	2.00	1.64	82.11	80-120
12 2-Methylphenol	2.00	2.23	111.57	80-120
13 Acetophenone	2.00	1.89	94.44	80-120
14 N-Nitroso-di-n-pro	2.00	1.73	86.74	80-120
16 Hexachloroethane	2.00	1.98	99.09	80-120
15 3&4-Methylphenol	2.00	1.87	93.42	80-120
17 Nitrobenzene	2.00	2.16	108.14	80-120
18 Isophorone	2.00	2.02	101.04	80-120
19 2-Nitrophenol	2.00	1.93	96.41	80-120
20 2,4-Dimethylphenol	2.00	1.84	92.17	80-120
21 bis(2-Chloroethoxy	2.00	2.00	100.12	80-120
22 2,4-Dichlorophenol	2.00	1.95	97.63	80-120
23 1,2,4-Trichloroben	2.00	2.03	101.75	80-120
25 Naphthalene	2.00	2.02	100.79	80-120
26 4-Chloroaniline	2.00	1.94	97.23	80-120
27 Hexachlorobutadien	2.00	1.95	97.65	80-120
28 Caprolactam	2.00	1.86	92.91	80-120
29 4-Chloro-3-Methylp	2.00	1.82	91.26	80-120
31 2-Methylnaphthalen	2.00	1.98	99.15	80-120
32 1-Methylnaphthalen	2.00	1.97	98.49	80-120
34 1,2,4,5-Tetrachlor	2.00	1.86	93.03	80-120
33 Hexachlorocyclopen	2.00	1.25	62.72*	80-120
36 2,4,6-Trichlorophe	2.00	1.81	90.58	80-120
37 2,4,5-Trichlorophe	2.00	1.83	91.40	80-120
39 2-Chloronaphthalen	2.00	1.86	92.81	80-120
38 1,1'-Biphenyl	2.00	1.87	93.64	80-120
40 2-Nitroaniline	2.00	1.86	92.89	80-120
41 Dimethyl Phthalate	2.00	1.89	94.63	80-120
43 Acenaphthylene	2.00	1.64	82.11	80-120
42 2,6-Dinitrotoluene	2.00	1.70	84.80	80-120
44 3-Nitroaniline	2.00	1.93	96.39	80-120
46 Acenaphthene	2.00	1.88	93.94	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N070115.b\N6955.D
Report Date: 07-Jul-2015 12:55

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 2,4-Dinitrophenol	2.00	1.40	69.89*	80-120
48 Dibenzofuran	2.00	1.82	91.00	80-120
49 2,4-Dinitrotoluene	2.00	1.75	87.63	80-120
50 4-Nitrophenol	2.00	1.57	78.52*	80-120
51 2,3,4,6-Tetrachlor	2.00	1.52	75.82*	80-120
52 Diethylphthalate	2.00	1.96	98.20	80-120
54 Fluorene	2.00	1.82	90.82	80-120
56 4-Nitroaniline	2.00	2.33	116.50	80-120
57 4,6-Dinitro-2-Meth	2.00	1.57	78.39*	80-120
58 N-Nitrosodiphenyla	2.00	1.50	74.89*	80-120
59 4-Bromophenyl-phen	2.00	1.76	88.20	80-120
60 Hexachlorobenzene	2.00	1.80	90.09	80-120
61 Atrazine	2.00	1.64	82.22	80-120
62 Pentachlorophenol	2.00	1.63	81.68	80-120
64 Phenanthrene	2.00	1.80	89.94	80-120
65 Anthracene	2.00	1.80	90.29	80-120
66 Carbazole	2.00	1.79	89.71	80-120
67 Di-n-butylphthalat	2.00	2.03	101.41	80-120
68 Fluoranthene	2.00	1.72	85.95	80-120
70 Pyrene	2.00	2.04	101.94	80-120
71 Butylbenzylphthala	2.00	1.97	98.39	80-120
72 Benzo(a)anthracene	2.00	1.68	83.84	80-120
75 Chrysene	2.00	2.12	106.05	80-120
73 3,3'-Dichlorobenzi	2.00	1.88	94.05	80-120
76 bis(2-Ethylhexyl)p	2.00	1.91	95.61	80-120
77 Di-n-octylphthalat	2.00	1.87	93.59	80-120
78 Benzo(b)fluoranthe	2.00	1.38	68.85*	80-120
79 Benzo(k)fluoranthe	2.00	2.25	112.57	80-120
80 Benzo(a)pyrene	2.00	1.34	67.00*	80-120
82 Indeno(1,2,3-cd)py	2.00	1.61	80.50	80-120
83 Dibenzo(a,h)anthra	2.00	1.61	80.67	80-120
84 Benzo(g,h,i)peryle	2.00	1.64	81.77	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	10-93
$ 30 2-Methylnaphthale	2.00	0.000	*	43-92
$ 35 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 53 Fluorene-D10	2.00	0.000	*	29-101
$ 69 Pyrene-D10	2.00	0.000	*	53-166

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY **SDG:** SI4615
Lab ID : WG165856-2 **Analytical Date:** 07/02/15 14:38
Lab File ID : N6978.D **Instrument ID:** GCMS-N
Initial Calibration Date(s): 07/01/15 16:38 07/01/15 18:59 **Column ID:**

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
5 Bis(2-Chloroethyl)ether	1.00000	1.21018	1.78211	0.010	21.01767	20.00000	Quadratic	*
6 2-Chlorophenol	1.31495	1.31822	1.31822	0.010	0.24896	20.00000	Averaged	
11 2,2'-Oxybis(1-chloropropane	0.90627	0.91923	0.91923	0.010	1.42995	20.00000	Averaged	
14 N-Nitroso-di-n-propylamine	0.79524	0.82747	0.82747	0.050	4.05185	20.00000	Averaged	
15 3&4-Methylphenol	1.13905	1.07466	1.07466	0.010	-5.65272	20.00000	Averaged	
16 Hexachloroethane	0.48260	0.53566	0.53566	0.010	10.99421	20.00000	Averaged	
17 Nitrobenzene	1.00000	1.03970	0.42746	0.010	3.96985	20.00000	Linear	
19 2-Nitrophenol	0.21298	0.20519	0.20519	0.010	-3.65616	20.01000	Averaged	
21 bis(2-Chloroethoxy)methane	0.43459	0.41159	0.41159	0.010	-5.29193	20.00000	Averaged	
22 2,4-Dichlorophenol	0.28760	0.27839	0.27839	0.010	-3.20189	20.01000	Averaged	
25 Naphthalene	1.02023	1.01684	1.01684	0.010	-0.33256	20.00000	Averaged	
26 4-Chloroaniline	0.42122	0.38084	0.38084	0.010	-9.58652	20.00000	Averaged	
27 Hexachlorobutadiene	0.19878	0.20302	0.20302	0.010	2.13118	20.01000	Averaged	
31 2-Methylnaphthalene	1.00000	1.02164	0.77933	0.010	2.16418	20.00000	Linear	
33 Hexachlorocyclopentadiene	1.00000	1.08208	0.19454	0.050	8.20839	20.00000	Quadratic	
34 1,2,4,5-Tetrachlorobenzene	0.71220	0.72555	0.72555	0.010	1.87527	20.00000	Averaged	
36 2,4,6-Trichlorophenol	0.41832	0.40813	0.40813	0.010	-2.43641	20.01000	Averaged	
37 2,4,5-Trichlorophenol	0.50568	0.50447	0.50447	0.010	-0.23986	20.00000	Averaged	
38 1,1'-Biphenyl	1.83353	1.82969	1.82969	0.010	-0.20931	20.00000	Averaged	
40 2-Nitroaniline	0.34811	0.32868	0.32868	0.010	-5.58265	20.00000	Averaged	
42 2,6-Dinitrotoluene	0.40795	0.37240	0.37240	0.010	-8.71585	20.00000	Averaged	
47 2,4-Dinitrophenol	3.00000	3.04082	0.13239	0.050	1.36053	20.00000	Quadratic	
48 Dibenzofuran	1.92705	1.83615	1.83615	0.010	-4.71742	20.00000	Averaged	
49 2,4-Dinitrotoluene	0.47354	0.42365	0.42365	0.010	-10.53455	20.00000	Averaged	
50 4-Nitrophenol	0.26181	0.24430	0.24430	0.050	-6.69042	20.00000	Averaged	
51 2,3,4,6-Tetrachlorophenol	0.40572	0.38469	0.38469	0.010	-5.18340	20.00000	Averaged	
55 4-Chlorophenyl-phenylether	0.75337	0.74005	0.74005	0.010	-1.76728	20.00000	Averaged	
56 4-Nitroaniline	0.23884	0.25275	0.25275	0.010	5.82327	20.00000	Averaged	
57 4,6-Dinitro-2-Methylphenol	3.00000	3.05831	0.13358	0.010	1.94372	20.00000	Quadratic	
58 N-Nitrosodiphenylamine	0.78789	0.77954	0.77954	0.010	-1.06049	20.01000	Averaged	
60 Hexachlorobenzene	0.28279	0.30564	0.30564	0.010	8.08012	20.00000	Averaged	
61 Atrazine	0.18789	0.18390	0.18390	0.010	-2.12219	20.00000	Averaged	
62 Pentachlorophenol	0.16849	0.22296	0.22296	0.010	32.32406	20.01000	Averaged	*
64 Phenanthrene	1.32878	1.27971	1.27971	0.010	-3.69298	20.00000	Averaged	
65 Anthracene	1.38742	1.43762	1.43762	0.010	3.61870	20.00000	Averaged	
67 Di-n-butylphthalate	1.96194	2.12165	2.12165	0.010	8.14050	20.00000	Averaged	
68 Fluoranthene	1.28030	1.37243	1.37243	0.010	7.19603	20.01000	Averaged	
70 Pyrene	1.00000	1.09814	2.40693	0.010	9.81369	20.00000	Linear	
71 Butylbenzylphthalate	1.31673	1.39955	1.39955	0.010	6.28972	20.00000	Averaged	
72 Benzo(a)anthracene	1.00000	0.84925	1.33725	0.010	-15.07479	20.00000	Linear	
73 3,3'-Dichlorobenzidine	0.34194	0.34178	0.34178	0.010	-0.04648	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4615
Lab ID : WG165856-2
Analytical Date: 07/02/15 14:38
Lab File ID : N6978.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 07/01/15 16:38 07/01/15 18:59
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
75 Chrysene	1.00000	1.15333	1.80583	0.010	15.33289	20.00000	Linear
76 bis(2-Ethylhexyl)phthalate	1.93504	2.13540	2.13540	0.010	10.35449	20.00000	Averaged
77 Di-n-octylphthalate	4.89279	4.79809	4.79809	0.010	-1.93542	20.01000	Averaged
78 Benzo(b)fluoranthene	1.00000	0.93826	1.75354	0.010	-6.17440	20.00000	Linear
79 Benzo(k)fluoranthene	1.00000	1.01060	2.14499	0.010	1.05955	20.00000	Linear
80 Benzo(a)pyrene	1.53066	1.51671	1.51671	0.010	-0.91158	20.01000	Averaged
82 Indeno(1,2,3-cd)pyrene	0.99635	1.00599	1.00599	0.010	0.96789	20.00000	Averaged
83 Dibenzo(a,h)anthracene	0.71472	0.77218	0.77218	0.010	8.03871	20.00000	Averaged
84 Benzo(g,h,i)perylene	0.90378	1.02049	1.02049	0.010	12.91394	20.00000	Averaged
30 2-Methylnaphthalene-D10	1.09252	1.10645	1.10645	0.010	1.27545	20.00000	Averaged
35 2,4-Dibromophenol	0.41229	0.39196	0.39196	0.010	-4.93168	20.00000	Averaged
53 Fluorene-D10	0.92249	0.89252	0.89252	0.010	-3.24903	20.00000	Averaged
69 Pyrene-D10	1.22845	1.22192	1.22192	0.010	-0.53114	20.00000	Averaged

*** = Compound out of QC criteria**

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY **SDG:** SI4615
Lab ID : WG166006-2 **Analytical Date:** 07/06/15 12:48
Lab File ID : N7020.D **Instrument ID:** GCMS-N
Initial Calibration Date(s): 07/01/15 16:38 07/01/15 18:59 **Column ID:**

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
5 Bis(2-Chloroethyl)ether	1.00000	1.33295	1.94341	0.010	33.29453	20.00000	Quadratic	*
6 2-Chlorophenol	1.31495	1.30100	1.30100	0.010	-1.06089	20.00000	Averaged	
11 2,2'-Oxybis(1-chloropropane	0.90627	0.84289	0.84289	0.010	-6.99415	20.00000	Averaged	
14 N-Nitroso-di-n-propylamine	0.79524	0.76261	0.76261	0.050	-4.10334	20.00000	Averaged	
15 3&4-Methylphenol	1.13905	0.98618	0.98618	0.010	-13.42040	20.00000	Averaged	
16 Hexachloroethane	0.48260	0.55860	0.55860	0.010	15.74787	20.00000	Averaged	
17 Nitrobenzene	1.00000	1.28647	0.50977	0.010	28.64730	20.00000	Linear	*
19 2-Nitrophenol	0.21298	0.20899	0.20899	0.010	-1.87294	20.01000	Averaged	
21 bis(2-Chloroethoxy)methane	0.43459	0.43938	0.43938	0.010	1.10192	20.00000	Averaged	
22 2,4-Dichlorophenol	0.28760	0.28883	0.28883	0.010	0.42916	20.01000	Averaged	
25 Naphthalene	1.02023	1.16132	1.16132	0.010	13.82943	20.00000	Averaged	
26 4-Chloroaniline	0.42122	0.39291	0.39291	0.010	-6.72283	20.00000	Averaged	
27 Hexachlorobutadiene	0.19878	0.20911	0.20911	0.010	5.19396	20.01000	Averaged	
31 2-Methylnaphthalene	1.00000	1.02538	0.78172	0.010	2.53771	20.00000	Linear	
33 Hexachlorocyclopentadiene	1.00000	0.96012	0.16682	0.050	-3.98760	20.00000	Quadratic	
34 1,2,4,5-Tetrachlorobenzene	0.71220	0.70731	0.70731	0.010	-0.68624	20.00000	Averaged	
36 2,4,6-Trichlorophenol	0.41832	0.39718	0.39718	0.010	-5.05517	20.01000	Averaged	
37 2,4,5-Trichlorophenol	0.50568	0.54510	0.54510	0.010	7.79652	20.00000	Averaged	
38 1,1'-Biphenyl	1.83353	1.76990	1.76990	0.010	-3.47019	20.00000	Averaged	
40 2-Nitroaniline	0.34811	0.34832	0.34832	0.010	0.06010	20.00000	Averaged	
42 2,6-Dinitrotoluene	0.40795	0.39227	0.39227	0.010	-3.84504	20.00000	Averaged	
47 2,4-Dinitrophenol	3.00000	3.30627	0.14714	0.050	10.20905	20.00000	Quadratic	
48 Dibenzofuran	1.92705	1.93401	1.93401	0.010	0.36103	20.00000	Averaged	
49 2,4-Dinitrotoluene	0.47354	0.45499	0.45499	0.010	-3.91749	20.00000	Averaged	
50 4-Nitrophenol	0.26181	0.22733	0.22733	0.050	-13.17160	20.00000	Averaged	
51 2,3,4,6-Tetrachlorophenol	0.40572	0.40155	0.40155	0.010	-1.02657	20.00000	Averaged	
55 4-Chlorophenyl-phenylether	0.75337	0.74643	0.74643	0.010	-0.92024	20.00000	Averaged	
56 4-Nitroaniline	0.23884	0.21463	0.21463	0.010	-10.13816	20.00000	Averaged	
57 4,6-Dinitro-2-Methylphenol	3.00000	3.12476	0.13697	0.010	4.15880	20.00000	Quadratic	
58 N-Nitrosodiphenylamine	0.78789	0.82333	0.82333	0.010	4.49776	20.01000	Averaged	
60 Hexachlorobenzene	0.28279	0.32738	0.32738	0.010	15.76713	20.00000	Averaged	
61 Atrazine	0.18789	0.15887	0.15887	0.010	-15.44651	20.00000	Averaged	
62 Pentachlorophenol	0.16849	0.21658	0.21658	0.010	28.53725	20.01000	Averaged	*
64 Phenanthrene	1.32878	1.15907	1.15907	0.010	-12.77209	20.00000	Averaged	
65 Anthracene	1.38742	1.54853	1.54853	0.010	11.61239	20.00000	Averaged	
67 Di-n-butylphthalate	1.96194	1.98093	1.98093	0.010	0.96823	20.00000	Averaged	
68 Fluoranthene	1.28030	1.17347	1.17347	0.010	-8.34370	20.01000	Averaged	
70 Pyrene	1.00000	1.09708	2.40492	0.010	9.70783	20.00000	Linear	
71 Butylbenzylphthalate	1.31673	1.37834	1.37834	0.010	4.67856	20.00000	Averaged	
72 Benzo(a)anthracene	1.00000	0.88386	1.38188	0.010	-11.61405	20.00000	Linear	
73 3,3'-Dichlorobenzidine	0.34194	0.34860	0.34860	0.010	1.94818	20.00000	Averaged	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : Navy Clean WE08 NWIRP Bethpage, NY
SDG: SI4615
Lab ID : WG166006-2
Analytical Date: 07/06/15 12:48
Lab File ID : N7020.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 07/01/15 16:38 07/01/15 18:59
Column ID:

Compound	RRF/Amount	RF1	CCAL RRF1	Min	%D/ %Drift	Max %D/ %Drift	Curve Type	
75 Chrysene	1.00000	1.26910	1.95183	0.010	26.90992	20.00000	Linear	*
76 bis(2-Ethylhexyl)phthalate	1.93504	2.00789	2.00789	0.010	3.76478	20.00000	Averaged	
77 Di-n-octylphthalate	4.89279	4.79537	4.79537	0.010	-1.99113	20.01000	Averaged	
78 Benzo(b)fluoranthene	1.00000	1.08847	1.99590	0.010	8.84664	20.00000	Linear	
79 Benzo(k)fluoranthene	1.00000	1.15072	2.38205	0.010	15.07237	20.00000	Linear	
80 Benzo(a)pyrene	1.53066	1.59136	1.59136	0.010	3.96534	20.01000	Averaged	
82 Indeno(1,2,3-cd)pyrene	0.99635	1.01077	1.01077	0.010	1.44757	20.00000	Averaged	
83 Dibenzo(a,h)anthracene	0.71472	0.73418	0.73418	0.010	2.72263	20.00000	Averaged	
84 Benzo(g,h,i)perylene	0.90378	1.01539	1.01539	0.010	12.34921	20.00000	Averaged	
30 2-Methylnaphthalene-D10	1.09252	1.08982	1.08982	0.010	-0.24716	20.00000	Averaged	
35 2,4-Dibromophenol	0.41229	0.41344	0.41344	0.010	0.27775	20.00000	Averaged	
53 Fluorene-D10	0.92249	0.89629	0.89629	0.010	-2.83951	20.00000	Averaged	
69 Pyrene-D10	1.22845	1.32236	1.32236	0.010	7.64480	20.00000	Averaged	

*** = Compound out of QC criteria**

Logbooks and Supporting Documents

S/S SEP

KATAHDIN ANALYTICAL SERVICES, INC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓		SW846 3520 (CLLE)		SW846 3535 (SPE)
Analytical Method: (check one)	SW846 8270 ✓	EPA 625	CLP OLM04.2	CLP OLC02.1	CLP SOM01.2
Standards	Surrogate ID (1): SV8721		Spike ID (1): SV8715		
	Surrogate ID (2):		Spike ID (2): SM: SV8722		
Solvents/Acid/Base	Solvent Lot # (Mecl2): DM904		H_2SO_4 Lot # 71333		NaOH Lot # 62534
Consumables	Filter Paper Lot # 96181511		$NaSO_4$ Lot # 27965002		
Nitrogen Water Bath Temperature 36°C			pH (1st Extraction) ≤2		pH (2nd Extraction) ≥11
Prep Start Time: 0950	Prep End Time: 1225		CLLE Start Time: —		CLLE End Time: —

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV OMZ	Initials	Comments
7-1-15	KF	WG165688-1 ~~WG165689-1~~	1000	1mL	NR	✓	✓	1mL	7-1-15	B7	WAS	SM# 323845 SM# 323846
		WG165688-2			1mL	✓				B8		
		-3				✓				B9		
		WG165689-2					✓			B10		
		-3					✓			C1		
		WG165688-4 WG165689-4	930		NR	✓	✓			C2		SPLP Blank PBT1264A

TMS 7-7-15

EX-007 – Revision 2 – 12/05/2013 QAEX284 0000098

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV OMZ	Initials	Comments
7-1-15	KF	S14615-2E	~~930~~ 960	1mL	NR	✓	✓	1mL	7-1-15	C3	WAS	SPLP
		S14632-2c	~~960~~ 870			✓				C4		1/3 of sediment - em-SS-CA
		-3c	970							C5		
		-4c	900			✓				C6		
		S14654-1J	1000			✓				C7		em-S.S.
		-2J	1050							C8		
		-3J	1060							C9		
		S14612-22E	1060				✓			C10		
		S14675-6F	950				✓			D1		
		-8F	980							D2		
		-18F	1010							D3		

TMS 7-7-15

Reviewed By_____ Date_____

EX-007 – Revision 2 – 12/05/2013 QAEX284 0000099

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 07/07/15

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165774-1	50ng DFTPP	ND963	1	1	DFTPPSVM	2.0	JLM	OK
-4	SSTD1.00 NOTOL	ND949		2	NSPSVM46			✓
-2	0.2	50		3				✓
-3	0.5	51		4				✓
-5	3.0	52		5				✓
-6	7.0	53		6				✓
-7	10.	54		7				✓
-8	IND	55		8				OK
	meCl2	56-57	1	9				—
350	WG165669-1RA	578 JK	1	11				OK
350	WG165724-1RA	579	1	12				OK
	1 -2RA	580	1	13				SSIT OK
	SE4383-1DL	601	6	14				— DL1:8 50/300
	SE4408-1DL	612	40	15				OK 50/250 → 50/400
	-3DL	613	100	16				OK (50/500)X2
	-5DL	634	50	17				OK 50/250 → 50/500
	-7DL	645	20	18				OK 50/100
	-9DL	656	15	19				OK 50/750
	-11DL	667	30	20				OK 25/750
	-12DL	678	10	21				OK DL1:15 50/500
	-13DL	689	3	22				OK 100/300
	-9	700	1	23				1561
	-11	70		24				1556V
	-3	72		25				1561
	-7	73		26				50 C
	meCl2	75		9				

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52640
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 070215

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG165856-1	50ng DFTPP	ND964	1	1	DFTPP 5ml	2.0	JLY	OK
-2	5STD1.00 ND702	NG978		2	NSPSJM46			OK
3550	WG165510-1DA	79		3				OK
3510	WG165689-1DA	80		4				OK
	-2DA	81		5				OK
	-3DA	82		6				OK
	SI 4612-22	83		7				OK
	SI 4675-6	84		8				OK
	-8	85		9				OK
	-18	86		10				OK
3550	SI4383-1DL	87	8	11				OK 50/400
	SI4408-12DL	88	10	12				— DL1:20 50/500
	SI4492-7	89	1	13				OK
	-9	90		14				1S6L
	-5	91		15				1S6L DL1:2
	SI4545-3	92		16				OK
	WG165510-4	93		17				OK
	-5	94		18				OK
	SI4545-5	95		19				OK
	SI4492-12	96		20				1S6L DL1:5
	-13	97		21				1S6L DL1:4
	SI4545-1	98		22				1S6L
	SI4492-6	99		23				1S6L DL1:5
	-3	N7000		24				1S6L DL1:10
	-10	01		25				1S6L DL1:5
	SI4545-7	02		26				OK
	SI4408-12	03		27				OK DL1:5
	Meller	04-16		28				

STANDARD	CODE
DFTPP	52611
CAL. STD.	52595 52640
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 070615

JOB	SAMPLE	DATAFILE	DF	ALS #	METHOD	UL INJ	CHEMIST	COMMENTS
WG166006-1	50ng DFTPP	ND965	1	1	DFTPPSIM	20	ok	ok
-2	50ng/100 N0706	N7020		2	NSOSIMLL			ok
3510	WG165689-4RA	21		3				ok PAT 125A
	SI4615-2RA	22		4				ok
3550	SI4408-12DL	23	20	5				ok 25/500
3510	SI4632-2	24	1	6				ok
	-3	25		7				SS4
	-4	26		8				ok
3550	SI4492-3DL	27	10	9				ok 50/500
	-5DL	28	2	10				ok 100/200
	-7DL	29	5	11				ok 50/250
	-10DL	30	5	12				— DL1:B
	-12DL	31	5	13				— DL1:X
	-13DL	32	4	14				— DL1:6 50/200
	SI4545-9	33	1	15				ok
	-2	34		16				1S6
	SI4408-7	35		17				1S6
	-12	36		18				1S56
	MeCl2	37-49	1	19				—

STANDARD	CODE
DFTPP	52641
CAL. STD.	52595 52639
IS MIX	52638

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA-005 – Revision 1 – 03/01/2011

METALS DATA

Sample Data Section

METALS SAMPLE FLAGGING

FLAG	SPECIFIED MEANING
E	The reported value is estimated because of the presence of interference (as indicated by serial dilution).
N	The pre-digestion spiked sample recovery is not within control limits.
*	The duplicate sample analysis relative percent difference (RPD) is not within control limits.
B	Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
A	The post-digestion spiked sample recovery is not within control limits.
•	Analytical run QC sample (e.g. ICV, CCV, ICB, CCB, ICSA, ICSAB) not within control limits.
U	The analyte was not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as “U” MDL have a 50% rate for false negatives compared to those results reported as “U” PQL/LOQ or “U” LOD, where the rate of false negatives is <1%.
J	The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ) (previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Katahdin Analytical Services

SDG Name: SI4615 **SOW No.** SW846

Client Field ID	Lab Sample ID
SITE 4TS-SEE2-PT	SI4615-001
SITE 4TS-SEE2-PT	SI4615-002

Were ICP interelement corrections applied ?	Yes
Were ICP background corrections applied ?	Yes
If yes - were raw data generated before application of background corrections ?	No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Edward A. Morgan Name: Edward A. Morgan

Date: July 16, 2015 Title: Senior Analyst

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE 4TS-SEE2-PT

Matrix: SOIL **SDG Name:** SI4615

Percent Solids: 94.0 **Lab Sample ID:** SI4615-001

Concentration Units : mg/Kg drywt

							ADJUSTED		
CAS No.	**Analyte**	**Concentration**	**C**	**Q**	**M**	**DF**	**LOQ**	**MDL**	**LOD**
7429-90-5	ALUMINUM, TOTAL	1170			MS	5	20	0.33	2.7
7440-36-0	ANTIMONY, TOTAL	0.028	J		MS	5	0.067	0.013	0.033
7440-38-2	ARSENIC, TOTAL	1.75			MS	5	0.33	0.10	0.27
7440-39-3	BARIUM, TOTAL	5.08			MS	5	0.13	0.024	0.067
7440-41-7	BERYLLIUM, TOTAL	0.0574	J		MS	5	0.067	0.0027	0.013
7440-43-9	CADMIUM, TOTAL	0.0057	J		MS	5	0.067	0.0050	0.013
7440-70-2	CALCIUM, TOTAL	51.1			MS	5	6.7	2.6	5.4
7440-47-3	CHROMIUM, TOTAL	3.45			MS	5	0.33	0.033	0.27
7440-48-4	COBALT, TOTAL	0.609			MS	5	0.067	0.0037	0.020
7440-50-8	COPPER, TOTAL	1.95			MS	5	0.20	0.047	0.13
7439-89-6	IRON, TOTAL	3660			MS	5	6.7	1.6	4.0
7439-92-1	LEAD, TOTAL	1.84			MS	5	0.067	0.0047	0.033
7439-95-4	MAGNESIUM, TOTAL	76.8			MS	5	6.7	0.90	5.4
7439-96-5	MANGANESE, TOTAL	23.0		B	MS	5	0.13	0.028	0.067
7439-97-6	MERCURY, TOTAL	0.017	U		CV	1	0.034	0.0052	0.017
7440-02-0	NICKEL, TOTAL	2.38			MS	5	0.13	0.018	0.080
7440-09-7	POTASSIUM, TOTAL	114			MS	5	67	3.0	27
7782-49-2	SELENIUM, TOTAL	0.044	J		MS	5	0.33	0.026	0.20
7440-22-4	SILVER, TOTAL	0.0062	J		MS	5	0.067	0.0043	0.027
7440-23-5	SODIUM, TOTAL	11	J		MS	5	67	1.7	27
7440-28-0	THALLIUM, TOTAL	0.016	J		MS	5	0.067	0.0064	0.027
7440-62-2	VANADIUM, TOTAL	15.7			MS	5	0.33	0.074	0.27
7440-66-6	ZINC, TOTAL	3.92			MS	5	0.67	0.087	0.54

Comments:

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: Katahdin Analytical Services **Client Field ID:** SITE 4TS-SEE2-PT

Matrix: WATER **SDG Name:** SI4615

Percent Solids: 0.00 **Lab Sample ID:** SI4615-002

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	DF	LOQ	ADJUSTED MDL	LOD
7429-90-5	ALUMINUM, SPLP	500	U		P	1	1500	75.	500
7440-36-0	ANTIMONY, SPLP	25	U		P	1	40	6.5	25
7440-38-2	ARSENIC, SPLP	25	U		P	1	40	7.0	25
7440-39-3	BARIUM, SPLP	25.7			P	1	25	1.2	15
7440-41-7	BERYLLIUM, SPLP	2.5	U		P	1	25	0.50	2.5
7440-43-9	CADMIUM, SPLP	15	U		P	1	25	0.25	15
7440-70-2	CALCIUM, SPLP	1260			P	1	500	55.	400
7440-47-3	CHROMIUM, SPLP	2.1	J		P	1	50	1.8	20
7440-48-4	COBALT, SPLP	20	U		P	1	50	1.2	20
7440-50-8	COPPER, SPLP	6.0	J		P	1	120	3.2	50
7439-89-6	IRON, SPLP	752			P	1	500	27.	400
7439-92-1	LEAD, SPLP	20	U		P	1	25	5.5	20
7439-95-4	MAGNESIUM, SPLP	190	J		P	1	500	39.	400
7439-96-5	MANGANESE, SPLP	346			P	1	25	5.5	20
7439-97-6	MERCURY, SPLP	0.10	U		CV	1	0.20	0.013	0.10
7440-02-0	NICKEL, SPLP	4.1	J		P	1	50	1.4	20
7440-09-7	POTASSIUM, SPLP	490	J		P	1	5000	205.	2500
7782-49-2	SELENIUM, SPLP	35	U		P	1	50	12.	35
7440-22-4	SILVER, SPLP	20	U		P	1	50	1.4	20
7440-23-5	SODIUM, SPLP	440	J		P	1	5000	120.	2500
7440-28-0	THALLIUM, SPLP	25	U		P	1	75	5.5	25
7440-62-2	VANADIUM, SPLP	20	U		P	1	50	1.2	20
7440-66-6	ZINC, SPLP	55.3	J		P	1	100	3.6	50

Comments:

FORM I - IN

QC Summary Section

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICV

File: HIG01A Jul 01, 2015 10:27

Analyte	True	Found	%R (1)
MERCURY	6.0	6.27	104.5

SAMPLE: CCV

File: HIG01A Jul 01, 2015 10:41

Analyte	True	Found	%R (1)
MERCURY	5.0	5.04	100.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICV

File: HIG02A Jul 02, 2015 12:57

Analyte	True	Found	%R (1)
MERCURY	6.0	5.97	99.5

SAMPLE: CCV

File: HIG02A Jul 02, 2015 13:04

Analyte	True	Found	%R (1)
MERCURY	5.0	5.14	102.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: HIG02A Jul 02, 2015 13:27

Analyte	True	Found	%R (1)
MERCURY	5.0	5.15	103.0

SAMPLE: CCV

File: HIG02A Jul 02, 2015 13:52

Analyte	True	Found	%R (1)
MERCURY	5.0	5.05	101.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: HIG02A Jul 02, 2015 14:18

Analyte	True	Found	%R (1)
MERCURY	5.0	4.99	99.8

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICV

File: IIG01B Jul 01, 2015 15:41

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10080.00	100.8
ANTIMONY	400.0	424.30	106.1
BARIUM	400.0	410.50	102.6
CADMIUM	400.0	414.90	103.7
CALCIUM	10000.0	9851.00	98.5
COBALT	400.0	422.20	105.5
IRON	10000.0	9887.00	98.9
LEAD	400.0	419.70	104.9
MAGNESIUM	10000.0	10250.00	102.5
NICKEL	400.0	420.90	105.2
SILVER	400.0	416.90	104.2
SODIUM	10000.0	10100.00	101.0
THALLIUM	400.0	427.10	106.8
VANADIUM	400.0	418.90	104.7
ZINC	400.0	415.40	103.8

SAMPLE: CCV

File: IIG01B Jul 01, 2015 16:24

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12910.00	103.3
ANTIMONY	500.0	505.10	101.0
BARIUM	500.0	507.80	101.6
CADMIUM	500.0	500.40	100.1
CALCIUM	12500.0	12920.00	103.4
COBALT	500.0	499.80	100.0
IRON	12500.0	12980.00	103.8
LEAD	500.0	505.50	101.1
MAGNESIUM	12500.0	12930.00	103.4
NICKEL	500.0	503.20	100.6
SILVER	500.0	504.00	100.8
SODIUM	12500.0	12920.00	103.4
THALLIUM	500.0	508.60	101.7
VANADIUM	500.0	497.30	99.5
ZINC	500.0	496.20	99.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: IIG01B Jul 01, 2015 17:21

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13480.00	107.8
ANTIMONY	500.0	502.90	100.6
BARIUM	500.0	529.40	105.9
CADMIUM	500.0	498.30	99.7
CALCIUM	12500.0	13670.00	109.4
COBALT	500.0	498.30	99.7
IRON	12500.0	13760.00	110.1
LEAD	500.0	503.70	100.7
MAGNESIUM	12500.0	12860.00	102.9
NICKEL	500.0	502.20	100.4
SILVER	500.0	501.10	100.2
SODIUM	12500.0	13370.00	107.0
THALLIUM	500.0	504.40	100.9
VANADIUM	500.0	495.30	99.1
ZINC	500.0	492.70	98.5

SAMPLE: CCV

File: IIG01B Jul 01, 2015 18:20

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12830.00	102.6
ANTIMONY	500.0	496.10	99.2
BARIUM	500.0	503.20	100.6
CADMIUM	500.0	500.50	100.1
CALCIUM	12500.0	12840.00	102.7
COBALT	500.0	487.90	97.6
IRON	12500.0	13200.00	105.6
LEAD	500.0	506.20	101.2
MAGNESIUM	12500.0	13030.00	104.2
NICKEL	500.0	500.70	100.1
SILVER	500.0	505.10	101.0
SODIUM	12500.0	12750.00	102.0
THALLIUM	500.0	514.90	103.0
VANADIUM	500.0	493.80	98.8
ZINC	500.0	480.10	96.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: IIG01B Jul 01, 2015 19:20

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12720.00	101.8
ANTIMONY	500.0	493.00	98.6
BARIUM	500.0	498.00	99.6
CADMIUM	500.0	515.80	103.2
CALCIUM	12500.0	13180.00	105.4
COBALT	500.0	475.50	95.1
IRON	12500.0	14220.00	113.8•
LEAD	500.0	524.10	104.8
MAGNESIUM	12500.0	13410.00	107.3
NICKEL	500.0	507.80	101.6
SILVER	500.0	524.10	104.8
SODIUM	12500.0	12710.00	101.7
THALLIUM	500.0	540.40	108.1
VANADIUM	500.0	501.20	100.2
ZINC	500.0	469.50	93.9

SAMPLE: CCV

File: IIG01B Jul 01, 2015 20:19

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12830.00	102.6
ANTIMONY	500.0	487.10	97.4
BARIUM	500.0	501.50	100.3
CADMIUM	500.0	522.90	104.6
CALCIUM	12500.0	13400.00	107.2
COBALT	500.0	470.10	94.0
IRON	12500.0	14750.00	118.0•
LEAD	500.0	530.90	106.2
MAGNESIUM	12500.0	13450.00	107.6
NICKEL	500.0	508.80	101.8
SILVER	500.0	532.30	106.5
SODIUM	12500.0	12840.00	102.7
THALLIUM	500.0	548.50	109.7
VANADIUM	500.0	505.00	101.0
ZINC	500.0	463.50	92.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: IIG01B Jul 01, 2015 21:19

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12710.00	101.7
ANTIMONY	500.0	489.20	97.8
BARIUM	500.0	497.90	99.6
CADMIUM	500.0	520.20	104.0
CALCIUM	12500.0	13380.00	107.0
COBALT	500.0	469.50	93.9
IRON	12500.0	14670.00	117.4•
LEAD	500.0	530.70	106.1
MAGNESIUM	12500.0	13450.00	107.6
NICKEL	500.0	508.50	101.7
SILVER	500.0	529.80	106.0
SODIUM	12500.0	12790.00	102.3
THALLIUM	500.0	546.30	109.3
VANADIUM	500.0	504.30	100.9
ZINC	500.0	464.00	92.8

SAMPLE: CCV

File: IIG01B Jul 01, 2015 22:13

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13020.00	104.2
ANTIMONY	500.0	490.20	98.0
BARIUM	500.0	509.40	101.9
CADMIUM	500.0	521.10	104.2
CALCIUM	12500.0	13700.00	109.6
COBALT	500.0	470.20	94.0
IRON	12500.0	15080.00	120.6•
LEAD	500.0	530.90	106.2
MAGNESIUM	12500.0	13440.00	107.5
NICKEL	500.0	510.70	102.1
SILVER	500.0	530.30	106.1
SODIUM	12500.0	13040.00	104.3
THALLIUM	500.0	549.20	109.8
VANADIUM	500.0	505.10	101.0
ZINC	500.0	465.30	93.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICV

File: IIG02A Jul 02, 2015 11:18

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10090.00	100.9
ARSENIC	400.0	399.40	99.8
BARIUM	400.0	409.10	102.3
BERYLLIUM	400.0	410.70	102.7
CADMIUM	400.0	414.60	103.6
CALCIUM	10000.0	9893.00	98.9
CHROMIUM	400.0	414.90	103.7
COBALT	400.0	421.40	105.3
COPPER	400.0	412.70	103.2
IRON	10000.0	9933.00	99.3
LEAD	400.0	419.50	104.9
MAGNESIUM	10000.0	10150.00	101.5
MANGANESE	400.0	408.60	102.2
NICKEL	400.0	420.10	105.0
POTASSIUM	13600.0	13570.00	99.8
SELENIUM	400.0	415.30	103.8
SILVER	400.0	411.40	102.8
SODIUM	10000.0	10080.00	100.8
THALLIUM	400.0	427.60	106.9
VANADIUM	400.0	416.60	104.2
ZINC	400.0	415.00	103.8

SAMPLE: CCV

File: IIG02A Jul 02, 2015 12:03

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12550.00	100.4
ARSENIC	500.0	495.90	99.2
BARIUM	500.0	496.80	99.4
BERYLLIUM	500.0	496.20	99.2
CADMIUM	500.0	497.20	99.4
CALCIUM	12500.0	12610.00	100.9
CHROMIUM	500.0	487.20	97.4
COBALT	500.0	502.30	100.5
COPPER	500.0	484.30	96.9
IRON	12500.0	12530.00	100.2
LEAD	500.0	499.70	99.9
MAGNESIUM	12500.0	12680.00	101.4
MANGANESE	500.0	493.10	98.6
NICKEL	500.0	502.80	100.6
POTASSIUM	12500.0	12440.00	99.5
SELENIUM	500.0	490.90	98.2
SILVER	500.0	487.30	97.5
SODIUM	12500.0	12540.00	100.3
THALLIUM	500.0	497.20	99.4
VANADIUM	500.0	486.80	97.4
ZINC	500.0	497.40	99.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: IIG02A Jul 02, 2015 13:03

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12480.00	99.8
ARSENIC	500.0	494.50	98.9
BARIUM	500.0	493.70	98.7
BERYLLIUM	500.0	491.10	98.2
CADMIUM	500.0	496.00	99.2
CALCIUM	12500.0	12570.00	100.6
CHROMIUM	500.0	494.50	98.9
COBALT	500.0	500.20	100.0
COPPER	500.0	493.60	98.7
IRON	12500.0	12520.00	100.2
LEAD	500.0	498.50	99.7
MAGNESIUM	12500.0	12640.00	101.1
MANGANESE	500.0	489.60	97.9
NICKEL	500.0	500.90	100.2
POTASSIUM	12500.0	12370.00	99.0
SELENIUM	500.0	492.50	98.5
SILVER	500.0	490.70	98.1
SODIUM	12500.0	12540.00	100.3
THALLIUM	500.0	500.20	100.0
VANADIUM	500.0	493.00	98.6
ZINC	500.0	495.80	99.2

SAMPLE: CCV

File: IIG02A Jul 02, 2015 14:04

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12480.00	99.8
ARSENIC	500.0	489.60	97.9
BARIUM	500.0	495.60	99.1
BERYLLIUM	500.0	490.70	98.1
CADMIUM	500.0	496.30	99.3
CALCIUM	12500.0	12580.00	100.6
CHROMIUM	500.0	494.50	98.9
COBALT	500.0	498.10	99.6
COPPER	500.0	495.20	99.0
IRON	12500.0	12540.00	100.3
LEAD	500.0	497.70	99.5
MAGNESIUM	12500.0	12670.00	101.4
MANGANESE	500.0	490.80	98.2
NICKEL	500.0	501.40	100.3
POTASSIUM	12500.0	12280.00	98.2
SELENIUM	500.0	492.20	98.4
SILVER	500.0	487.10	97.4
SODIUM	12500.0	12590.00	100.7
THALLIUM	500.0	499.30	99.9
VANADIUM	500.0	490.30	98.1
ZINC	500.0	491.40	98.3

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: IIG02A Jul 02, 2015 15:04

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12410.00	99.3
ARSENIC	500.0	488.70	97.7
BARIUM	500.0	496.30	99.3
BERYLLIUM	500.0	487.60	97.5
CADMIUM	500.0	495.70	99.1
CALCIUM	12500.0	12590.00	100.7
CHROMIUM	500.0	493.00	98.6
COBALT	500.0	497.60	99.5
COPPER	500.0	491.50	98.3
IRON	12500.0	12500.00	100.0
LEAD	500.0	498.70	99.7
MAGNESIUM	12500.0	12650.00	101.2
MANGANESE	500.0	487.20	97.4
NICKEL	500.0	501.90	100.4
POTASSIUM	12500.0	12280.00	98.2
SELENIUM	500.0	494.10	98.8
SILVER	500.0	479.10	95.8
SODIUM	12500.0	12680.00	101.4
THALLIUM	500.0	500.10	100.0
VANADIUM	500.0	483.20	96.6
ZINC	500.0	492.00	98.4

SAMPLE: CCV

File: IIG02A Jul 02, 2015 15:24

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12380.00	99.0
ARSENIC	500.0	489.90	98.0
BARIUM	500.0	493.10	98.6
BERYLLIUM	500.0	487.40	97.5
CADMIUM	500.0	494.90	99.0
CALCIUM	12500.0	12500.00	100.0
CHROMIUM	500.0	494.10	98.8
COBALT	500.0	498.30	99.7
COPPER	500.0	492.50	98.5
IRON	12500.0	12360.00	98.9
LEAD	500.0	496.80	99.4
MAGNESIUM	12500.0	12610.00	100.9
MANGANESE	500.0	483.80	96.8
NICKEL	500.0	501.60	100.3
POTASSIUM	12500.0	12260.00	98.1
SELENIUM	500.0	487.90	97.6
SILVER	500.0	483.50	96.7
SODIUM	12500.0	12560.00	100.5
THALLIUM	500.0	501.10	100.2
VANADIUM	500.0	487.80	97.6
ZINC	500.0	492.60	98.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICV

File: IIG07B Jul 07, 2015 16:45

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10390.00	103.9
ANTIMONY	400.0	416.30	104.1
CALCIUM	10000.0	10270.00	102.7
IRON	10000.0	10270.00	102.7
MAGNESIUM	10000.0	10300.00	103.0

SAMPLE: CCV

File: IIG07B Jul 07, 2015 17:30

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13000.00	104.0
ANTIMONY	500.0	500.00	100.0
CALCIUM	12500.0	13050.00	104.4
IRON	12500.0	13170.00	105.4
MAGNESIUM	12500.0	12930.00	103.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: IIG07B Jul 07, 2015 18:31

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	13010.00	104.1
ANTIMONY	500.0	494.50	98.9
CALCIUM	12500.0	13250.00	106.0
IRON	12500.0	13730.00	109.8
MAGNESIUM	12500.0	13060.00	104.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICV

File: IIG14B Jul 14, 2015 15:18

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10030.00	100.3
CALCIUM	10000.0	9998.00	100.0
IRON	10000.0	10030.00	100.3
MAGNESIUM	10000.0	10260.00	102.6

SAMPLE: CCV

File: IIG14B Jul 14, 2015 16:01

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12570.00	100.6
CALCIUM	12500.0	12520.00	100.2
IRON	12500.0	12540.00	100.3
MAGNESIUM	12500.0	12690.00	101.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: IIG14B Jul 14, 2015 17:00

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12490.00	99.9
CALCIUM	12500.0	12490.00	99.9
IRON	12500.0	12440.00	99.5
MAGNESIUM	12500.0	12680.00	101.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICV

File: IIG15B Jul 15, 2015 17:14

Analyte	True	Found	%R (1)
ALUMINUM	10000.0	10220.00	102.2
CALCIUM	10000.0	10110.00	101.1
IRON	10000.0	10230.00	102.3
MAGNESIUM	10000.0	10190.00	101.9

SAMPLE: CCV

File: IIG15B Jul 15, 2015 17:58

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12850.00	102.8
CALCIUM	12500.0	13020.00	104.2
IRON	12500.0	12870.00	103.0
MAGNESIUM	12500.0	12670.00	101.4

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: IIG15B Jul 15, 2015 18:58

Analyte	True	Found	%R (1)
ALUMINUM	12500.0	12810.00	102.5
CALCIUM	12500.0	13260.00	106.1
IRON	12500.0	12910.00	103.3
MAGNESIUM	12500.0	12640.00	101.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICV

File: JIF30A Jun 30, 2015 15:26

Analyte	True	Found	%R (1)
ALUMINUM	400.0	415.00	103.8
ANTIMONY	20.0	20.42	102.1
ARSENIC	20.0	19.37	96.9
BARIUM	20.0	20.35	101.8
BERYLLIUM	20.0	19.77	98.8
CADMIUM	20.0	20.35	101.8
CALCIUM	4000.0	4061.00	101.5
CHROMIUM	20.0	20.55	102.8
COBALT	20.0	20.56	102.8
COPPER	20.0	20.85	104.3
IRON	4000.0	3829.00	95.7
LEAD	20.0	20.01	100.1
MAGNESIUM	4000.0	4113.00	102.8
MANGANESE	20.0	20.41	102.1
MOLYBDENUM	40.0	39.73	99.3
NICKEL	20.0	20.66	103.3
POTASSIUM	4000.0	3997.00	99.9
SELENIUM	20.0	19.90	99.5
SILVER	20.0	18.87	94.3
SODIUM	4000.0	3956.00	98.9
THALLIUM	20.0	20.83	104.1
VANADIUM	20.0	19.98	99.9

SAMPLE: CCV

File: JIF30A Jun 30, 2015 15:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	508.90	101.8
ANTIMONY	25.0	24.23	96.9
ARSENIC	25.0	24.42	97.7
BARIUM	25.0	24.64	98.6
BERYLLIUM	25.0	24.85	99.4
CADMIUM	25.0	24.90	99.6
CALCIUM	5000.0	5026.00	100.5
CHROMIUM	25.0	24.24	97.0
COBALT	25.0	24.58	98.3
COPPER	25.0	24.58	98.3
IRON	5000.0	4917.00	98.3
LEAD	25.0	24.46	97.8
MAGNESIUM	5000.0	5078.00	101.6
MANGANESE	25.0	24.40	97.6
MOLYBDENUM	25.0	24.91	99.6
NICKEL	25.0	24.72	98.9
POTASSIUM	5000.0	4962.00	99.2
SELENIUM	25.0	24.42	97.7
SILVER	25.0	24.89	99.6
SODIUM	5000.0	4902.00	98.0
THALLIUM	25.0	24.30	97.2
VANADIUM	25.0	24.17	96.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: JIF30A Jun 30, 2015 16:34

Analyte	True	Found	%R (1)
ALUMINUM	500.0	512.10	102.4
ANTIMONY	25.0	24.52	98.1
ARSENIC	25.0	24.37	97.5
BARIUM	25.0	24.40	97.6
BERYLLIUM	25.0	25.14	100.6
CADMIUM	25.0	24.70	98.8
CALCIUM	5000.0	5057.00	101.1
CHROMIUM	25.0	24.34	97.4
COBALT	25.0	24.62	98.5
COPPER	25.0	24.93	99.7
IRON	5000.0	4939.00	98.8
LEAD	25.0	24.38	97.5
MAGNESIUM	5000.0	5147.00	102.9
MANGANESE	25.0	24.65	98.6
MOLYBDENUM	25.0	24.39	97.6
NICKEL	25.0	24.26	97.0
POTASSIUM	5000.0	4969.00	99.4
SELENIUM	25.0	24.45	97.8
SILVER	25.0	24.76	99.0
SODIUM	5000.0	4963.00	99.3
THALLIUM	25.0	24.51	98.0
VANADIUM	25.0	24.16	96.6

SAMPLE: CCV

File: JIF30A Jun 30, 2015 17:13

Analyte	True	Found	%R (1)
ALUMINUM	500.0	519.60	103.9
ANTIMONY	25.0	24.15	96.6
ARSENIC	25.0	24.16	96.6
BARIUM	25.0	24.41	97.6
BERYLLIUM	25.0	24.43	97.7
CADMIUM	25.0	25.02	100.1
CALCIUM	5000.0	5036.00	100.7
CHROMIUM	25.0	24.63	98.5
COBALT	25.0	24.74	99.0
COPPER	25.0	24.70	98.8
IRON	5000.0	4983.00	99.7
LEAD	25.0	24.54	98.2
MAGNESIUM	5000.0	5150.00	103.0
MANGANESE	25.0	24.89	99.6
MOLYBDENUM	25.0	24.78	99.1
NICKEL	25.0	24.87	99.5
POTASSIUM	5000.0	4895.00	97.9
SELENIUM	25.0	24.30	97.2
SILVER	25.0	24.88	99.5
SODIUM	5000.0	4987.00	99.7
THALLIUM	25.0	24.46	97.8
VANADIUM	25.0	24.56	98.2

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: JIF30A Jun 30, 2015 17:53

Analyte	True	Found	%R (1)
ALUMINUM	500.0	519.30	103.9
ANTIMONY	25.0	24.00	96.0
ARSENIC	25.0	23.97	95.9
BARIUM	25.0	24.28	97.1
BERYLLIUM	25.0	23.80	95.2
CADMIUM	25.0	25.07	100.3
CALCIUM	5000.0	5043.00	100.9
CHROMIUM	25.0	24.53	98.1
COBALT	25.0	24.83	99.3
COPPER	25.0	24.91	99.6
IRON	5000.0	4987.00	99.7
LEAD	25.0	24.34	97.4
MAGNESIUM	5000.0	5144.00	102.9
MANGANESE	25.0	24.80	99.2
MOLYBDENUM	25.0	24.72	98.9
NICKEL	25.0	24.67	98.7
POTASSIUM	5000.0	4986.00	99.7
SELENIUM	25.0	24.54	98.2
SILVER	25.0	24.85	99.4
SODIUM	5000.0	5014.00	100.3
THALLIUM	25.0	24.18	96.7
VANADIUM	25.0	24.45	97.8

SAMPLE: CCV

File: JIF30A Jun 30, 2015 18:34

Analyte	True	Found	%R (1)
ALUMINUM	500.0	521.80	104.4
ANTIMONY	25.0	23.61	94.4
ARSENIC	25.0	24.13	96.5
BARIUM	25.0	24.10	96.4
BERYLLIUM	25.0	23.75	95.0
CADMIUM	25.0	25.18	100.7
CALCIUM	5000.0	5013.00	100.3
CHROMIUM	25.0	24.30	97.2
COBALT	25.0	24.81	99.2
COPPER	25.0	24.71	98.8
IRON	5000.0	4990.00	99.8
LEAD	25.0	24.73	98.9
MAGNESIUM	5000.0	5168.00	103.4
MANGANESE	25.0	24.73	98.9
MOLYBDENUM	25.0	24.54	98.2
NICKEL	25.0	24.89	99.6
POTASSIUM	5000.0	4922.00	98.4
SELENIUM	25.0	24.86	99.4
SILVER	25.0	24.85	99.4
SODIUM	5000.0	5016.00	100.3
THALLIUM	25.0	24.62	98.5
VANADIUM	25.0	24.23	96.9

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: JIF30A Jun 30, 2015 19:14

Analyte	True	Found	%R (1)
ALUMINUM	500.0	513.80	102.8
ANTIMONY	25.0	23.57	94.3
ARSENIC	25.0	24.60	98.4
BARIUM	25.0	23.90	95.6
BERYLLIUM	25.0	24.57	98.3
CADMIUM	25.0	25.15	100.6
CALCIUM	5000.0	5117.00	102.3
CHROMIUM	25.0	24.54	98.2
COBALT	25.0	24.91	99.6
COPPER	25.0	24.91	99.6
IRON	5000.0	5042.00	100.8
LEAD	25.0	24.44	97.8
MAGNESIUM	5000.0	5182.00	103.6
MANGANESE	25.0	24.55	98.2
MOLYBDENUM	25.0	24.93	99.7
NICKEL	25.0	24.65	98.6
POTASSIUM	5000.0	5009.00	100.2
SELENIUM	25.0	24.45	97.8
SILVER	25.0	24.93	99.7
SODIUM	5000.0	5033.00	100.7
THALLIUM	25.0	24.31	97.2
VANADIUM	25.0	24.18	96.7

SAMPLE: CCV

File: JIF30A Jun 30, 2015 19:55

Analyte	True	Found	%R (1)
ALUMINUM	500.0	510.20	102.0
ANTIMONY	25.0	23.61	94.4
ARSENIC	25.0	24.20	96.8
BARIUM	25.0	24.01	96.0
BERYLLIUM	25.0	22.58	90.3
CADMIUM	25.0	25.05	100.2
CALCIUM	5000.0	5006.00	100.1
CHROMIUM	25.0	24.03	96.1
COBALT	25.0	24.44	97.8
COPPER	25.0	24.47	97.9
IRON	5000.0	4953.00	99.1
LEAD	25.0	24.38	97.5
MAGNESIUM	5000.0	5115.00	102.3
MANGANESE	25.0	24.72	98.9
MOLYBDENUM	25.0	24.60	98.4
NICKEL	25.0	24.44	97.8
POTASSIUM	5000.0	4955.00	99.1
SELENIUM	25.0	24.79	99.2
SILVER	25.0	24.77	99.1
SODIUM	5000.0	4924.00	98.5
THALLIUM	25.0	24.19	96.8
VANADIUM	25.0	24.13	96.5

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: JIF30A Jun 30, 2015 20:36

Analyte	True	Found	%R (1)
ALUMINUM	500.0	514.20	102.8
ANTIMONY	25.0	23.70	94.8
ARSENIC	25.0	24.78	99.1
BARIUM	25.0	24.35	97.4
BERYLLIUM	25.0	23.15	92.6
CADMIUM	25.0	25.28	101.1
CALCIUM	5000.0	5075.00	101.5
CHROMIUM	25.0	24.63	98.5
COBALT	25.0	24.87	99.5
COPPER	25.0	24.92	99.7
IRON	5000.0	5039.00	100.8
LEAD	25.0	24.57	98.3
MAGNESIUM	5000.0	5193.00	103.9
MANGANESE	25.0	25.06	100.2
MOLYBDENUM	25.0	25.11	100.4
NICKEL	25.0	25.08	100.3
POTASSIUM	5000.0	5013.00	100.3
SELENIUM	25.0	25.31	101.2
SILVER	25.0	25.02	100.1
SODIUM	5000.0	5026.00	100.5
THALLIUM	25.0	24.62	98.5
VANADIUM	25.0	24.43	97.7

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICV

File: JIG02A Jul 02, 2015 18:52

Analyte	True	Found	%R (1)
ALUMINUM	400.0	393.90	98.5
CALCIUM	4000.0	3995.00	99.9
IRON	4000.0	4018.00	100.4
MAGNESIUM	4000.0	4005.00	100.1
MOLYBDENUM	40.0	38.86	97.2
POTASSIUM	4000.0	3903.00	97.6
SODIUM	4000.0	3895.00	97.4
ZINC	20.0	21.32	106.6

SAMPLE: CCV

File: JIG02A Jul 02, 2015 19:21

Analyte	True	Found	%R (1)
ALUMINUM	500.0	505.80	101.2
CALCIUM	5000.0	5068.00	101.4
IRON	5000.0	4945.00	98.9
MAGNESIUM	5000.0	5066.00	101.3
MOLYBDENUM	25.0	24.40	97.6
POTASSIUM	5000.0	5030.00	100.6
SODIUM	5000.0	5064.00	101.3
ZINC	25.0	24.53	98.1

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCV

File: JIG02A Jul 02, 2015 20:00

Analyte	True	Found	%R (1)
ALUMINUM	500.0	505.80	101.2
CALCIUM	5000.0	4944.00	98.9
IRON	5000.0	4948.00	99.0
MAGNESIUM	5000.0	4902.00	98.0
MOLYBDENUM	25.0	24.40	97.6
POTASSIUM	5000.0	4833.00	96.7
SODIUM	5000.0	4738.00	94.8
ZINC	25.0	24.99	100.0

(1) Control Limits: Mercury 80-120; Other Metals 90-110

FORM II (Part 1) - IN

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: PQL

File: HIG01A Jul 01, 2015 10:31

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.17	85.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: PQL

File: HIG02A Jul 02, 2015 13:02

Analyte	TRUE	FOUND	% R
MERCURY	0.2	0.19	95.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: PQL

File: IIG01B Jul 01, 2015 15:52

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	334.00	111.3
ANTIMONY	8.0	6.80	85.0
BARIUM	5.0	5.12	102.4
CADMIUM	5.0	5.30	106.0
CALCIUM	100.0	110.00	110.0
COBALT	10.0	10.37	103.7
IRON	100.0	106.40	106.4
LEAD	5.0	5.86	117.2
MAGNESIUM	100.0	110.20	110.2
NICKEL	10.0	10.61	106.1
SILVER	10.0	10.55	105.5
SODIUM	1000.0	1029.00	102.9
THALLIUM	15.0	15.86	105.7
VANADIUM	10.0	9.64	96.4
ZINC	20.0	22.11	110.6

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: PQL

File: IIG02A Jul 02, 2015 11:30

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	316.70	105.6
ARSENIC	8.0	7.56	94.5
BARIUM	5.0	5.47	109.4
BERYLLIUM	5.0	5.26	105.2
CADMIUM	5.0	5.16	103.2
CALCIUM	100.0	119.60	119.6
CHROMIUM	10.0	10.67	106.7
COBALT	10.0	10.39	103.9
COPPER	25.0	25.88	103.5
IRON	100.0	100.30	100.3
LEAD	5.0	4.96	99.2
MAGNESIUM	100.0	108.10	108.1
MANGANESE	5.0	4.68	93.6
NICKEL	10.0	11.45	114.5
POTASSIUM	1000.0	1099.00	109.9
SELENIUM	10.0	9.66	96.6
SILVER	10.0	10.62	106.2
SODIUM	1000.0	1054.00	105.4
THALLIUM	15.0	15.49	103.3
VANADIUM	10.0	10.31	103.1
ZINC	20.0	22.36	111.8

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: PQL

File: IIG07B Jul 07, 2015 16:57

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	292.40	97.5
ANTIMONY	8.0	7.35	91.9
CALCIUM	100.0	110.50	110.5
IRON	100.0	102.90	102.9
MAGNESIUM	100.0	101.50	101.5

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: PQL

File: IIG14B Jul 14, 2015 15:30

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	308.30	102.8
CALCIUM	100.0	105.70	105.7
IRON	100.0	104.80	104.8
MAGNESIUM	100.0	106.70	106.7

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: PQL

File: IIG15B Jul 15, 2015 17:26

Analyte	TRUE	FOUND	% R
ALUMINUM	300.0	302.90	101.0
CALCIUM	100.0	109.60	109.6
IRON	100.0	105.70	105.7
MAGNESIUM	100.0	100.20	100.2

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: PQL

File: JIF30A Jun 30, 2015 15:32

Analyte	TRUE	FOUND	% R
ALUMINUM	60.0	57.07	95.1
ANTIMONY	0.2	0.22	110.0
ARSENIC	1.0	0.85	85.0
BARIUM	0.4	0.44	110.0
BERYLLIUM	0.2	0.20	100.0
CADMIUM	0.2	0.20	100.0
CALCIUM	20.0	21.71	108.6
CHROMIUM	1.0	1.03	103.0
COBALT	0.2	0.20	100.0
COPPER	0.6	0.65	108.3
IRON	20.0	18.68	93.4
LEAD	0.2	0.20	100.0
MAGNESIUM	20.0	19.85	99.3
MANGANESE	0.4	0.43	107.5
MOLYBDENUM	1.0	1.01	101.0
NICKEL	0.4	0.40	100.0
POTASSIUM	200.0	197.60	98.8
SELENIUM	1.0	0.98	98.0
SILVER	0.2	0.20	100.0
SODIUM	200.0	205.10	102.6
THALLIUM	0.2	0.19	95.0
VANADIUM	1.0	0.94	94.0

2C

PQL STANDARD FOR AA AND ICP

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: PQL

File: JIG02A Jul 02, 2015 18:58

Analyte	TRUE	FOUND	% R
ALUMINUM	60.0	57.20	95.3
CALCIUM	20.0	17.59	87.9
IRON	20.0	18.53	92.7
MAGNESIUM	20.0	21.01	105.1
MOLYBDENUM	1.0	1.02	102.0
POTASSIUM	200.0	201.50	100.8
SODIUM	200.0	204.30	102.2
ZINC	2.0	2.13	106.5

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICB

File: HIG01A Jul 01, 2015 10:29

Analyte	Result	C
MERCURY	-0.054	U

SAMPLE: CCB

File: HIG01A Jul 01, 2015 10:44

Analyte	Result	C
MERCURY	-0.033	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICB

File: HIG02A Jul 02, 2015 12:59

Analyte	Result	C
MERCURY	0.023	U

SAMPLE: CCB

File: HIG02A Jul 02, 2015 13:06

Analyte	Result	C
MERCURY	0.023	U

SAMPLE: CCB

File: HIG02A Jul 02, 2015 13:29

Analyte	Result	C
MERCURY	0.023	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCB

File: HIG02A Jul 02, 2015 13:55

Analyte	Result	C
MERCURY	0.023	U

SAMPLE: CCB

File: HIG02A Jul 02, 2015 14:20

Analyte	Result	C
MERCURY	0.023	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICB

File: IIG01B Jul 01, 2015 15:47

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	-1.973	U
BARIUM	-0.945	U
CADMIUM	0.083	J
CALCIUM	-11.340	U
COBALT	0.250	U
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	5.200	U
NICKEL	0.420	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	-0.677	U
ZINC	0.510	U

SAMPLE: CCB

File: IIG01B Jul 01, 2015 16:29

Analyte	Result	C
ALUMINUM	33.390	J
ANTIMONY	1.800	U
BARIUM	0.500	U
CADMIUM	0.078	U
CALCIUM	9.700	U
COBALT	0.250	U
IRON	5.200	U
LEAD	1.448	J
MAGNESIUM	5.200	U
NICKEL	0.420	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	-0.420	U
ZINC	0.510	U

SAMPLE: CCB

File: IIG01B Jul 01, 2015 17:26

Analyte	Result	C
ALUMINUM	38.500	J
ANTIMONY	1.800	U
BARIUM	0.500	U
CADMIUM	0.078	U
CALCIUM	23.070	J
COBALT	0.250	U
IRON	5.683	J
LEAD	1.377	J
MAGNESIUM	5.200	U
NICKEL	0.420	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCB

File: IIG01B Jul 01, 2015 18:25

Analyte	Result	C
ALUMINUM	40.640	J
ANTIMONY	1.800	U
BARIUM	0.500	U
CADMIUM	0.078	U
CALCIUM	9.700	U
COBALT	-0.603	U
IRON	5.974	J
LEAD	1.200	U
MAGNESIUM	5.200	U
NICKEL	0.420	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

SAMPLE: CCB

File: IIG01B Jul 01, 2015 19:24

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	1.800	U
BARIUM	0.500	U
CADMIUM	0.078	U
CALCIUM	9.700	U
COBALT	0.250	U
IRON	5.200	U
LEAD	1.977	J
MAGNESIUM	5.200	U
NICKEL	0.420	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	-0.671	U
ZINC	0.510	U

SAMPLE: CCB

File: IIG01B Jul 01, 2015 20:24

Analyte	Result	C
ALUMINUM	41.870	J
ANTIMONY	-3.142	U
BARIUM	0.529	J
CADMIUM	0.078	U
CALCIUM	9.700	U
COBALT	0.250	U
IRON	5.200	U
LEAD	1.346	J
MAGNESIUM	6.455	J
NICKEL	0.420	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	-1.186	U
ZINC	0.510	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCB

File: IIG01B Jul 01, 2015 21:24

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	1.800	U
BARIUM	0.500	U
CADMIUM	0.078	U
CALCIUM	9.700	U
COBALT	0.250	U
IRON	6.094	J
LEAD	2.054	J
MAGNESIUM	5.200	U
NICKEL	0.467	J
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	-0.430	U
ZINC	0.510	U

SAMPLE: CCB

File: IIG01B Jul 01, 2015 22:18

Analyte	Result	C
ALUMINUM	-25.690	U
ANTIMONY	1.800	U
BARIUM	0.500	U
CADMIUM	0.078	U
CALCIUM	9.700	U
COBALT	-0.304	U
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	5.200	U
NICKEL	0.420	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICB

File: IIG02A Jul 02, 2015 11:25

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BARIUM	0.524	J
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
CHROMIUM	0.310	U
COBALT	0.250	U
COPPER	-0.721	U
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	45.000	U
SELENIUM	4.174	J
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

SAMPLE: CCB

File: IIG02A Jul 02, 2015 12:08

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BARIUM	0.500	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	11.160	J
CHROMIUM	0.310	U
COBALT	0.250	U
COPPER	-0.735	U
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	14.390	J
MANGANESE	-1.338	U
NICKEL	0.420	U
POTASSIUM	63.700	J
SELENIUM	2.800	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

SAMPLE: CCB

File: IIG02A Jul 02, 2015 13:08

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BARIUM	0.500	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	9.700	U
CHROMIUM	0.310	U
COBALT	0.250	U
COPPER	0.580	J
IRON	5.200	U
LEAD	-1.343	U
MAGNESIUM	5.629	J
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	45.000	U
SELENIUM	-2.955	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCB
File: IIG02A Jul 02, 2015 14:09

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BARIUM	0.540	J
BERYLLIUM	0.135	J
CADMIUM	0.078	U
CALCIUM	12.660	J
CHROMIUM	0.310	U
COBALT	0.250	U
COPPER	-0.700	U
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	5.224	J
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	45.000	U
SELENIUM	2.800	U
SILVER	-0.457	U
SODIUM	40.000	U
THALLIUM	1.500	U
VANADIUM	0.250	U
ZINC	0.510	U

SAMPLE: CCB
File: IIG02A Jul 02, 2015 15:09

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BARIUM	0.500	U
BERYLLIUM	0.130	U
CADMIUM	0.078	U
CALCIUM	10.370	J
CHROMIUM	0.310	U
COBALT	-0.353	U
COPPER	-0.773	U
IRON	5.338	J
LEAD	1.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
NICKEL	0.420	U
POTASSIUM	45.000	U
SELENIUM	2.800	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.835	J
VANADIUM	0.250	U
ZINC	0.510	U

SAMPLE: CCB
File: IIG02A Jul 02, 2015 15:29

Analyte	Result	C
ALUMINUM	24.000	U
ARSENIC	2.400	U
BARIUM	0.543	J
BERYLLIUM	0.218	J
CADMIUM	0.078	U
CALCIUM	15.840	J
CHROMIUM	0.310	U
COBALT	0.250	U
COPPER	0.470	U
IRON	5.200	U
LEAD	1.200	U
MAGNESIUM	5.200	U
MANGANESE	1.100	U
NICKEL	0.493	J
POTASSIUM	53.410	J
SELENIUM	2.800	U
SILVER	0.410	U
SODIUM	40.000	U
THALLIUM	1.639	J
VANADIUM	0.250	U
ZINC	0.510	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICB

File: IIG07B Jul 07, 2015 16:52

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	1.800	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U

SAMPLE: CCB

File: IIG07B Jul 07, 2015 17:35

Analyte	Result	C
ALUMINUM	24.980	J
ANTIMONY	1.800	U
CALCIUM	31.100	J
IRON	18.470	J
MAGNESIUM	11.020	J

SAMPLE: CCB

File: IIG07B Jul 07, 2015 18:36

Analyte	Result	C
ALUMINUM	24.000	U
ANTIMONY	1.800	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.583	J

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICB

File: IIG14B Jul 14, 2015 15:25

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U

SAMPLE: CCB

File: IIG14B Jul 14, 2015 16:06

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	9.700	U
IRON	8.481	J
MAGNESIUM	6.710	J

SAMPLE: CCB

File: IIG14B Jul 14, 2015 17:05

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICB

File: IIG15B Jul 15, 2015 17:21

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	-9.742	U

SAMPLE: CCB

File: IIG15B Jul 15, 2015 18:03

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U

SAMPLE: CCB

File: IIG15B Jul 15, 2015 19:03

Analyte	Result	C
ALUMINUM	24.000	U
CALCIUM	9.700	U
IRON	5.200	U
MAGNESIUM	5.200	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICB

File: JIF30A Jun 30, 2015 15:29

Analyte	Result	C
ALUMINUM	0.424	J
ANTIMONY	0.037	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.023	J
CADMIUM	0.026	J
CALCIUM	5.826	J
CHROMIUM	0.043	U
COBALT	0.021	J
COPPER	0.033	J
IRON	6.300	U
LEAD	0.028	J
MAGNESIUM	4.044	J
MANGANESE	0.032	J
MOLYBDENUM	0.132	J
NICKEL	0.028	J
POTASSIUM	6.189	J
SELENIUM	0.230	U
SILVER	0.022	J
SODIUM	7.100	U
THALLIUM	0.029	J
VANADIUM	0.110	U

SAMPLE: CCB

File: JIF30A Jun 30, 2015 15:58

Analyte	Result	C
ALUMINUM	0.649	J
ANTIMONY	0.019	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.007	J
CADMIUM	0.010	J
CALCIUM	8.689	J
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.073	J
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.868	J
MANGANESE	0.031	U
MOLYBDENUM	0.235	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.005	J
SODIUM	7.100	U
THALLIUM	0.007	J
VANADIUM	0.110	U

SAMPLE: CCB

File: JIF30A Jun 30, 2015 16:37

Analyte	Result	C
ALUMINUM	1.958	J
ANTIMONY	0.025	J
ARSENIC	0.220	U
BARIUM	0.060	J
BERYLLIUM	0.007	J
CADMIUM	0.009	J
CALCIUM	38.170	B
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.029	J
IRON	6.300	U
LEAD	0.012	J
MAGNESIUM	24.900	B
MANGANESE	0.366	B
MOLYBDENUM	0.055	J
NICKEL	0.014	U
POTASSIUM	5.678	J
SELENIUM	0.230	U
SILVER	0.007	J
SODIUM	7.100	U
THALLIUM	0.007	J
VANADIUM	0.110	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCB
File: JIF30A Jun 30, 2015 17:16

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.015	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.003	U
CADMIUM	0.003	U
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.053	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.006	U
VANADIUM	0.110	U

SAMPLE: CCB
File: JIF30A Jun 30, 2015 17:57

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.012	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.005	J
CADMIUM	0.005	J
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.055	J
NICKEL	0.014	U
POTASSIUM	8.273	J
SELENIUM	0.230	U
SILVER	0.006	J
SODIUM	7.100	U
THALLIUM	0.011	J
VANADIUM	0.110	U

SAMPLE: CCB
File: JIF30A Jun 30, 2015 18:37

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.015	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.004	J
CADMIUM	0.005	J
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.050	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.011	J
SODIUM	7.100	U
THALLIUM	0.008	J
VANADIUM	0.110	U

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: CCB
File: JIF30A Jun 30, 2015 19:18

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.012	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.003	U
CADMIUM	0.005	J
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	-0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.133	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.014	J
VANADIUM	0.110	U

SAMPLE: CCB
File: JIF30A Jun 30, 2015 19:59

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.017	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.003	U
CADMIUM	0.007	J
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.031	U
MOLYBDENUM	0.059	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	-0.232	U
SILVER	0.004	U
SODIUM	7.100	U
THALLIUM	0.008	J
VANADIUM	0.110	U

SAMPLE: CCB
File: JIF30A Jun 30, 2015 20:40

Analyte	Result	C
ALUMINUM	0.380	U
ANTIMONY	0.018	J
ARSENIC	0.220	U
BARIUM	0.037	U
BERYLLIUM	0.006	J
CADMIUM	0.005	J
CALCIUM	4.800	U
CHROMIUM	0.043	U
COBALT	0.009	U
COPPER	0.028	U
IRON	6.300	U
LEAD	0.010	U
MAGNESIUM	1.200	U
MANGANESE	0.045	J
MOLYBDENUM	0.054	J
NICKEL	0.014	U
POTASSIUM	5.300	U
SELENIUM	0.230	U
SILVER	0.008	J
SODIUM	7.100	U
THALLIUM	0.006	U
VANADIUM	0.110	U

3A

INITIAL AND CONTINUING CALIBRATION BLANKS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICB

File: JIG02A Jul 02, 2015 18:55

Analyte	Result	C
ALUMINUM	0.380	U
CALCIUM	4.800	U
IRON	6.300	U
MAGNESIUM	2.696	J
MOLYBDENUM	0.114	J
POTASSIUM	5.300	U
SODIUM	7.100	U
ZINC	0.120	U

SAMPLE: CCB

File: JIG02A Jul 02, 2015 19:24

Analyte	Result	C
ALUMINUM	32.850	B
CALCIUM	22.570	B
IRON	22.270	B
MAGNESIUM	46.850	B
MOLYBDENUM	0.667	B
POTASSIUM	26.200	J
SODIUM	31.300	J
ZINC	0.120	U

SAMPLE: CCB

File: JIG02A Jul 02, 2015 20:03

Analyte	Result	C
ALUMINUM	0.380	U
CALCIUM	4.800	U
IRON	6.300	U
MAGNESIUM	1.200	U
MOLYBDENUM	0.056	J
POTASSIUM	5.300	U
SODIUM	7.100	U
ZINC	0.120	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSIF30HGS1

Matrix: SOIL **SDG Name:** SI4615

QC Batch ID: IF30HGS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
MERCURY	0.017	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBSIF30IMS1

Matrix: SOIL **SDG Name:** SI4615

QC Batch ID: IF30IMS1

Concentration Units : mg/Kg drywt

Analyte	RESULT	C
ALUMINUM	0.89	J
ANTIMONY	0.050	U
ARSENIC	0.40	U
BARIUM	0.10	U
BERYLLIUM	0.020	U
CADMIUM	0.020	U
CALCIUM	8.0	U
CHROMIUM	0.16	J
COBALT	0.030	U
COPPER	0.11	J
IRON	6.0	U
LEAD	0.017	J
MAGNESIUM	1.5	J
MANGANESE	0.15	B
NICKEL	0.087	J
POTASSIUM	40	U
SELENIUM	0.30	U
SILVER	0.040	U
SODIUM	4.3	J
THALLIUM	0.040	U
VANADIUM	0.40	U
ZINC	0.20	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBT1254A

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG01ICW2

Concentration Units : ug/L

Analyte	RESULT	C
ALUMINUM	500	U
ANTIMONY	25	U
ARSENIC	25	U
BARIUM	11	J
BERYLLIUM	2.5	U
CADMIUM	15	U
CALCIUM	190	J
CHROMIUM	2.1	J
COBALT	20	U
COPPER	3.4	J
IRON	400	U
LEAD	20	U
MAGNESIUM	76	J
MANGANESE	20	U
MERCURY	0.10	U
NICKEL	2.3	J
POTASSIUM	2500	U
SELENIUM	35	U
SILVER	20	U
SODIUM	120	J
THALLIUM	25	U
VANADIUM	20	U
ZINC	36	J

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWIG01HGW3

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG01HGW3

Concentration Units : ug/L

Analyte	RESULT	C
MERCURY	0.10	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWIG01ICW2

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG01ICW2

Concentration Units : ug/L

Analyte	RESULT	C
ALUMINUM	30	J
ANTIMONY	5.0	U
ARSENIC	5.0	U
BARIUM	0.99	J
BERYLLIUM	0.50	U
CADMIUM	3.0	U
CALCIUM	80	U
CHROMIUM	1.8	J
COBALT	4.0	U
COPPER	0.89	J
IRON	181	B
LEAD	4.0	U
MAGNESIUM	80	U
MANGANESE	2.2	J
NICKEL	0.43	J
POTASSIUM	500	U
SELENIUM	7.0	U
SILVER	4.0	U
SODIUM	500	U
THALLIUM	5.0	U
VANADIUM	4.0	U
ZINC	10	U

3P

PREPARATION BLANKS

Lab Name: Katahdin Analytical Services **Sample ID:** PBWIG10ICW1

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG10ICW1

Concentration Units : ug/L

Analyte	RESULT	C
IRON	11	J

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICSA

File: IIG01B Jul 01, 2015 16:13

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	483000	96.6
ANTIMONY	0	3	
BARIUM	0	0	
CADMIUM	0	0	
CALCIUM	500000	448800	89.8
COBALT	0	0	
IRON	200000	184800	92.4
LEAD	0	-1	
MAGNESIUM	500000	456300	91.3
NICKEL	0	0	
SILVER	0	3	
SODIUM	0	128	
THALLIUM	0	-3	
VANADIUM	0	-1	
ZINC	0	1	

SAMPLE: ICSAB

File: IIG01B Jul 01, 2015 16:17

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	541700	108.3
ANTIMONY	600	621	103.5
BARIUM	500	552	110.4
CADMIUM	1000	980	98.0
CALCIUM	500000	482700	96.5
COBALT	500	483	96.6
IRON	200000	207100	103.6
LEAD	50	55	110.0
MAGNESIUM	500000	474000	94.8
NICKEL	1000	953	95.3
SILVER	200	227	113.5
SODIUM	20000	22350	111.8
THALLIUM	100	96	96.0
VANADIUM	500	519	103.8
ZINC	1000	959	95.9

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICSA

File: IIG02A Jul 02, 2015 11:51

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	471700	94.3
ARSENIC	0	1	
BARIUM	0	1	
BERYLLIUM	0	0	
CADMIUM	0	0	
CALCIUM	500000	443600	88.7
CHROMIUM	0	0	
COBALT	0	0	
COPPER	0	8	
IRON	200000	180700	90.3
LEAD	0	2	
MAGNESIUM	500000	454800	91.0
MANGANESE	0	-3	
NICKEL	0	0	
POTASSIUM	0	251	
SELENIUM	0	-1	
SILVER	0	-3	
SODIUM	0	140	
THALLIUM	0	-1	
VANADIUM	0	0	
ZINC	0	2	

SAMPLE: ICSAB

File: IIG02A Jul 02, 2015 11:56

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	498400	99.7
ARSENIC	100	102	102.0
BARIUM	500	515	103.0
BERYLLIUM	500	516	103.2
CADMIUM	1000	967	96.7
CALCIUM	500000	463800	92.8
CHROMIUM	500	493	98.6
COBALT	500	482	96.4
COPPER	500	521	104.2
IRON	200000	192100	96.0
LEAD	50	52	104.0
MAGNESIUM	500000	471600	94.3
MANGANESE	500	494	98.8
NICKEL	1000	944	94.4
POTASSIUM	20000	21690	108.5
SELENIUM	50	46	92.0
SILVER	200	213	106.5
SODIUM	20000	20880	104.4
THALLIUM	100	95	95.0
VANADIUM	500	508	101.6
ZINC	1000	951	95.1

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICSA

File: IIG07B Jul 07, 2015 17:19

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	480200	96.0
ANTIMONY	0	2	
CALCIUM	500000	460600	92.1
IRON	200000	187600	93.8
MAGNESIUM	500000	463100	92.6

SAMPLE: ICSAB

File: IIG07B Jul 07, 2015 17:23

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	501200	100.2
ANTIMONY	600	618	103.0
CALCIUM	500000	472100	94.4
IRON	200000	194200	97.1
MAGNESIUM	500000	474800	95.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICSA

File: IIG14B Jul 14, 2015 15:50

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	487200	97.4
CALCIUM	500000	449200	89.8
IRON	200000	185200	92.6
MAGNESIUM	500000	457300	91.5

SAMPLE: ICSAB

File: IIG14B Jul 14, 2015 15:55

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	497400	99.5
CALCIUM	500000	462300	92.5
IRON	200000	188000	94.0
MAGNESIUM	500000	467100	93.4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICSA

File: IIG15B Jul 15, 2015 17:47

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	503900	100.8
CALCIUM	500000	461000	92.2
IRON	200000	192400	96.2
MAGNESIUM	500000	454400	90.9

SAMPLE: ICSAB

File: IIG15B Jul 15, 2015 17:52

Analyte	TRUE	FOUND	% R
ALUMINUM	500000	498300	99.7
CALCIUM	500000	470100	94.0
IRON	200000	188800	94.4
MAGNESIUM	500000	461600	92.3

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICSA

File: JIF30A Jun 30, 2015 15:45

Analyte	TRUE	FOUND	% R
ALUMINUM	100000	93410	93.4
ANTIMONY	0	0	
ARSENIC	0	0	
BARIUM	0	0	
BERYLLIUM	0	0	
CADMIUM	0	0	
CALCIUM	100000	91650	91.6
CHROMIUM	0	2	
COBALT	0	0	
COPPER	0	1	
IRON	100000	87150	87.2
LEAD	0	0	
MAGNESIUM	100000	93210	93.2
MANGANESE	0	0	
MOLYBDENUM	2000	1922	96.1
NICKEL	0	0	
POTASSIUM	100000	95000	95.0
SELENIUM	0	0	
SILVER	0	0	
SODIUM	100000	94330	94.3
THALLIUM	0	0	
VANADIUM	0	0	

SAMPLE: ICSAB

File: JIF30A Jun 30, 2015 15:49

Analyte	TRUE	FOUND	% R
ALUMINUM	100000	91940	91.9
ANTIMONY	20	19	95.0
ARSENIC	20	19	95.0
BARIUM	21	20	95.2
BERYLLIUM	20	20	100.0
CADMIUM	20	19	95.0
CALCIUM	100000	91040	91.0
CHROMIUM	20	21	105.0
COBALT	20	19	95.0
COPPER	20	19	95.0
IRON	100000	85530	85.5
LEAD	20	20	100.0
MAGNESIUM	100000	91840	91.8
MANGANESE	20	19	95.0
MOLYBDENUM	2000	1912	95.6
NICKEL	20	18	90.0
POTASSIUM	100000	92820	92.8
SELENIUM	20	19	95.0
SILVER	20	18	90.0
SODIUM	100000	92280	92.3
THALLIUM	20	20	100.0
VANADIUM	20	19	95.0

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Concentration Units: ug/L

SAMPLE: ICSA

File: JIG02A Jul 02, 2015 19:11

Analyte	TRUE	FOUND	% R
ALUMINUM	100000	91900	91.9
CALCIUM	100000	90690	90.7
IRON	100000	86660	86.7
MAGNESIUM	100000	90950	91.0
MOLYBDENUM	2000	1866	93.3
POTASSIUM	100000	93380	93.4
SODIUM	100000	92520	92.5
ZINC	0	3	

SAMPLE: ICSAB

File: JIG02A Jul 02, 2015 19:14

Analyte	TRUE	FOUND	% R
ALUMINUM	100000	90540	90.5
CALCIUM	100000	89850	89.8
IRON	100000	85730	85.7
MAGNESIUM	100000	89560	89.6
MOLYBDENUM	2000	1879	94.0
POTASSIUM	100000	92520	92.5
SODIUM	100000	92000	92.0
ZINC	20	21	105.0

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LC2WIG01ICW2

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG01ICW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	2000	2100	105.0	80	120
ANTIMONY	100	99.8	99.8	80	120
ARSENIC	100	98.7	98.7	80	120
BARIUM	2000	2010	100.6	80	120
BERYLLIUM	50.0	52.4	104.8	80	120
CADMIUM	250	271	108.4	80	120
CALCIUM	2500	2640	105.8	80	120
CHROMIUM	200	203	101.7	80	120
COBALT	500	494	98.7	80	120
COPPER	250	253	101.4	80	120
IRON	1000	1130	113.2	80	120
LEAD	100	111	110.8	80	120
MAGNESIUM	5000	5480	109.5	80	120
MANGANESE	500	522	104.3	80	120
NICKEL	500	533	106.6	80	120
POTASSIUM	10000	10100	101.1	80	120
SELENIUM	100	99.6	99.6	80	120
SILVER	50.0	53.5	107.1	80	120
SODIUM	7500	7530	100.4	80	120
THALLIUM	100	113	113.1	80	120
VANADIUM	500	524	104.8	80	120
ZINC	500	482	96.3	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LC2WIG10ICW1

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG10ICW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
IRON	1000	1020	101.7	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSOIF30HGS1

Matrix: SOIL **SDG Name:** SI4615

QC Batch ID: IF30HGS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	0.833	0.930	112.0	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSOIF30IMS1

Matrix: SOIL **SDG Name:** SI4615

QC Batch ID: IF30IMS1

Concentration Units : mg/Kg drywt

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	200	214	106.9	80	120
ANTIMONY	10.0	9.39	93.9	80	120
ARSENIC	10.0	9.80	98.1	80	120
BARIUM	200	197	98.6	80	120
BERYLLIUM	5.00	4.42	88.4	80	120
CADMIUM	25.0	25.6	102.5	80	120
CALCIUM	250	235	94.2	80	120
CHROMIUM	20.0	20.5	102.3	80	120
COBALT	50.0	53.7	107.4	80	120
COPPER	25.0	25.9	103.7	80	120
IRON	100	99.8	99.8	80	120
LEAD	10.0	10.3	103.2	80	120
MAGNESIUM	500	518	103.5	80	120
MANGANESE	50.0	53.2	106.5	80	120
NICKEL	50.0	51.3	102.6	80	120
POTASSIUM	1000	976	97.5	80	120
SELENIUM	10.0	9.98	99.8	80	120
SILVER	5.00	4.80	96.0	80	120
SODIUM	750	750	99.9	80	120
THALLIUM	10.0	9.98	99.8	80	120
VANADIUM	50.0	52.0	104.0	80	120
ZINC	50.0	50.1	100.2	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWIG01HGW3

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG01HGW3

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
MERCURY	5.00	5.00	100.0	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWIG01ICW2

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG01ICW2

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
ALUMINUM	2000	2080	104.1	80	120
ANTIMONY	100	107	107.1	80	120
ARSENIC	100	100	100.4	80	120
BARIUM	2000	2060	102.8	80	120
BERYLLIUM	50.0	52.7	105.3	80	120
CADMIUM	250	277	110.7	80	120
CALCIUM	2500	2700	108.1	80	120
CHROMIUM	200	208	104.1	80	120
COBALT	500	503	100.6	80	120
COPPER	250	258	103.0	80	120
IRON	1000	1110	111.3	80	120
LEAD	100	112	111.9	80	120
MAGNESIUM	5000	5580	111.6	80	120
MANGANESE	500	523	104.6	80	120
NICKEL	500	544	108.9	80	120
POTASSIUM	10000	10200	102.4	80	120
SELENIUM	100	99.7	99.7	80	120
SILVER	50.0	54.0	108.0	80	120
SODIUM	7500	7760	103.4	80	120
THALLIUM	100	106	106.2	80	120
VANADIUM	500	534	106.7	80	120
ZINC	500	490	98.0	80	120

LABORATORY CONTROL SAMPLES

Lab Name: Katahdin Analytical Services **Sample ID:** LCSWIG10ICW1

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG10ICW1

Concentration Units : ug/L

Analyte	TRUE	FOUND	% R	LIMITS (%)	
IRON	1000	1030	103.3	80	120

7D

LABORATORY CONTROL SAMPLE DUPLICATES

Lab Name: Katahdin Analytical Services

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG01ICW2 **Lab Sample ID:** LCSWIG01ICW2

Concentration Units: ug/L

Analyte	Control Limit (%)	LCS Result	LCS Dup. Result	RPD(%)	Q
ALUMINUM	20.0	2080	2100	0.8	
ANTIMONY	20.0	107	99.8	7.1	
ARSENIC	20.0	100	98.7	1.7	
BARIUM	20.0	2060	2010	2.2	
BERYLLIUM	20.0	52.7	52.4	0.5	
CADMIUM	20.0	277	271	2.1	
CALCIUM	20.0	2700	2640	2.2	
CHROMIUM	20.0	208	203	2.3	
COBALT	20.0	503	494	1.9	
COPPER	20.0	258	253	1.6	
IRON	20.0	1110	1130	1.7	
LEAD	20.0	112	111	1.0	
MAGNESIUM	20.0	5580	5480	1.9	
MANGANESE	20.0	523	522	0.3	
NICKEL	20.0	544	533	2.1	
POTASSIUM	20.0	10200	10100	1.3	
SELENIUM	20.0	99.7	99.6	0.2	
SILVER	20.0	54.0	53.5	0.9	
SODIUM	20.0	7760	7530	2.9	
THALLIUM	20.0	106	113	6.3	
VANADIUM	20.0	534	524	1.9	
ZINC	20.0	490	482	1.7	

FORM VIID - IN

7D

LABORATORY CONTROL SAMPLE DUPLICATES

Lab Name: Katahdin Analytical Services

Matrix: WATER **SDG Name:** SI4615

QC Batch ID: IG10ICW1 **Lab Sample ID:** LCSWIG10ICW1

Concentration Units: ug/L

Analyte	Control Limit (%)	LCS Result	LCS Dup. Result	RPD(%)	Q
IRON	20.0	1030	1020	1.6	

FORM VIID - IN

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 4/13/2015

Concentration Units: ug/L

Analyte	CRDL	IDL	M
MERCURY	0.20	0.023	CV

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 4/13/2015

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	24.	P
ANTIMONY	0.20	1.8	P
ARSENIC	1.0	2.4	P
BARIUM	0.40	0.50	P
BERYLLIUM	0.20	0.13	P
CADMIUM	0.20	0.078	P
CALCIUM	100	9.7	P
CHROMIUM	1.0	0.31	P
COBALT	0.20	0.25	P
COPPER	0.60	0.47	P
IRON	100	5.2	P
LEAD	0.20	1.2	P
MAGNESIUM	100	5.2	P
MANGANESE	0.40	1.1	P
MOLYBDENUM	1.0	1.2	P
NICKEL	0.40	0.42	P
POTASSIUM	1000	45.	P
SELENIUM	1.0	2.8	P
SILVER	0.20	0.41	P
SODIUM	1000	40.	P
THALLIUM	0.20	1.5	P
VANADIUM	1.0	0.25	P
ZINC	2.0	0.51	P

INSTRUMENT DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** J

Instrument Name: AGILENT 7500 ICP-MS **Date:** 4/13/2015

Concentration Units: ug/L

Analyte	CRDL	IDL	M
ALUMINUM	300	0.38	MS
ANTIMONY	0.20	0.0058	MS
ARSENIC	1.0	0.22	MS
BARIUM	0.40	0.037	MS
BERYLLIUM	0.20	0.0027	MS
CADMIUM	0.20	0.0031	MS
CALCIUM	100	4.8	MS
CHROMIUM	1.0	0.043	MS
COBALT	0.20	0.0087	MS
COPPER	0.60	0.028	MS
IRON	100	6.3	MS
LEAD	0.20	0.0096	MS
MAGNESIUM	100	1.2	MS
MANGANESE	0.40	0.031	MS
MOLYBDENUM	1.0	0.012	MS
NICKEL	0.40	0.014	MS
POTASSIUM	1000	5.3	MS
SELENIUM	1.0	0.23	MS
SILVER	0.20	0.0039	MS
SODIUM	1000	7.1	MS
THALLIUM	0.20	0.0065	MS
VANADIUM	1.0	0.11	MS
ZINC	2.0	0.12	MS

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 1/7/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
MERCURY	0.017	mg/Kg	CV	SW846 7471B / SW846 7471B

FORM X - IN

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 2/9/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
MERCURY	0.10	ug/L	CV	SW846 7470A / SW846 7470A

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/19/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ALUMINUM	100.	ug/L	P	SW846 3010A / SW846 6010C
ANTIMONY	5.0	ug/L	P	SW846 3010A / SW846 6010C
ARSENIC	5.0	ug/L	P	SW846 3010A / SW846 6010C
BARIUM	3.0	ug/L	P	SW846 3010A / SW846 6010C
BERYLLIUM	0.50	ug/L	P	SW846 3010A / SW846 6010C
CADMIUM	3.0	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	80.	ug/L	P	SW846 3010A / SW846 6010C
CHROMIUM	4.0	ug/L	P	SW846 3010A / SW846 6010C
COBALT	4.0	ug/L	P	SW846 3010A / SW846 6010C
COPPER	10.	ug/L	P	SW846 3010A / SW846 6010C
IRON	80.	ug/L	P	SW846 3010A / SW846 6010C
LEAD	4.0	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	80.	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	4.0	ug/L	P	SW846 3010A / SW846 6010C
NICKEL	4.0	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	500.	ug/L	P	SW846 3010A / SW846 6010C
SELENIUM	7.0	ug/L	P	SW846 3010A / SW846 6010C
SILVER	4.0	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	500.	ug/L	P	SW846 3010A / SW846 6010C
THALLIUM	5.0	ug/L	P	SW846 3010A / SW846 6010C
VANADIUM	4.0	ug/L	P	SW846 3010A / SW846 6010C
ZINC	10.	ug/L	P	SW846 3010A / SW846 6010C

LIMITS of DETECTION

Lab Name: Katahdin Analytical Services **Instrument Code:** J

Instrument Name: AGILENT 7500 ICP-MS **Date:** 1/26/2011

Analyte	LOD	Units	M	EPA Prep./Anal. Method
ALUMINUM	0.80	mg/kg	MS	SW846 3050B / SW846 6020A
ANTIMONY	0.010	mg/kg	MS	SW846 3050B / SW846 6020A
ARSENIC	0.080	mg/kg	MS	SW846 3050B / SW846 6020A
BARIUM	0.020	mg/kg	MS	SW846 3050B / SW846 6020A
BERYLLIUM	0.0040	mg/Kg	MS	SW846 3050B / SW846 6020A
CADMIUM	0.0040	mg/kg	MS	SW846 3050B / SW846 6020A
CALCIUM	1.6	mg/kg	MS	SW846 3050B / SW846 6020A
CHROMIUM	0.080	mg/kg	MS	SW846 3050B / SW846 6020A
COBALT	0.0060	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.040	mg/kg	MS	SW846 3050B / SW846 6020A
IRON	1.2	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.010	mg/Kg	MS	SW846 3050B / SW846 6020A
MAGNESIUM	1.6	mg/kg	MS	SW846 3050B / SW846 6020A
MANGANESE	0.020	mg/kg	MS	SW846 3050B / SW846 6020A
NICKEL	0.024	mg/kg	MS	SW846 3050B / SW846 6020A
POTASSIUM	8.0	mg/Kg	MS	SW846 3050B / SW846 6020A
SELENIUM	0.060	mg/kg	MS	SW846 3050B / SW846 6020A
SILVER	0.0080	mg/kg	MS	SW846 3050B / SW846 6020A
SODIUM	8.0	mg/kg	MS	SW846 3050B / SW846 6020A
THALLIUM	0.0080	mg/kg	MS	SW846 3050B / SW846 6020A
VANADIUM	0.080	mg/Kg	MS	SW846 3050B / SW846 6020A
ZINC	0.16	mg/kg	MS	SW846 3050B / SW846 6020A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 1/7/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
MERCURY	0.0052	mg/Kg	CV	SW846 7471B / SW846 7471B

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** H

Instrument Name: CETAC M6100 **Date:** 2/9/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
MERCURY	0.013	ug/L	CV	SW846 7470A / SW846 7470A

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 1/19/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ALUMINUM	15.	ug/L	P	SW846 3010A / SW846 6010C
ANTIMONY	1.3	ug/L	P	SW846 3010A / SW846 6010C
ARSENIC	1.4	ug/L	P	SW846 3010A / SW846 6010C
BARIUM	0.23	ug/L	P	SW846 3010A / SW846 6010C
BERYLLIUM	0.10	ug/L	P	SW846 3010A / SW846 6010C
CADMIUM	0.049	ug/L	P	SW846 3010A / SW846 6010C
CALCIUM	11.	ug/L	P	SW846 3010A / SW846 6010C
CHROMIUM	0.36	ug/L	P	SW846 3010A / SW846 6010C
COBALT	0.24	ug/L	P	SW846 3010A / SW846 6010C
COPPER	0.63	ug/L	P	SW846 3010A / SW846 6010C
IRON	5.4	ug/L	P	SW846 3010A / SW846 6010C
LEAD	1.1	ug/L	P	SW846 3010A / SW846 6010C
MAGNESIUM	7.8	ug/L	P	SW846 3010A / SW846 6010C
MANGANESE	1.1	ug/L	P	SW846 3010A / SW846 6010C
NICKEL	0.28	ug/L	P	SW846 3010A / SW846 6010C
POTASSIUM	41.	ug/L	P	SW846 3010A / SW846 6010C
SELENIUM	2.4	ug/L	P	SW846 3010A / SW846 6010C
SILVER	0.27	ug/L	P	SW846 3010A / SW846 6010C
SODIUM	24.	ug/L	P	SW846 3010A / SW846 6010C
THALLIUM	1.1	ug/L	P	SW846 3010A / SW846 6010C
VANADIUM	0.23	ug/L	P	SW846 3010A / SW846 6010C
ZINC	0.72	ug/L	P	SW846 3010A / SW846 6010C

METHOD DETECTION LIMITS

Lab Name: Katahdin Analytical Services **Instrument Code:** J

Instrument Name: AGILENT 7500 ICP-MS **Date:** 1/26/2011

Analyte	MDL	Units	M	EPA Prep./Anal. Method
ALUMINUM	0.10	mg/kg	MS	SW846 3050B / SW846 6020A
ANTIMONY	0.0040	mg/kg	MS	SW846 3050B / SW846 6020A
ARSENIC	0.030	mg/kg	MS	SW846 3050B / SW846 6020A
BARIUM	0.0073	mg/kg	MS	SW846 3050B / SW846 6020A
BERYLLIUM	0.00081	mg/kg	MS	SW846 3050B / SW846 6020A
CADMIUM	0.0015	mg/kg	MS	SW846 3050B / SW846 6020A
CALCIUM	0.77	mg/kg	MS	SW846 3050B / SW846 6020A
CHROMIUM	0.0098	mg/kg	MS	SW846 3050B / SW846 6020A
COBALT	0.0011	mg/kg	MS	SW846 3050B / SW846 6020A
COPPER	0.014	mg/kg	MS	SW846 3050B / SW846 6020A
IRON	0.48	mg/kg	MS	SW846 3050B / SW846 6020A
LEAD	0.0014	mg/kg	MS	SW846 3050B / SW846 6020A
MAGNESIUM	0.27	mg/kg	MS	SW846 3050B / SW846 6020A
MANGANESE	0.0084	mg/kg	MS	SW846 3050B / SW846 6020A
NICKEL	0.0053	mg/kg	MS	SW846 3050B / SW846 6020A
POTASSIUM	0.91	mg/kg	MS	SW846 3050B / SW846 6020A
SELENIUM	0.0078	mg/kg	MS	SW846 3050B / SW846 6020A
SILVER	0.0013	mg/kg	MS	SW846 3050B / SW846 6020A
SODIUM	0.51	mg/kg	MS	SW846 3050B / SW846 6020A
THALLIUM	0.0019	mg/kg	MS	SW846 3050B / SW846 6020A
VANADIUM	0.022	mg/kg	MS	SW846 3050B / SW846 6020A
ZINC	0.026	mg/kg	MS	SW846 3050B / SW846 6020A

ICP INTERELEMENT CORRECTION FACTORS

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument Name: THERMO ICAP 6500 **Instrument ID:** I **Date:** 1/8/2015

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As	Cr	Co	Cu	Mn	Mo	Ni	Ti	V
ALUMINUM	396.15	0.0	0.0003680	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0300000	0.0	0.0	0.0
ANTIMONY	206.83	0.0000250	0.0	0.0000520	0.0	-0.0001350	0.0078600	0.0	0.0	0.0	-0.0018800	-0.0009470	0.0	-0.0017400
ARSENIC	189.04	0.0000120	0.0	-0.0001310	0.0	0.0	0.0006100	0.0	0.0	0.0	0.0020700	0.0	0.0	0.0
BARIUM	455.40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BERYLLIUM	313.04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0007160	0.0000820
BORON	208.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0296000	0.0	0.0	0.0
CADMIUM	226.50	0.0	0.0	0.0000630	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0000800	0.0000260	0.0
CALCIUM	315.89	0.0	0.0	0.0	0.0	0.0	0.0008850	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHROMIUM	267.72	0.0	0.0	0.0000070	0.0	0.0	0.0	0.0	0.0	0.0001110	0.0	0.0	0.0	0.0000720
COBALT	228.62	0.0	0.0	0.0	0.0	0.0	-0.0000420	0.0	0.0	0.0	0.0	0.0000640	0.0027000	0.0
COPPER	327.40	0.0000110	0.0	-0.0000060	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0005550	0.0003110
GOLD	242.79	0.0	0.0	0.0001410	0.0	0.0	0.0	0.0	0.0	-0.0019000	0.0	0.0	0.0	0.0
IRON	259.94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEAD	220.35	-0.0001240	0.0	0.0000190	0.0	0.0	-0.0005800	0.0000540	0.0001360	0.0	-0.0005810	0.0002080	0.0000970	0.0
LITHIUM	670.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAGNESIUM	202.58	0.0	0.0	0.0000370	0.0	0.0	0.0	0.2003000	0.0	0.0	0.0277000	0.0	0.0002000	0.0
MANGANESE	257.61	-0.0000010	0.0	0.0000150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MOLYBDENUM	202.03	0.0	0.0	0.0	0.0	0.0	0.0001080	0.0	0.0	0.0000070	0.0	0.0	0.0	-0.0001920
NICKEL	231.60	0.0	0.0	-0.0000380	0.0	0.0	0.0	0.0001270	0.0	0.0	0.0008690	0.0	0.0	0.0
POTASSIUM	766.49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SELENIUM	196.09	0.0000230	0.0	-0.0000020	0.0	-0.0000500	0.0	0.0000900	0.0	0.0004850	0.0	0.0	0.0	-0.0002080
SILICON	251.61	0.0	0.0	-0.0000080	0.0	0.0	0.0	0.0	0.0	0.0	0.0097100	0.0	0.0009940	0.0
SILVER	328.07	0.0	0.0	-0.0002370	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0002840	0.0
SODIUM	589.59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRONTIUM	421.55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THALLIUM	190.86	-0.0000020	0.0	0.0000020	0.0	0.0	0.0	0.0018400	0.0000120	-0.0021900	-0.0000380	0.0	-0.0010500	-0.0093600
TIN	189.99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TITANIUM	334.90	0.0	0.0	0.0	0.0	0.0	0.0001290	0.0	0.0	0.0	0.0010500	0.0	0.0	0.0
VANADIUM	292.40	0.0	0.0	0.0000210	0.0	0.0	-0.0041100	0.0	0.0	-0.0003220	-0.0062800	0.0	0.0010900	0.0
ZINC	206.20	0.0	0.0	0.0	0.0	0.0	-0.0011400	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FORM XI - IN

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** I

Instrument Name: THERMO ICAP 6500 **Date:** 4/6/2015

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	5.00	500000	P
ANTIMONY	45.00	20000	P
ARSENIC	45.00	20000	P
BARIUM	5.00	20000	P
BERYLLIUM	5.00	20000	P
CADMIUM	45.00	20000	P
CALCIUM	5.00	500000	P
CHROMIUM	10.00	20000	P
COBALT	45.00	20000	P
COPPER	10.00	20000	P
IRON	5.00	250000	P
LEAD	45.00	20000	P
MAGNESIUM	45.00	200000	P
MANGANESE	5.00	20000	P
MOLYBDENUM	45.00	5000	P
NICKEL	10.00	20000	P
POTASSIUM	5.00	300000	P
SELENIUM	45.00	20000	P
SILVER	10.00	2000	P
SODIUM	5.00	200000	P
THALLIUM	45.00	20000	P
VANADIUM	10.00	20000	P
ZINC	45.00	20000	P

ICP LINEAR RANGES

Lab Name: Katahdin Analytical Services **Instrument Code:** J

Instrument Name: AGILENT 7500 ICP-MS **Date:** 4/7/2015

Concentration Units: ug/L

Analyte	Integration Time (sec)	Linear Range	M
ALUMINUM	0.01	200000	MS
ANTIMONY	0.10	1000	MS
ARSENIC	0.30	1000	MS
BARIUM	0.10	2000	MS
BERYLLIUM	0.30	100	MS
CADMIUM	0.10	1000	MS
CALCIUM	0.03	200000	MS
CHROMIUM	0.10	1000	MS
COBALT	0.10	1000	MS
COPPER	0.10	2000	MS
IRON	0.03	100000	MS
LEAD	0.10	2000	MS
MAGNESIUM	0.05	200000	MS
MANGANESE	0.10	2000	MS
MOLYBDENUM	0.10	1000	MS
NICKEL	0.10	1000	MS
POTASSIUM	0.01	200000	MS
SELENIUM	0.30	1000	MS
SILVER	0.10	100	MS
SODIUM	0.01	200000	MS
THALLIUM	0.10	1000	MS
VANADIUM	0.10	1000	MS
ZINC	0.10	2000	MS

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IF30HGS1

Matrix: SOIL **SDG Name:** SI4615

Method: CV **Prep Date:** 06/30/2015

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSOIF30HGS1	LCSOIF30HGS1	0.6	0.1	
PBSIF30HGS1	PBSIF30HGS1	0.6	0.1	
SITE 4TS-SEE2-PT	SI4615-001	0.63	0.1	E

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IF30IMS1

Matrix: SOIL **SDG Name:** SI4615

Method: MS **Prep Date:** 06/30/2015

Client ID	Lab Sample ID	Initial (g)	Final (L)	Bottle ID
LCSOIF30IMS1	LCSOIF30IMS1	1	0.1	
PBSIF30IMS1	PBSIF30IMS1	1	0.1	
SITE 4TS-SEE2-PT	SI4615-001	1.59	0.1	E

FORM XIII - IN

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IG01HGW3

Matrix: WATER **SDG Name:** SI4615

Method: CV **Prep Date:** 07/01/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LCSWIG01HGW3	LCSWIG01HGW3	0.025	0.025	
PBT1254A	PBT1254A	0.025	0.025	
PBWIG01HGW3	PBWIG01HGW3	0.025	0.025	
SITE 4TS-SEE2-PT	SI4615-002	0.025	0.025	E

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IG01ICW2

Matrix: WATER **SDG Name:** SI4615

Method: P **Prep Date:** 07/01/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LC2WIG01ICW2	LC2WIG01ICW2	0.05	0.05	
LCSWIG01ICW2	LCSWIG01ICW2	0.05	0.05	
PBT1254A	PBT1254A	0.01	0.05	
PBWIG01ICW2	PBWIG01ICW2	0.05	0.05	
SITE 4TS-SEE2-PT	SI4615-002	0.01	0.05	E

PREPARATION LOG

Lab Name: Katahdin Analytical Services **QC Batch ID:** IG10ICW1

Matrix: WATER **SDG Name:** SI4615

Method: P **Prep Date:** 07/10/2015

Client ID	Lab Sample ID	Initial (L)	Final (L)	Bottle ID
LC2WIG10ICW1	LC2WIG10ICW1	0.05	0.05	
LCSWIG10ICW1	LCSWIG10ICW1	0.05	0.05	
PBWIG10ICW1	PBWIG10ICW1	0.05	0.05	
SITE 4TS-SEE2-PT	SI4615-002R	0.01	0.05	A

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: CETAC M6100 **File Name:** HIG01A

Date: 7/1/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	10:14	Hg
Standard #1 (0.2 ppb		1	10:16	Hg
Standard #2 (0.5 ppb		1	10:18	Hg
Standard #3 (1.0 ppb		1	10:20	Hg
Standard #4 (5.0 ppb		1	10:22	Hg
Standard #5 (10.0 pp		1	10:25	Hg
ICV		1	10:27	HG
ICB		1	10:29	HG
PQL		1	10:31	HG
LCSOIF30HGS1		1	10:33	HG
PBSIF30HGS1		1	10:35	HG
ZZZZZZ		1	10:37	
SI4615-001	SITE 4TS-SEE2-PT	1	10:39	HG
CCV		1	10:41	HG
CCB		1	10:44	HG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: CETAC M6100 **File Name:** HIG02A

Date: 7/2/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
Calibration Blank		1	12:37	Hg
Standard #1 (0.2 ppb		1	12:39	Hg
Standard #2 (0.5 ppb		1	12:41	Hg
Standard #3 (1.0 ppb		1	12:44	Hg
Standard #4 (5.0 ppb		1	12:46	Hg
Standard #5 (10.0 pp		1	12:50	Hg
Replacement: Standar		1	12:55	Hg
ICV		1	12:57	HG
ICB		1	12:59	HG
PQL		1	13:02	HG
CCV		1	13:04	HG
CCB		1	13:06	HG
ZZZZZZ		1	13:08	
ZZZZZZ		1	13:10	
ZZZZZZ		1	13:12	
ZZZZZZ		1	13:14	
ZZZZZZ		1	13:16	
ZZZZZZ		5	13:18	
ZZZZZZ		1	13:21	
ZZZZZZ		1	13:23	
ZZZZZZ		1	13:25	
CCV		1	13:27	HG
CCB		1	13:29	HG
ZZZZZZ		1	13:31	
ZZZZZZ		1	13:33	
ZZZZZZ		1	13:35	
ZZZZZZ		1	13:38	

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: CETAC M6100 **File Name:** HIG02A

Date: 7/2/2015 **Method:** CV

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		1	13:40	
ZZZZZZ		1	13:42	
ZZZZZZ		1	13:44	
LCSWIG01HGW3		1	13:46	HG
PBT1254A		1	13:48	HG
PBWIG01HGW3		1	13:50	HG
CCV		1	13:52	HG
CCB		1	13:55	HG
SI4615-002	SITE 4TS-SEE2-PT	1	13:57	HG
ZZZZZZ		1	13:59	
ZZZZZZ		1	14:01	
ZZZZZZ		1	14:03	
ZZZZZZ		1	14:05	
ZZZZZZ		1	14:07	
ZZZZZZ		1	14:10	
ZZZZZZ		1	14:12	
ZZZZZZ		5	14:14	
ZZZZZZ		1	14:16	
CCV		1	14:18	HG
CCB		1	14:20	HG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: THERMO ICAP 6500 **File Name:** IIG01B

Date: 7/1/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements												
Blank		1	15:31	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
Std 1		1	15:36	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
ICV		1	15:41	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
ICB		1	15:47	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
PQL		1	15:52	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
ZZZZZZ		1	15:59															
ZZZZZZ		1	16:04															
ICSA		1	16:13	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
ICSAB		1	16:17	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
CCV		1	16:24	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
CCB		1	16:29	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
ZZZZZZ		1	16:34															
ZZZZZZ		1	16:39															
ZZZZZZ		1	16:44															
ZZZZZZ		1	16:49															
ZZZZZZ		1	16:53															
ZZZZZZ		5	16:58															
ZZZZZZ		1	17:03															
ZZZZZZ		1	17:07															
ZZZZZZ		1	17:12															
ZZZZZZ		1	17:16															
CCV		1	17:21	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
CCB		1	17:26	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
ZZZZZZ		1	17:30															
ZZZZZZ		1	17:36															
ZZZZZZ		1	17:41															
ZZZZZZ		1	17:46															

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: THERMO ICAP 6500 **File Name:** IIG01B

Date: 7/1/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements											
ZZZZZZ		1	17:50												
ZZZZZZ		1	17:55												
ZZZZZZ		5	18:00												
ZZZZZZ		1	18:05												
ZZZZZZ		1	18:10												
ZZZZZZ		1	18:15												
CCV		1	18:20	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
CCB		1	18:25	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
ZZZZZZ		1	18:30												
ZZZZZZ		1	18:35												
ZZZZZZ		1	18:40												
ZZZZZZ		1	18:45												
ZZZZZZ		1	18:50												
ZZZZZZ		1	18:55												
ZZZZZZ		1	19:00												
ZZZZZZ		1	19:05												
ZZZZZZ		1	19:10												
ZZZZZZ		1	19:15												
CCV		1	19:20	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
CCB		1	19:24	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
ZZZZZZ		1	19:29												
ZZZZZZ		1	19:34												
ZZZZZZ		1	19:39												
ZZZZZZ		1	19:44												
ZZZZZZ		1	19:49												
ZZZZZZ		1	19:54												
ZZZZZZ		1	19:59												

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: THERMO ICAP 6500 **File Name:** IIG01B

Date: 7/1/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements												
ZZZZZZ		1	20:04													
ZZZZZZ		1	20:09													
ZZZZZZ		1	20:14													
CCV		1	20:19	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
CCB		1	20:24	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
ZZZZZZ		1	20:29													
ZZZZZZ		1	20:34													
ZZZZZZ		1	20:39													
ZZZZZZ		1	20:44													
ZZZZZZ		1	20:49													
ZZZZZZ		1	20:54													
ZZZZZZ		1	20:59													
ZZZZZZ		1	21:04													
ZZZZZZ		5	21:09													
ZZZZZZ		1	21:14													
CCV		1	21:19	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
CCB		1	21:24	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN
ZZZZZZ		1	21:29													
ZZZZZZ		1	21:33													
ZZZZZZ		1	21:38													
ZZZZZZ		2	21:43													
LC2WIG01ICW2		1	21:48	AL	SB	BA	CD	CA	CO		PB	MG	NI	AG	NA	TL	V	ZN
LCSWIG01ICW2		1	21:53	AL	SB	BA	CD	CA	CO		PB	MG	NI	AG	NA		V	ZN
PBWIG01ICW2		1	21:58	AL	SB	BA	CD	CA	CO		PB	MG	NI	AG	NA	TL	V	ZN
PBT1254A		1	22:03	AL	SB	BA	CD	CA	CO		PB	MG	NI	AG	NA	TL	V	ZN
ZZZZZZ		1	22:08													
CCV		1	22:13	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: THERMO ICAP 6500 **File Name:** IIG01B

Date: 7/1/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements													
CCB		1	22:18	AL	SB	BA	CD	CA	CO	FE	PB	MG	NI	AG	NA	TL	V	ZN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: THERMO ICAP 6500 **File Name:** IIG02A

Date: 7/2/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																						
Blank		1	11:08	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
Std 1		1	11:13	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ICV		1	11:18	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ICB		1	11:25	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
PQL		1	11:30	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ZZZZZZ		1	11:37																						
ZZZZZZ		1	11:42																						
ICSA		1	11:51	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ICSAB		1	11:56	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
CCV		1	12:03	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
CCB		1	12:08	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ZZZZZZ		1	12:13																						
ZZZZZZ		1	12:18																						
ZZZZZZ		2	12:23																						
LC2WIG01ICW2		1	12:28		AS		BE			CR		CU	FE			MN		K	SE						
LCSWIG01ICW2		1	12:33		AS		BE			CR		CU	FE			MN		K	SE			TL			
PBWIG01ICW2		1	12:38		AS		BE			CR		CU	FE			MN		K	SE						
PBT1254A		1	12:43		AS		BE			CR		CU	FE			MN		K	SE						
ZZZZZZ		1	12:48																						
ZZZZZZ		1	12:53																						
ZZZZZZ		1	12:58																						
CCV		1	13:03	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
CCB		1	13:08	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN
ZZZZZZ		1	13:13																						
ZZZZZZ		1	13:18																						
ZZZZZZ		1	13:23																						
ZZZZZZ		1	13:28																						

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: THERMO ICAP 6500 **File Name:** IIG02A

Date: 7/2/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements																											
ZZZZZZ		1	13:33																												
ZZZZZZ		1	13:38																												
ZZZZZZ		1	13:43																												
ZZZZZZ		1	13:48																												
ZZZZZZ		1	13:54																												
ZZZZZZ		1	13:59																												
CCV		1	14:04	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN							
CCB		1	14:09	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN							
ZZZZZZ		1	14:14																												
ZZZZZZ		1	14:19																												
ZZZZZZ		1	14:24																												
ZZZZZZ		1	14:29																												
ZZZZZZ		1	14:34																												
ZZZZZZ		1	14:39																												
ZZZZZZ		1	14:44																												
ZZZZZZ		1	14:49																												
ZZZZZZ		5	14:54																												
ZZZZZZ		1	14:59																												
CCV		1	15:04	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN							
CCB		1	15:09	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN							
ZZZZZZ		1	15:14																												
SI4615-002	SITE 4TS-SEE2-PT	1	15:19	AL	AS	BA	BE	CD	CA	CR	CO	CU		PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN							
CCV		1	15:24	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN							
CCB		1	15:29	AL	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	NI	K	SE	AG	NA	TL		V	ZN							

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: THERMO ICAP 6500 **File Name:** IIG07B

Date: 7/7/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements			
Blank		1	16:35	AL SB	CA	FE	MG
Std 1		1	16:40	AL SB	CA	FE	MG
ICV		1	16:45	AL SB	CA	FE	MG
ICB		1	16:52	AL SB	CA	FE	MG
PQL		1	16:57	AL SB	CA	FE	MG
ZZZZZZ		1	17:04				
ZZZZZZ		1	17:09				
ICSA		1	17:19	AL SB	CA	FE	MG
ICSAB		1	17:23	AL SB	CA	FE	MG
CCV		1	17:30	AL SB	CA	FE	MG
CCB		1	17:35	AL SB	CA	FE	MG
SI4615-002	SITE 4TS-SEE2-PT	1	17:40	SB			
ZZZZZZ		1	17:45				
ZZZZZZ		1	17:50				
ZZZZZZ		1	17:55				
ZZZZZZ		1	18:00				
ZZZZZZ		1	18:05				
ZZZZZZ		1	18:10				
ZZZZZZ		1	18:15				
ZZZZZZ		1	18:21				
ZZZZZZ		1	18:26				
CCV		1	18:31	AL SB	CA	FE	MG
CCB		1	18:36	AL SB	CA	FE	MG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: THERMO ICAP 6500 **File Name:** IIG14B

Date: 7/14/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements			
Blank		1	15:08	AL	CA	FE	MG
Std 1		1	15:13	AL	CA	FE	MG
ICV		1	15:18	AL	CA	FE	MG
ICB		1	15:25	AL	CA	FE	MG
PQL		1	15:30	AL	CA	FE	MG
ZZZZZZ		1	15:37				
ZZZZZZ		1	15:41				
ICSA		1	15:50	AL	CA	FE	MG
ICSAB		1	15:55	AL	CA	FE	MG
CCV		1	16:01	AL	CA	FE	MG
CCB		1	16:06	AL	CA	FE	MG
ZZZZZZ		1	16:11				
LC2WIG10ICW1		1	16:16			FE	
LCSWIG10ICW1		1	16:21			FE	
PBWIG10ICW1		1	16:26			FE	
ZZZZZZ		1	16:31				
ZZZZZZ		1	16:36				
ZZZZZZ		1	16:41				
ZZZZZZ		1	16:45				
ZZZZZZ		5	16:50				
ZZZZZZ		1	16:55				
CCV		1	17:00	AL	CA	FE	MG
CCB		1	17:05	AL	CA	FE	MG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: THERMO ICAP 6500 **File Name:** IIG15B

Date: 7/15/2015 **Method:** P

Lab Sample ID	Client ID	D.F.	Time	Elements			
Blank		1	17:05	AL	CA	FE	MG
Std 1		1	17:10	AL	CA	FE	MG
ICV		1	17:14	AL	CA	FE	MG
ICB		1	17:21	AL	CA	FE	MG
PQL		1	17:26	AL	CA	FE	MG
ZZZZZZ		1	17:33				
ZZZZZZ		1	17:38				
ICSA		1	17:47	AL	CA	FE	MG
ICSAB		1	17:52	AL	CA	FE	MG
CCV		1	17:58	AL	CA	FE	MG
CCB		1	18:03	AL	CA	FE	MG
SI4615-002R	SITE 4TS-SEE2-PT	1	18:08			FE	
ZZZZZZ		1	18:13				
ZZZZZZ		1	18:18				
ZZZZZZ		1	18:23				
ZZZZZZ		1	18:28				
ZZZZZZ		1	18:33				
ZZZZZZ		1	18:38				
ZZZZZZ		1	18:43				
ZZZZZZ		1	18:48				
ZZZZZZ		1	18:53				
CCV		1	18:58	AL	CA	FE	MG
CCB		1	19:03	AL	CA	FE	MG

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF30A

Date: 6/30/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
6020 Tune		1	14:33	
200.8 Tune		1	14:36	
Cal Blank		1	15:10	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
Cal Std 1		1	15:13	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
Cal Std 2		1	15:17	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
Cal Std 3		1	15:20	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
Cal Std 4		1	15:23	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
ICV		1	15:26	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
ICB		1	15:29	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
PQL		1	15:32	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
ZZZZZZ		1	15:36	
ZZZZZZ		1	15:38	
ZZZZZZ		1	15:42	
ICSA		1	15:45	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
ICSAB		1	15:49	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
ZZZZZZ		1	15:52	
CCV		1	15:55	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
CCB		1	15:58	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
ZZZZZZ		5	16:02	
ZZZZZZ		5	16:05	
ZZZZZZ		5	16:08	
ZZZZZZ		25	16:11	
ZZZZZZ		5	16:14	
ZZZZZZ		5	16:17	
ZZZZZZ		5	16:21	
ZZZZZZ		5	16:24	
ZZZZZZ		5	16:27	

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF30A

Date: 6/30/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements																						
ZZZZZZ		5	16:30																							
CCV		1	16:34	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V
CCB		1	16:37	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V
ZZZZZZ		5	16:40																							
ZZZZZZ		5	16:43																							
ZZZZZZ		5	16:47																							
ZZZZZZ		5	16:50																							
ZZZZZZ		5	16:53																							
ZZZZZZ		5	16:57																							
ZZZZZZ		5	17:00																							
ZZZZZZ		5	17:03																							
ZZZZZZ		5	17:06																							
ZZZZZZ		5	17:10																							
CCV		1	17:13	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V
CCB		1	17:16	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V
ZZZZZZ		5	17:20																							
ZZZZZZ		5	17:23																							
ZZZZZZ		5	17:27																							
ZZZZZZ		5	17:30																							
ZZZZZZ		5	17:33																							
ZZZZZZ		5	17:36																							
ZZZZZZ		5	17:40																							
ZZZZZZ		5	17:43																							
ZZZZZZ		5	17:47																							
ZZZZZZ		25	17:50																							
CCV		1	17:53	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V
CCB		1	17:57	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF30A

Date: 6/30/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements
ZZZZZZ		5	18:00	
ZZZZZZ		5	18:04	
ZZZZZZ		5	18:07	
ZZZZZZ		5	18:10	
ZZZZZZ		5	18:14	
ZZZZZZ		1	18:17	
ZZZZZZ		5	18:20	
ZZZZZZ		5	18:24	
ZZZZZZ		5	18:27	
ZZZZZZ		5	18:30	
CCV		1	18:34	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
CCB		1	18:37	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
ZZZZZZ		5	18:41	
ZZZZZZ		5	18:44	
ZZZZZZ		5	18:47	
ZZZZZZ		5	18:51	
ZZZZZZ		25	18:54	
ZZZZZZ		5	18:57	
ZZZZZZ		5	19:01	
ZZZZZZ		5	19:04	
ZZZZZZ		5	19:08	
ZZZZZZ		5	19:11	
CCV		1	19:14	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
CCB		1	19:18	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Na Tl V
ZZZZZZ		5	19:21	
ZZZZZZ		5	19:25	
ZZZZZZ		5	19:28	

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIF30A

Date: 6/30/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements																						
ZZZZZZ		25	19:31																							
ZZZZZZ		5	19:35																							
ZZZZZZ		5	19:38																							
ZZZZZZ		5	19:42																							
ZZZZZZ		5	19:45																							
ZZZZZZ		5	19:48																							
ZZZZZZ		5	19:52																							
CCV		1	19:55	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V
CCB		1	19:59	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V
ZZZZZZ		5	20:02																							
ZZZZZZ		5	20:06																							
ZZZZZZ		5	20:09																							
ZZZZZZ		5	20:12																							
ZZZZZZ		5	20:16																							
ZZZZZZ		5	20:19																							
PBSIF30IMS1		5	20:22	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn		Ni	K	Se	Ag	Na	Tl		V
LCSOIF30IMS1		5	20:26	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn		Ni	K	Se	Ag	Na	Tl		V
ZZZZZZ		5	20:29																							
SI4615-001	SITE 4TS-SEE2-PT	5	20:33	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn		Ni	K	Se	Ag	Na	Tl		V
CCV		1	20:36	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V
CCB		1	20:40	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl		V

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIG02A

Date: 7/2/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
6020 Tune		1	17:59								
200.8 Tune		1	18:01								
Cal Blank		1	18:36	Al	Ca	Fe	Mg	Mo	K	Na	Zn
Cal Std 1		1	18:39	Al	Ca	Fe	Mg	Mo	K	Na	Zn
Cal Std 2		1	18:42	Al	Ca	Fe	Mg	Mo	K	Na	Zn
Cal Std 3		1	18:46	Al	Ca	Fe	Mg	Mo	K	Na	Zn
Cal Std 4		1	18:49	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICV		1	18:52	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICB		1	18:55	Al	Ca	Fe	Mg	Mo	K	Na	Zn
PQL		1	18:58	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		1	19:01								
ZZZZZZ		1	19:04								
ZZZZZZ		1	19:08								
ICSA		1	19:11	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ICSAB		1	19:14	Al	Ca	Fe	Mg	Mo	K	Na	Zn
ZZZZZZ		1	19:18								
CCV		1	19:21	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	19:24	Al	Ca	Fe	Mg	Mo	K	Na	Zn
PBSIF30IMS1		5	19:28								Zn
LCSOIF30IMS1		5	19:31								Zn
SI4615-001	SITE 4TS-SEE2-PT	5	19:34								Zn
ZZZZZZ		5	19:37								
ZZZZZZ		5	19:40								
ZZZZZZ		5	19:44								
ZZZZZZ		5	19:47								
ZZZZZZ		5	19:50								
ZZZZZZ		5	19:53								

FORM XIV - IN

ANALYSIS RUN LOG

Lab Name: Katahdin Analytical Services **SDG Name:** SI4615

Instrument ID: AGILENT 7500 ICP-MS **File Name:** JIG02A

Date: 7/2/2015 **Method:** MS

Lab Sample ID	Client ID	D.F.	Time	Elements							
ZZZZZZ		5	19:57								
CCV		1	20:00	Al	Ca	Fe	Mg	Mo	K	Na	Zn
CCB		1	20:03	Al	Ca	Fe	Mg	Mo	K	Na	Zn

Logbooks and Supporting Documents

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 104736 HCL: 100562 H2SO4: N/A Method: 7471

KMNO4: MR1480/MR1482 K2S2O8: N/A NH2OH-HCl: MR1478

Standards/Spiking Information:

1ppm A : MW1559

1ppm B : MW1558

LCSO = 500uL of 1ppm A to 100mL

Spike(S/P) = 100uL of 1ppm A to 100mL

ICV = 600uL of 1ppm A to 100 mL

S0.2 = 20uL of 1ppm B to 100 mL

S0.5 = 50uL of 1ppm B to 100 mL

S1.0 = 100uL of 1ppm B to 100 mL

S5.0 = 500uL of 1ppm B to 100 mL

S10.0 = 1000uL of 1ppm B to 100 mL

REVIEWED
gc 07-07-15
KATAHDIN ANALYTICAL
METALS SECTION

Water Bath ID : B

Thermometer ID : DIG65

Balance ID: BAL15

Start Time: 15:01 /Temp. 91 °C) End Time: 15:36 /Temp. 92 °C)

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Texture	Final Color	Final Clarity	Artifacts	Bottle
LCSOIF30HGS1	IF30HGS1	0.60	g	0.10	L	SL	HG	GES	06/30/2015	N/A	N/A	N/A	N/A		N/A
PBSIF30HGS1	IF30HGS1	0.60	g		L	SL	HG	GES	06/30/2015	N/A	N/A	N/A	N/A		N/A
SI4545-001	IF30HGS1	0.69	g		L	SL	HG	GES	06/30/2015						C
SI4545-002	IF30HGS1	0.87	g		L	SL	HG	GES	06/30/2015						D
SI4545-003	IF30HGS1	0.79	g		L	SL	HG	GES	06/30/2015						H
SI4545-003P	IF30HGS1	0.79	g		L	SL	HG	GES	06/30/2015						H
SI4545-003S	IF30HGS1	1.18	g		L	SL	HG	GES	06/30/2015						H
SI4545-005	IF30HGS1	0.82	g		L	SL	HG	GES	06/30/2015						D
SI4545-007	IF30HGS1	0.95	g		L	SL	HG	GES	06/30/2015						C
SI4545-009	IF30HGS1	0.98	g		L	SL	HG	GES	06/30/2015						C
SI4612-013	IF30HGS1	0.81	g		L	SL	HG	GES	06/30/2015						O
SI4612-013P	IF30HGS1	0.75	g		L	SL	HG	GES	06/30/2015						O
SI4612-013S	IF30HGS1	0.77	g		L	SL	HG	GES	06/30/2015						O
SI4612-015	IF30HGS1	0.85	g		L	SL	HG	GES	06/30/2015						C
SI4612-017	IF30HGS1	1.29	g		L	SL	HG	GES	06/30/2015						D
SI4612-019	IF30HGS1	0.96	g		L	SL	HG	GES	06/30/2015						D
SI4612-020	IF30HGS1	1.04	g		L	SL	HG	GES	06/30/2015						D
SI4612-021	IF30HGS1	0.78	g		L	SL	HG	GES	06/30/2015						D
SI4615-001	IF30HGS1	0.63	g		L	SL	HG	GES	06/30/2015						E
SI4634-001	IF30HGS1	0.81	g		L	SL	HG	GES	06/30/2015						N/A

GES 07.01.15

Katahdin Analytical Services 0000341

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 104736 HCL: 100562 H2O2: 466APB505 **Method:** 3050H-MS

LCS / Spike **LCS/Spiking Information:**

- [x] [x] CLPP-SPK-1 (ID/Vol): MS1928 / 0.10 mL
- [x] [x] CLPP-SPK-INT1 (ID/Vol): MW15577 / 1.00 mL
- [x] [x] CLPP-SPK-INT2 (ID/Vol): MW15585 / 1.00 mL
- [ ] [ ] NA Spike (ID/Vol): NA / mL
- [ ] [ ] CLPP-SPK-4 (ID/Vol): ↓ / mL

LCSS: NA Balance ID: BAL 15

Hot Plate/Block ID: A
Start Time/Temp.: 0940 / 90 °C
End Time/Temp.: 1715 / 91 °C
Thermometer ID/Pos.: ALC11 / 2.5

Filter Paper: 9653007

REVIEWED
EL 07-02-15
KATAHDIN ANALYTICAL
METALS SECTION

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Texture	Final Color	Final Clarity	Artifacts	Bottle
LCSOIF30IMS1	IF30IMS1	1.0	g	0.10	L	SL	IM	ERL	06/30/2015	N/A	N/A	N/A	N/A		NA
PBSIF30IMS1	IF30IMS1	1.0	g		L	SL	IM	ERL	06/30/2015	N/A	N/A	N/A	N/A		NA
SI4426-001R	IF30IMS1	1.40	g		L	SL	IM	ERL	06/30/2015						NA
SI4615-001	IF30IMS1	1.59	g		L	SL	IM	ERL	06/30/2015						E

6/30/15 ER

Katahdin Analytical Services 0000342

KATAHDIN ANALYTICAL SERVICES, INC. — Non-Volatile TCLP/SPLP Extraction Log

I. EXTRACTION CONDITIONS

Extraction Method:	SW846 1311 (TCLP) ☑ GET 06·30·15 SW846 1312 (SPLP) ☑	Extractor ID: # 2 Balance ID: BAL-~~08~~ 15	Room Thermometer ID: DIG-23 (Room Temp Criteria. 23(±2)°C) pH Meter ID: Orion 520A s/n 7422	pH Probe ID: 5733526 - 0038
Solid pH Determination:	Date: N/A		Analyst: NM	
Rotary Extraction Started:	Date: 06·30·15	Time: ~~0~~ 15:22	Analyst: GET	Room Temp. (degrees °C): 20.4
Rotary Extraction Completed:	Date: 07-01-15	Time: 07:35	Analyst: [illegible]	Room Temp. (degrees °C): 19.4
Extraction Filtered:	Date: 07·01·15	Time: 09:20	Analyst: GET	Filter Lot #: R5AA49484
Elapsed Extraction Time (HH:MM): 16:13		5% HNO_3 ID (used to wash filters): MB1477		HNO_3 Lot # (used to preserve extracts): 104736
Fluid 1 pH (Day of use): 4.24		Fluid 1 Expiration Date: 06 30 16		
Fluid 2 pH (Day of use): —		Fluid 2 Expiration Date: —		

II. EXTRACTION SETUP

TCLP Fluid pH: #1 - 4.93 ± 0.05 #2 - 2.88 ± 0.05 SPLP Fluid pH: #1 - 4.20 ± 0.05 #2 - 5.00 ± 0.05

Katahdin Sample No. (include bottle ID)	Matrix	Check One: 100% Wet Solids-waste will yield no liquid upon filtration	Check One: < 100% Wet Solids (Perform Solids Determination below)	SPLP FLUID # (1 for east and 2 for west of Mississippi River)	TCLP pH Determination and Fluid Selection (date & init. above): Initial pH of solid phase: (if <5, use Fluid #1; if >5 add 3.5 mL of 1 N HCl)	TCLP pH Determination and Fluid Selection (date & init. above): pH after 1 N HCL addition (if <5, use Fluid #1; if >5, use Fluid #2	Extraction Setup: Volume of Extraction Fluid (mL)	Extraction Setup: Fluid # used	Extraction Setup: Associated Extraction Blank ID:	Extraction Setup: Weight of Waste (g)	pH of extract after extraction:	Extract to be analyzed for: Metals (M), SVOA (S), PEST (P), HERB (H), Cyanide (C)	Extraction Bottle ID (if applicable)
SI 4615 - 001E	SL	✓		1	—	—	2000	—	PBT 1254A	99.95	4.26	M, S	1
PBT 1254A	Aq	—	—	↓	—	—	↓	—	↓	—	4.18	M S	33

Katahdin Analytical Services 0000

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 104736 HCL: N/A H2SO4: 71333 **Method:** 7470

KMNO4: MR1482 K2S2O8: MR1481 NH2OH-HCl: MR1478

Standards/Spiking Information:

1ppm A : MW15581

1ppm B : MW15582

LCSW = 125uL of 1ppm A to 25mL

Spike(S/P) = 25uL of 1ppm A to 25mL

ICV = 600uL of 1ppm A to 100 mL

S0.2 = 20uL of 1ppm B to 100 mL

S0.5 = 50uL of 1ppm B to 100 mL

S1.0 = 100uL of 1ppm B to 100 mL

S5.0 = 500uL of 1ppm B to 100 mL

S10.0 = 1000uL of 1ppm B to 100 mL

REVIEWED
Ea 07-08-15
KATAHDIN ANALYTICAL
METALS SECTION

Water Bath ID : A

Thermometer ID : D1G60

Start Time: 13:24 Temp. 90 °C) End Time: 15:24 Temp. 93 °C)

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWIG01HGW3	IG01HGW3	0.025	L	0.025	L	AQ	HG	TCS	07/01/2015	N/A	N/A	N/A	N/A		N/A
PBT1254A	IG01HGW3	↓	L	↓	L	AQ	HG	TCS	07/01/2015						N/A
PBWIG01HGW3	IG01HGW3	↓	L	↓	L	AQ	HG	TCS	07/01/2015	N/A	N/A	N/A	N/A		N/A
SI4615-002	IG01HGW3	↓	L	↓	L	AQ	HG	TCS	07/01/2015						E

TRS 7/8/15

QA-066-Revision 2 - 04/23/2015 **Digestion performed by:** TRS **On:** 7/1/15 **Page:** IG007 **Revision:** 00

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 104736 HCL: 100562 H2O2: NA Method: 3010

7/1/15 ER

LCS / Spike

LCS/Spiking Information: MS1928

- ☑ ☑ CLPP-SPK-1 (ID/Vol): ~~CLPP-SPK~~ / 0.05 mL
- ☑ ☑ CLPP-SPK-INT1 (ID/Vol): MW15577 / 0.50 mL
- ☑ ☑ CLPP-SPK-INT2 (ID/Vol): MW15555 / 0.50 mL
- ☐ ☐ NA Spike (ID/Vol): NA mL
- ☐ ☐ CLPP-SPK-4 (ID/Vol): ↓ / mL

Hot Plate/Block ID: B

Start Time: 1046 /Temp.(90-95°C): 96

End Time: 1645 /Temp.(90-95°C): 97

Thermometer ID/Pos.: ALK11 / 289

Filter Paper: NA

REVIEWED
EA 07-02-15
KATAHDIN ANALYTICAL
METALS SECTION

7/1/15 ER

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LCSWIG01ICW2	IG01ICW2	0.05	L	~~0.10~~	L 0.05	AQ	IC	ERL	07/01/2015	N/A	N/A	N/A	N/A		N/A
PBT1254A	IG01ICW2	0.01	L		L	AQ	IC	ERL	07/01/2015						N/A
PBWIG01ICW2	IG01ICW2	0.05	L		L	AQ	IC	ERL	07/01/2015	N/A	N/A	N/A	N/A		N/A
SI4383-013	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						J
SI4615-002	IG01ICW2	0.01	L		L	AQ	IC	ERL	07/01/2015						E
SI4617-019	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						A
SI4617-021	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						U
SI4617-023	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						D
SI4617-025	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						U
SI4617-027	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						D
SI4617-027D	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						D
SI4617-027P	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						A
SI4617-027S	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						A
SI4617-029	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						C
SI4617-029D	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						C
SI4617-029P	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						C
SI4617-029S	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						C
SI4617-031	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						D
SI4617-033	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						C
SI4617-035	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						A
SI4617-037	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						A
SI4617-040	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						A
SI4618-001	IG01ICW2	0.01 ~~0.00~~	L		L	AQ	IC	ERL	07/01/2015						A
SI4637-001	IG01ICW2	0.05	L		L	AQ	IC	ERL	07/01/2015						A
SI4637-002	IG01ICW2		L		L	AQ	IC	ERL	07/01/2015						A

07/01/15 ER

LCZWIG01ICW2 ↓ 0.05 7/1/15 ER ~~0.10~~ 0.05 07/01/15 ER N/A

7/1/15 ER

QA-064-Revision 2 - 01/08/2014 Digestion performed by: ER On: 7/1/15 Page: IG008 Revision: 00

Katahdin Analytical Services, Inc. **Metals Preparation Benchsheet**

Reagent Information:

HNO3: 113071 HCL: 100567 H2O2: NA **Method:** 3010

LCS / Spike **LCS/Spiking Information:**

- [x] [x] CLPP-SPK-1 (ID/Vol): MS1928 / 0.05 mL
- [x] [x] CLPP-SPK-INT1 (ID/Vol): MW15595 / 0.5 mL
- [x] [x] CLPP-SPK-INT2 (ID/Vol): MW15505 / 0.5 mL
- [ ] [ ] NA Spike (ID/Vol): NA / NA mL
- [ ] [ ] CLPP-SPK-4 (ID/Vol): ↓ / ↓ mL

Hot Plate/Block ID : B

Start Time: 1630 /Temp.(90-95°C) : 95

End Time: 1650 /Temp.(90-95°C) : 90

Thermometer ID/Pos.: ALK11 / 6.8

Filter Paper: NA

REVIEWED
KATAHDIN ANALYTICAL
METALS SECTION

Sample ID	Batch ID	Initial Wt/Vol	Initial Units	Final Vol	Final Units	MX	Meth	Anal.	Date	Initial Color	Initial Clarity	Final Color	Final Clarity	Artifacts	Bottle
LC2WIG10ICW1	IG10ICW1	0.05	L	0.05	L	AQ	IC	ERL	07/10/2015	N/A	N/A	N/A	N/A	N/A	N/A
LCSWIG10ICW1	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015	N/A	N/A	N/A	N/A		NA
PBWIG10ICW1	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015	N/A	N/A	N/A	N/A		NA
SI4383-013R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						J
SI4615-002R	IG10ICW1	0.01	L	↓	L	AQ	IC	ERL	07/10/2015						A
SI4617-019R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						D
SI4617-021R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						C
SI4617-023R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						D
SI4617-025R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						C
SI4617-027R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						D
SI4617-027RD	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						D
SI4617-027RP	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						D
SI4617-027RS	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						D
SI4617-029R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						C
SI4617-029RD	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						C
SI4617-029RP	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						C
SI4617-029RS	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						C
SI4617-031R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						D
SI4617-033R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						C
SI4617-035R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						D
SI4617-037R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						C
SI4617-040R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						A
SI4637-001R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						A
SI4637-002R	IG10ICW1	↓	L	↓	L	AQ	IC	ERL	07/10/2015						A
SI4932-001	IG10ICW1	0.01	L	↓	L	AQ	IC	ERL	07/10/2015						A
SI4647-001	↓	↓		↓		↓	↓	↓	↓						↓

7/10/15 ERL

QA-064-Revision 2 - 01/08/2014 Digestion performed by: ERL On: 7/10/15 Page: IG060 Revision: 00

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG165760	SM2540	01-JUL-15	30-JUN-15	U 1 %	1 %	N/A

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG165760-2	LCS	WG165760	01-JUL-15	30-JUN-15	%	90	90.	100	90-110	

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfide H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI4615-1
Report Date: 16-JUL-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI4615

Sample Description	Matrix	Date Sampled	Date Received
SITE 4TS-SEE2-PT	SL	26-JUN-15 13:30:00	27-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	94. %	1		N/A	SM2540G	WG165760	01-JUL-15 11:59:14	SM2540G	30-JUN-15	

Katahdin Analytical Services 0000353

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Report of Analytical Results

Client: Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

Lab Sample ID: SI4615-3
Report Date: 16-JUL-15
Client PO: 18884
Project: Navy Clean WE08 NWIR
SDG: SI4615

Sample Description	Matrix	Date Sampled	Date Received
SITE 4TS-TB-62615	SL	26-JUN-15 00:00:00	27-JUN-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	100 %	1		N/A	SM2540G	WG165773	01-JUL-15 09:20:00	SM2540G	01-JUL-15	

Katahdin Analytical Services 0000354

Raw Data Section

TOTAL SOLIDS BATCH REPORT
Jul 01 2015, 03:05 pm
Batch: WG165759

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SI4479-1	SL	SAMP	30-JUN-15	1.2963 g	32.8104 g	20.0994 g	20.1 g	AZ	01-JUL-15	59.6680	60. %		
SI4479-2	SL	SAMP	30-JUN-15	1.2963 g	32.8105 g	20.0994 g	20.1 g	AZ	01-JUL-15	59.6670	60. %		
SI4583-1	SL	SAMP	30-JUN-15	1.2942 g	42.6021 g	36.5823 g	36.5815 g	AZ	01-JUL-15	85.4250	85. %		
SI4583-2	SL	SAMP	30-JUN-15	1.3038 g	39.0638 g	35.4573 g	35.4567 g	AZ	01-JUL-15	90.4470	90. %		
SI4587-1	SL	SAMP	30-JUN-15	1.2928 g	44.0025 g	38.8815 g	38.8809 g	AZ	01-JUL-15	88.0080	88. %		
SI4595-1	SL	SAMP	30-JUN-15	1 g	5 g	5 g	5 g	AZ	01-JUL-15	100.0000	100 %		
SI4595-2	SL	SAMP	30-JUN-15	1.296 g	32.5249 g	26.3072 g	26.3052 g	AZ	01-JUL-15	80.0840	80. %		
SI4595-3	SL	SAMP	30-JUN-15	1.2987 g	36.527 g	30.9803 g	30.9771 g	AZ	01-JUL-15	84.2460	84. %		
SI4612-13	SL	SAMP	30-JUN-15	1.297 g	31.8079 g	14.6235 g	14.6249 g	AZ	01-JUL-15	43.6820	44. %		
SI4612-14	SL	SAMP	30-JUN-15	1.297 g	31.8079 g	14.6235 g	14.6249 g	AZ	01-JUL-15	43.6820	44. %		
SI4612-15	SL	SAMP	30-JUN-15	1.288 g	32.5896 g	13.7329 g	13.7351 g	AZ	01-JUL-15	39.7650	40. %		
SI4612-16	SL	SAMP	30-JUN-15	1.288 g	32.5896 g	13.7329 g	13.7351 g	AZ	01-JUL-15	39.7650	40. %		
SI4612-17	SL	SAMP	30-JUN-15	1.2965 g	31.6407 g	11.2173 g	11.2174 g	AZ	01-JUL-15	32.6940	33. %		
SI4612-18	SL	SAMP	30-JUN-15	1.2965 g	31.6407 g	11.2173 g	11.2174 g	AZ	01-JUL-15	32.6940	33. %		
SI4612-19	SL	SAMP	30-JUN-15	1.2903 g	32.4533 g	10.7535 g	10.7541 g	AZ	01-JUL-15	30.3690	30. %		
SI4612-20	SL	SAMP	30-JUN-15	1.304 g	34.3026 g	12.5346 g	12.5361 g	AZ	01-JUL-15	34.0380	34. %		
SI4612-21	SL	SAMP	30-JUN-15	1.2956 g	31.2967 g	11.9818 g	11.9828 g	AZ	01-JUL-15	35.6230	36. %		
SI4648-1	SL	SAMP	30-JUN-15	1.292 g	19.3777 g	17.0147 g	17.0154 g	AZ	01-JUL-15	86.9380	87. %		
WG165759-1	SL	MBLANK	30-JUN-15	1.3063 g	1.8048 g	1.3059 g	1.3061 g	AZ	01-JUL-15	-0.0400	1 %		
WG165759-2	SL	LCS	30-JUN-15	1.2914 g	6.3181 g	5.8194 g	5.82 g	AZ	01-JUL-15	90.0910	90. %	100	
WG165759-3	SL	DUP	30-JUN-15	1.2848 g	41.6012 g	19.998 g	19.9961 g	AZ	01-JUL-15	46.4110	46. %		6
WG165759-4	SL	DUP	30-JUN-15	1.2933 g	36.314 g	14.9968 g	14.9959 g	AZ	01-JUL-15	39.1270	39. %		2

Comments:

SI4479-1	for ts, use jar from -2. prep 8260's from -2
SI4595-1	TB, no TS jar
SI4612-13	MS/MSD
SI4612-14	MS/MSD
WG165759-1	SI4612-13
WG165759-2	SI4612-13
WG165759-3	SI4612-13
WG165759-4	SI4612-15

Entered by: _____ Date: 7-1-15 7-1-15 Accepted by: _____ Date: 07/02/15

TOTAL SOLIDS BATCH REPORT
Jul 01 2015, 01:42 pm
Batch: WG165760

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SI4554-1	SL	SAMP	30-JUN-15	1.2946 g	22.06 g	4.5588 g	4.5588 g	AZ	01-JUL-15	15.7190	16. %		
SI4554-2	SL	SAMP	30-JUN-15	1.2893 g	13.3773 g	5.8372 g	5.8372 g	AZ	01-JUL-15	37.6230	38. %		
SI4615-1	SL	SAMP	30-JUN-15	1.2885 g	46.9169 g	44.1928 g	44.1928 g	AZ	01-JUL-15	94.0300	94. %		
SI4628-1	SL	SAMP	30-JUN-15	1 g	5 g	5 g	5 g	AZ	01-JUL-15	100.0000	100 %		
SI4628-2	SL	SAMP	30-JUN-15	1 g	5 g	5 g	5 g	AZ	01-JUL-15	100.0000	100 %		
SI4628-3	SL	SAMP	30-JUN-15	1 g	5 g	5 g	5 g	AZ	01-JUL-15	100.0000	100 %		
SI4634-1	SL	SAMP	30-JUN-15	1.2959 g	16.9708 g	2.6504 g	2.6504 g	AZ	01-JUL-15	8.6410	8.6 %		
SI4653-1	SL	SAMP	30-JUN-15	1.2892 g	20.1625 g	19.531 g	19.531 g	AZ	01-JUL-15	96.6540	97. %		
WG165760-1	SL	MBLANK	30-JUN-15	1.3063 g	1.8048 g	1.3059 g	1.3059 g	AZ	01-JUL-15	-0.0800	1 %		
WG165760-2	SL	LCS	30-JUN-15	1.2914 g	6.3181 g	5.8194 g	5.8194 g	AZ	01-JUL-15	90.0790	90. %	100	

Comments:

SI4615-1	Metals are NOT on hold.
WG165760-1	SI4615-1
WG165760-2	SI4615-1

Entered by: _____ Date: 7-1-15 Accepted by: _____ Date: 07/02/15

R 323693 R 323694
SWG165759 WG165760

KATAHDIN ANALYTICAL SERVICES

Total Solids: SM2540 G / ASTM D2216			PQL: 0.10%	Total Volatile Solids: SM2540 G / E160.4			PQL: 0.10%	Balance Calibrated?
TS/TVS	In 1	In 2	TS Only	Out 1	Out 2	TVS Only		Y / N
ANALYST IN:			ANALYST OUT:			ANALYST OUT:		In: Y
DATE IN:	6-30-15	7-1-15	DATE OUT:	7-1-15	7-1-15	DATE OUT:		Out (TS): Y
TIME IN:	18:41	12:07	TIME OUT:	8:59	13:13	TIME OUT:		Out (TVS):
TEMP IN:	104°C	105°C	TEMP OUT:	104°C	104°C	TEMP OUT:		Balance ID:
Oven ID: Oven-4			Muffle Oven ID: 030807 (assigned)					S/N 112401631

TS=100%

SI4628-1,3,3
SI4595-1

SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)	1st DISH DRY WT (g)	2nd DISH DRY WT (g)	DISH/ASH WT (g)	TIME
1 Blank	14	1.3063	1.8048	1.3059			
2 LCS	15	1.2914	6.3181	5.8194			
3 SI4479 -1/-2	1						
4 SI4583 -1	2						
5 -2	3						
6 SI4587 -1	4						
7 SI4595 -2	5						
8 -3	6						
9 SI4612 -13/-14	7						
10 -15/-16	8						
11 -17/-18	9						
12 -19	10						
13 -20	11						
14 -21	12						
15 SI4648 -1	13						
16 SI4612 -13 Dup	16						
17 SI4612 - 15 Dup	17						
18 SI4654 -1	18						
19 -2	19						
20 SI4615 -1	20						
21 -2	21			36.1229			
22 SI4634 -1	22						
23 SI4653 -1	23						
24				7-1-15			

WL-009 – Revision 4 – 05/20/2015

Reviewed By: _____ Reviewed Date: 07/02/15

QAWL772

TOTAL SOLIDS BATCH REPORT
Jul 16 2015, 11:27 am
Batch: WG165773

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SI4615-3	SL	SAMP	01-JUL-15	1 g	5 g	5 g	5 g		01-JUL-15	100.0000	100 %		

Comments:

SI4615-3 Trip Blank, no TS jar.

Entered by: Dn for AZ Date: 7-16-15 Accepted by: Dn for GFB Date: 7-16-15

Appendix E
Monitoring Well Sample Logs

Well ID: MW-01

AECOM

Low Flow Ground Water Sample Collection Record

Client: ~~Consolidated Edison of New York~~ Navy NWIRP Date: 4/2/2015 Time: Start 8:45 am/pm
Project No: 60266526 ~~[illegible]~~ Finish _____ am/pm
Site Location: ~~3rd Avenue Yard St~~ Bethpage
Weather Conds: _____ Collector(s): RP - JL.

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length _____ c. Length of Water Column _____ (a-b)

Casing Diameter/Material 4" Steel

b. Water Table Depth 51.72 d. Calculated System Volume (see back) _____

2. WELL PURGE DATA

a. Purge Method: _____

b. Acceptance Criteria defined (see workplan)

- Temperature	3%	-D.O.	10%
- pH	± 1.0 unit	- ORP	± 10mV
- Sp. Cond.	3%	- Drawdown	< 0.3'

c. Field Testing Equipment used: Make _____ Model _____ Serial Number _____

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
905		15.60	6.78	0.131	2.74	-95.2	16.2	375	52.21	clear
910		16.44	6.67	0.132	1.76	-105.7	10.6	375	52.50	clear
915		16.65	6.62	0.147	1.92	-97.1	11.0	375	52.61	clear
0920		16.61	6.59	0.158	1.16	-80.9	9.43	375	52.70	clear
0925		16.62	6.52	0.192	0.88	-66.9	8.41	375	52.70	clear
0930		16.51	6.49	0.212	0.79	-112.1	6.47	375	52.70	clear
0935		16.60	6.45	0.229	0.72	-117.1	6.24	375	52.69	clear

(continued on back)

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☐
Has required turbidity been reached	☐	☐	☐
Have parameters stabilized	☐	☐	☐

If no or N/A - Explain below.

_____

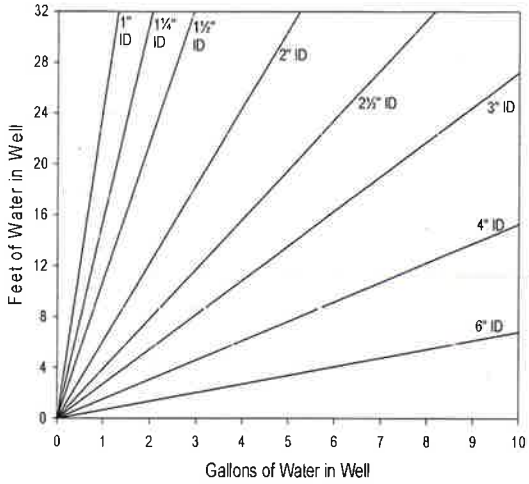
3. SAMPLE COLLECTION: Method: _____

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
					1055

Comments _____

Signature _____ Date _____

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (ft)	Color/Odor
0940		16.64	6.44	0.239	0.68	-119.1	5.09	375	52.69	clear
0945		16.63	6.42	0.252	0.61	-121.8	5.11	375	52.65	clear
0950		16.64	6.43	0.263	0.70	-119.4	4.41	375	52.60	clear
0955		16.55	6.42	0.264	1.65	-108.6	4.41	375	52.60	clear
1000		16.55	6.42	0.280	0.56	-109.6	4.74	375	52.50	clear
1005	10 gal	16.73	6.39	0.311	0.50	-107.6	4.43	375	52.50	clear
1010		16.73	6.41	0.		-105.5	4.67	375	52.50	clear
1025		16.72	6.39	0.303	0.50	-106.4	4.29	375	52.50	clear
1030		16.72	6.38	0.315	1.42	-77.3	4.05	375	52.50	clear
1035		16.72	6.38	0.313	1.40	-77.6	3.01	375	52.50	clear
1040		16.75	6.37	0.314	1.40	-70.3	3.0	375	52.50	clear
1045		16.72	6.30	0.310	1.45	-79.1	3.12	375	52.50	clear
1055	sample									

Well ID: MW-03

AECOM

Low Flow Ground Water Sample Collection Record

Client: ~~Consolidated Edison of New York~~ Navy NWIRP Date: 4/1/15 Time: Start 0910 am/pm
Project No: 60266526 [redacted] Finish _____ am/pm
Site Location: ~~3rd Avenue Yard St~~ Bethpage
Weather Conds: 40's F, Cloudy Collector(s): JC

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length _____ c. Length of Water Column _____ (a-b)

Casing Diameter/Material 4" PVC 13.1 gal

b. Water Table Depth _____ d. Calculated System Volume (see back) _____

2. WELL PURGE DATA

a. Purge Method: _____

b. Acceptance Criteria defined (see workplan)

- Temperature	3%	-D.O.	10%
- pH	± 1.0 unit	- ORP	± 10mV
- Sp. Cond.	3%	- Drawdown	< 0.3'

c. Field Testing Equipment used:

Make	Model	Serial Number
YSI	556MPS	V71977X
Hanna	HI 98703	

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
0925		14.95	6.27	0.485	3.94	77.9	26.0	550	50.61	Cloudy
930		15.36	6.17	0.467	3.63	83.3		550	50.62	Cloudy
935		15.22	6.13	0.452	3.45	86.0	15.1	500	50.62	"
940		15.16	6.11	0.449	3.45	89.9		500	50.62	"
945		15.31	6.08	0.438	3.41	93.6	10.1	500	50.62	"
950		15.36	6.05	0.431	3.55	96.9		475	50.62	"
955		15.44	6.03	0.429	3.30	97.4	9.82	475	50.63	"

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☐
Has required turbidity been reached	☐	☐	☐
Have parameters stabilized	☐	☐	☐

If no or N/A - Explain below.

(continued on back)

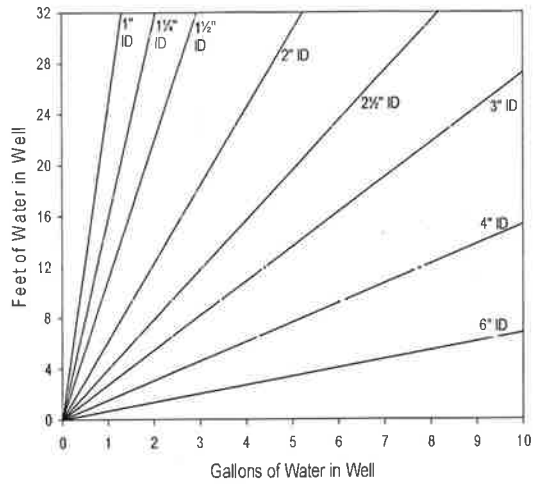
3. SAMPLE COLLECTION: Method: _____

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
MW-03-GW-~~033115~~ 040115	40mL VOA	3	HCl	VOCs	1100
MW-03-GW-~~0331~~ 040115	1L AG	2	-	SVOCs	1100
MW-03-GW-040115	250mL HDPE	1	HNO_3	TAL Metals	1100

Comments _____

Signature _____ Date _____

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (ft)	Color/Odor
1000		15.40	6.02	0.423	3.42	97.9		475	50.63	clear
1005		15.32	6.00	0.420	3.28	96.0	5.12	475	50.63	"
1010		15.21	5.99	0.412	3.11	105.6		475	50.63	"
1015		15.29	5.97	0.403	3.16	99.7		475	50.63	"
1020		15.37	5.96	0.404	3.07	100.2	5.11	475	50.63	"
1025		15.34	5.95	0.401	3.11	102.5	2.98	475	50.63	"
1030	10 gal	15.34	5.94	0.400	3.05	103.5		475	50.63	"
1035		15.32	5.95	0.398	3.09	107.7	2.41	475	50.63	"
1040		15.35	5.93	0.387	2.90	108.6		475	50.63	"
1045		15.37	5.92	0.385	2.76	107.3	2.29	475	50.63	"
1050		15.40	5.93	0.385	2.70	108.4	2.81	475	50.63	"
1055		15.43	5.91	0.379	2.74	107.9		475	50.63	"

Well ID: MW-04

AECOM

Low Flow Ground Water Sample Collection Record

Client: ~~Consolidated Edison of New York~~ Navy NWIRP Date: 4/1/15 Time: Start 1240 am/pm
Project No: 60266526 ~~50299025~~ Finish _____ am/pm
Site Location: ~~3rd Avenue Yard St~~ Bethpage
Weather Conds: 45F Partly cloudy Collector(s): JC

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length _____ c. Length of Water Column _____ (a-b) Casing Diameter/Material 4" PVC 13.3 gal

b. Water Table Depth 57.30 d. Calculated System Volume (see back) 13.3 gal

2. WELL PURGE DATA

a. Purge Method: Bladder pump w/ drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature	3%	-D.O.	10%
- pH	± 1.0 unit	- ORP	± 10mV
- Sp. Cond.	3%	- Drawdown	< 0.3'

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	U71977X
	Hanna	HI98703	

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1255		14.22	6.41	0.129	6.90	123.1		450	51.32	clear
1300		14.96	6.15	0.131	6.52	129.2		450	51.32	"
1305		15.10	5.98	0.131	6.50	134.9		450	51.32	"
1310		14.99	5.90	0.132	6.28	141.6	6.51	450	51.32	"
1315		15.09	5.88	0.132	6.09	143.8		450	51.30	"
1320		15.14	5.87	0.133	5.91	146.4		450	51.30	"
1325		15.16	5.87	0.135	5.54	145.1		450	51.30	"

(continued on back)

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☐
Has required turbidity been reached	☐	☐	☐
Have parameters stabilized	☐	☐	☐

If no or N/A - Explain below.

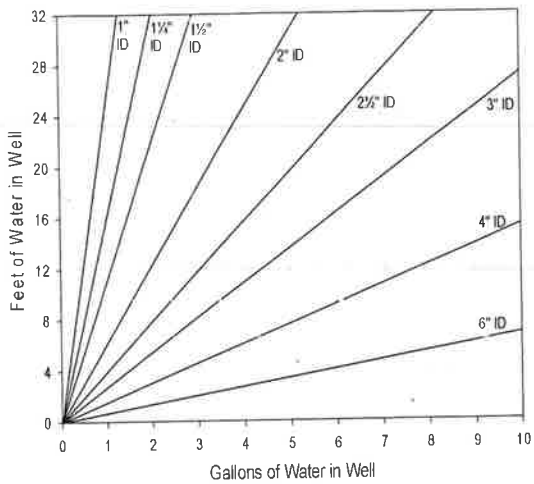
3. SAMPLE COLLECTION: Method: Low flow

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
MW-04-GW-040115	40mL VOA	3	HCl	VOCs	1440
MW-04-GW-040115	1L AG	2	—	SVOCs	1440
MW-04-GW-040115	250mL HDPE	1	HNO_3	TAL Metals	1440
MW-04-GW-040115	250mL HDPE	1	—	ANC by Alkalinity (SM2320B)	1440

Comments

Signature _____ Date _____

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (ft)	Color/Odor
1330	5 gal	15.20	5.84	0.137	5.01	148.1		450	51.32	clear
1340		15.16	5.84	0.138	4.61	150.1	2.05	450	51.32	"
1355		15.17	5.84	0.137	4.71	152.3	1.49	450	51.32	"
1400	~~10 gal~~	15.14	5.83	0.137	4.52	153.9		450	51.32	"
1405	10 gal	15.12	5.83	0.137	4.40	154.8	1.37	450	51.32	"
1410		15.14	5.83	0.135	4.61	155.0		450	51.32	"
1415		15.17	5.83	0.135	4.64	156.0	1.21	450	51.32	"
1420		15.19	5.84	0.135	4.57	156.0		450	51.32	"
1425		15.21	5.83	0.135	4.51	156.9	1.39	450	51.32	"
1430		15.27	5.83	0.134	4.58	157.0		450	51.32	"

Well ID: MW-06

AECOM 1

Low Flow Ground Water Sample Collection Record

Client: [redacted] Date: 3-31-15 Time: Start 1325 am/pm
Project No: [redacted] Finish _____ am/pm
Site Location: [redacted]
Weather Conds: 35°F Cloudy Collector(s): RP SC

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 61.91 c. Length of Water Column _____ (a-b) Casing Diameter/Material 2"

b. Water Table Depth 46.89 d. Calculated System Volume (see back) _____

2. WELL PURGE DATA

a. Purge Method: _____

b. Acceptance Criteria defined (see workplan)

- Temperature	3%	-D.O.	10%
- pH	± 1.0 unit	- ORP	± 10mV
- Sp. Cond.	3%	- Drawdown	< 0.3'

c. Field Testing Equipment used: Make YSI Model _____ Serial Number 77506

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1330		15.34	6.20	.201	1.24	33.3	7000	400	46.90	rust.
1340	[redacted]	15.30	6.31	0.226	[redacted].93	14.2	412	400	46.90	rust red
1345	12	15.33	6.33	0.230	0.90	11.1	208	400	46.9	"
1350		15.29	6.37	0.230	0.83	-7	104.7	400	46.9	"
1355	13	15.29	6.37	0.232	0.83	-5	37.6	400	46.9	clearing.
1400	21	15.20	6.38	0.233	0.83	-10.3	11.1	400	46.9	"
1405		15.20	6.39	0.232	0.83	-13.5	7.72	400	46.9	clear

(continued on back)

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☐
Has required turbidity been reached	☐	☐	☐
Have parameters stabilized	☐	☐	☐

If no or N/A - Explain below.

_____

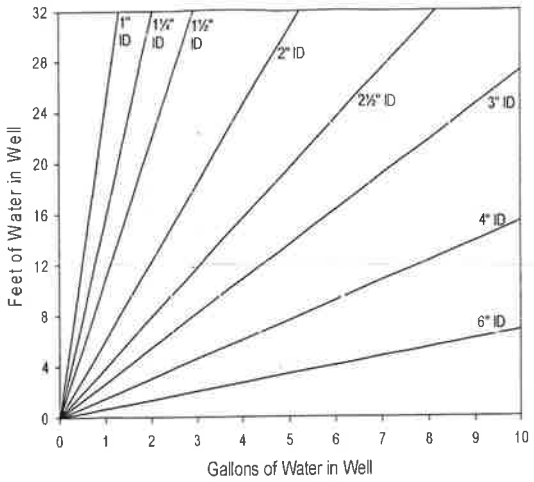
3. SAMPLE COLLECTION: Method: _____

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
MW-06-GW-033115					1410

Comments _____

Signature _____ Date _____

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (ft)	Color/Odor

Well ID: MW-07

AECOM

Low Flow Ground Water Sample Collection Record

Client: [redacted] Navy NWIRP Date: 3/31/15 Time: Start 1335 am/pm
Project No: 60266526 [redacted] Finish _____ am/pm
Site Location: [redacted] Bethpage
Weather Conds: 40's F, sprinkling Collector(s): JC

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length _____ c. Length of Water Column _____ (a-b) Casing Diameter/Material _____

b. Water Table Depth _____ d. Calculated System Volume (see back) _____

2. WELL PURGE DATA

a. Purge Method: Bladder pump w/ drop tube

b. Acceptance Criteria defined (see workplan)

- Temperature	3%	-D.O.	10%
- pH	± 1.0 unit	- ORP	± 10mV
- Sp. Cond.	3%	- Drawdown	< 0.3'

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	V7 19724
	Hanna	H198703	"

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1345		14.43	6.48	0.237	6.70	90.6	56.8	500	46.64	Brown
1350		14.49	6.24	0.210	6.54	86.8		500	46.64	Clearing
1355		14.53	6.15	0.196	6.60	97.2	21.4	500	46.64	"
1400		14.52	6.05	0.188	6.64	108.2	11.07	450	46.64	"
1405		14.40	6.02	0.184	6.77	112.0	9.41	450	46.65	"
1410		14.30	5.97	0.181	6.82	113.2	7.14	450	46.65	"
1415		14.28	5.93	0.177	6.85	114.9	5.92	450	46.65	"

(continued on back)

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☐
Has required turbidity been reached	☐	☐	☐
Have parameters stabilized	☐	☐	☐

If no or N/A - Explain below.

_____

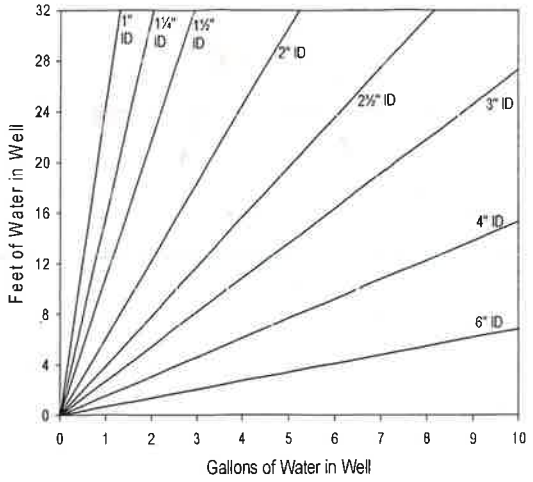
3. SAMPLE COLLECTION: Method: Bladder pump w/ drop tube

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
MW-07-GW-033115	40mL VOA	3	HCl	VOCs	1430
MW-07-GW-033115	1L AG	2	—	SVOCs	1430
MW-07-GW-033115	250 mL HDPE	1	HNO3	TAL Metals	1430

Comments _____

Signature _____ Date _____

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (ft)	Color/Odor
1420		14.21	5.92	0.176	6.54	122.1	2.47	450	46.65	"
1425		14.21	5.92	0.176	6.42	121.1		450	46.65	"

Well ID: MW-08

AECOM

Low Flow Ground Water Sample Collection Record

Client: [redacted] Navy NWIRP Date: 3/31/2015 Time: Start 1020 am/pm
Project No: 60266576 [redacted] Finish _____ am/pm
Site Location: [redacted] Bethpage
Weather Conds: 45°F, partly cloudy Collector(s): JC

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length _____ c. Length of Water Column _____ (a-b) Casing Diameter/Material 2" PVC

b. Water Table Depth _____ d. Calculated System Volume (see back) 6.6 gal

2. WELL PURGE DATA

a. Purge Method: Bladder pump w/ Drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature	3%	-D.O.	10%
- pH	± 1.0 unit	- ORP	± 10mV
- Sp. Cond.	3%	- Drawdown	< 0.3'

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	MPS 556	U71977x
	Hanna	HI 98703	

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1040		13.38	7.93	1.161	9.69	65.0	>1000	450	47.41	Brown/Earthy
1045		13.40	7.53	1.197	9.73	69.3	215	450	46.81	" clearing
1050		13.39	6.97	1.185	9.24	81.3	21.1	375	47.41	"
1100		13.54	6.55	1.127	9.10	92.4	~~2.37~~	400	47.46	"
1105	5 gal	13.49	6.42	1.132	9.08	96.1	2.87	400	47.46	"
1110		13.40	6.35	1.113	8.99	101.4		400	47.46	"
1115		13.49	6.26	1.108	8.89	102.1	2.44	400	47.46	"

(continued on back)

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☒	☐	☐
Has required turbidity been reached	☒	☐	☐
Have parameters stabilized	☒	☐	☐

If no or N/A - Explain below.

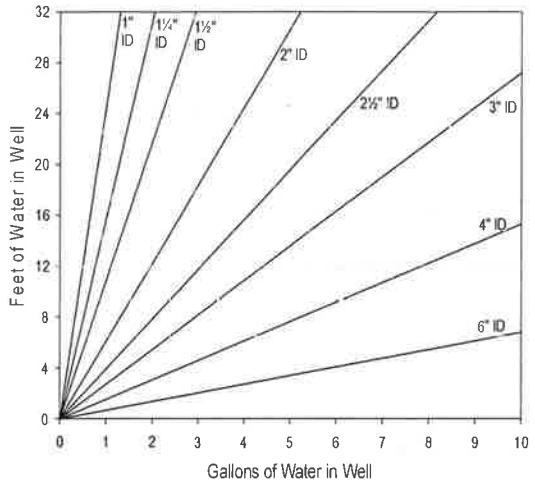
3. SAMPLE COLLECTION: Method: Bladder pump w/ drop tube assembly

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
MW-08-GW-033115	40mL VOA	3	HCl	VOCs	1125
MW-08-GW-033115	1L AG	2	–	SVOCs	1125
MW-08-GW-033115	250mL HDPE	1	HNO_3	TAL Metals	1125

Comments

Signature _____ Date _____

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (ft)	Color/Odor

Well ID: MW-09

AECOM

Low Flow Ground Water Sample Collection Record

Client: [redacted] Date: 3-31-15 Time: Start 1010 am/pm
Project No: [redacted] Finish _____ am/pm
Site Location: [redacted]
Weather Conds: 40°F Sunny Collector(s): RP / JC

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 62.9 c. Length of Water Column _____ (a-b)

Casing Diameter/Material 2" PVC

b. Water Table Depth 47.97 d. Calculated System Volume (see back) _____

2. WELL PURGE DATA

a. Purge Method: Bladder pump w/ Drop tube assembly

b. Acceptance Criteria defined (see workplan)

- Temperature	3%	-D.O.	10%
- pH	± 1.0 unit	- ORP	± 10mV
- Sp. Cond.	3%	- Drawdown	< 0.3'

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	556 MPS	
	Hanna	Turb. bidity meter	

Time (24hr)	Volume Removed ~~(Liters)~~ gal	Temp. (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1015	~~425~~	14.57	6.26	1.87	11.76	22.9	7.35	475	47.98	clear
1020		14.56	6.11	0.203	11.20	26.9	7.95	475	47.98	clear
1025	2.5 gal	14.52	6.11	0.202	11.15	28.4	7.85	475	47.99	clear
1030	3.25	14.54	6.12	0.208	11.07	32.4	4.64	475	47.99	clear
1035		14.78	6.11	0.204	10.83	40.2	4.49	475	48.0	cl.
1040	4.0	14.80	6.08	0.211	10.84	40.8	3.45	475	47.99	cl.
1045		14.82	6.08	0.208	10.85	42.1	3.39	475	47.99	cl.

(continued on back)

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☐
Has required turbidity been reached	☐	☐	☐
Have parameters stabilized	☐	☐	☐

If no or N/A - Explain below.

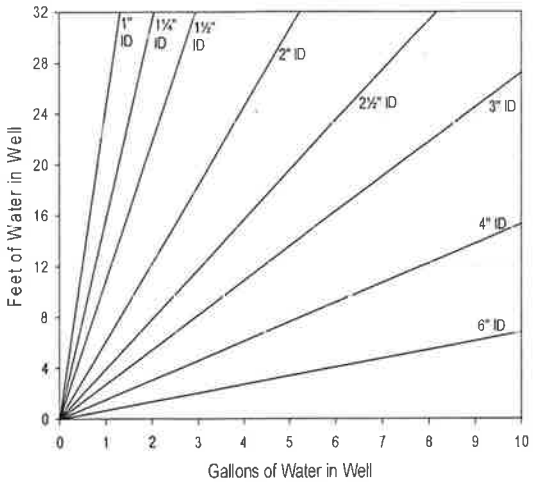
3. SAMPLE COLLECTION: Method: _____

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
MW-09-GW-033115	1 Plastic 250ml		HNO_3	TAL metals	1110
	2 Ambers			SVOC	
MS/MSD + Dup collected	3 VOA			VOC	

Comments _____

Signature [signature] Date 3-31-15

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (ft)	Color/Odor
1050		14.87	6.08	0.209	10.75	45.7	2.90	475	17.8	Clear
1055		14.89	6.07	0.213	10.75	49.0	2.87	475	17.9	Clear

Well ID: MW-10

AECOM

Low Flow Ground Water Sample Collection Record

Client: [redacted] Date: 4-1-15 Time: Start 1210 am/pm
Project No: [redacted] Finish _____ am/pm
Site Location: [redacted]
Weather Conds: 50°F Sunny Collector(s): RP

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 59.50 c. Length of Water Column _____ (a-b)

Casing Diameter/Material 2" PVC

b. Water Table Depth 45.27 d. Calculated System Volume (see back) _____

2. WELL PURGE DATA

a. Purge Method: _____

b. Acceptance Criteria defined (see workplan)

- Temperature	3%	-D.O.	10%
- pH	± 1.0 unit	- ORP	± 10mV
- Sp. Cond.	3%	- Drawdown	< 0.3'

c. Field Testing Equipment used:

	Make	Model	Serial Number
	YSI	7780L	
	Hanna Turbid. meter		

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet) 45.29	Color/Odor
1235		15.37	6.45	0.200	10.08	45.4	>1000	450	[redacted]	red/rusty
1240		15.44	6.30	0.210	10.05	50.4	498	450	45.29	red/rusty
1250		15.25	6.15	0.231	9.71	59.0	101	10+450	45.29	orange to red
1255		15.28	6.14	0.234	9.77	60.2	64	450	45.29	[redacted]/opaque wht.
1300		15.43	6.13	0.240	9.76	64	18.5	450	45.29	clear
1305		15.30	6.10	0.244	9.92	67.6	14.1	450	45.29	clear
1310		15.8	6.11	0.240	9.91	68.0	9.8	450	45.29	clear

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☐
Has required turbidity been reached	☐	☐	☐
Have parameters stabilized	☐	☐	☐

If no or N/A - Explain below.

(continued on back)

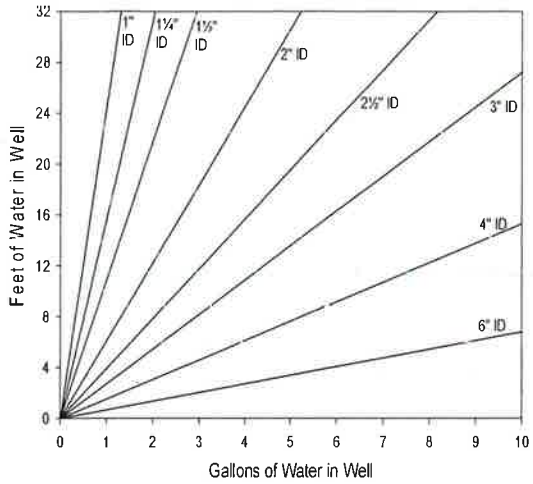
3. SAMPLE COLLECTION: Method: _____

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
					1325

Comments _____

Signature _____ Date _____

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (ft)	Color/Odor
MW-99 0950		14.19	8.96	0.196	2.97	-4.6	23.2	400	49.29	cl
0955		14.19	8.96	0.196	3.03	-4.5	19.8	400	49.30	cl
1000		14.27	8.93	0.204	3.20	-3.4	19.4	400	49.30	cl
1005		14.24	8.90	0.203	3.39	-3.5	16.5	400	49.30	cl
1010	9 gal	14.14	8.81	0.205	3.86	-2.8	12.5	400	49.30	cl
MW-10 1315	7 gal	15.15	6.10	0.235	9.90	68.9	8.5	400	49.30	cl.
sample 1325										

Well ID: MW-4

AECOM

Low Flow Ground Water Sample Collection Record

Client: [redacted] Date: 4-1-15 Time: Start [redacted] 0840 am/pm
Project No: [redacted] Finish _____ am/pm
Site Location: [redacted]
Weather Conds: [redacted] 45°F Sunny Collector(s): RP / JC

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 63.93 c. Length of Water Column _____ (a-b)

Casing Diameter/Material 2" PVC

b. Water Table Depth 49.02 d. Calculated System Volume (see back) _____

2. WELL PURGE DATA

a. Purge Method: Bladder pump w/ drop tubing Setup

b. Acceptance Criteria defined (see workplan)

- Temperature	3%	-D.O.	10%
- pH	± 1.0 unit	- ORP	± 10mV
- Sp. Cond.	3%	- Drawdown	< 0.3'

c. Field Testing Equipment used:

	Make	Model	Serial Number
	Hanna		
	YSI		77300

Time (24hr)	Volume Removed (Liters)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
0910		13.88	8.48	0.299	2.39	41.8	71000	400	49.29	Gray Silty
0915		13.56	8.88	0.264	1.35	17.5	318	400	49.30	Hazey Silty
0925		13.48	8.94	0.251	1.24	11.6	153	400	49.29	
0930		14.16	9.00	0.219	1.36	4.1	102.7	400	49.30	clear
0935		14.06	9.04	0.194	1.62	-1.2	48.9	400	49.30	cl.
0940	5 gal	14.12	9.03	0.194	2.03	-2.7	29.6	400	49.30	cl.
0945		14.11	9.01	0.193	2.24	-3.3	27.0	400	49.30	cl.

(continued on back)

d. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	☐	☐	☐
Has required turbidity been reached	☐	☐	☐
Have parameters stabilized	☐	☐	☐

If no or N/A - Explain below.

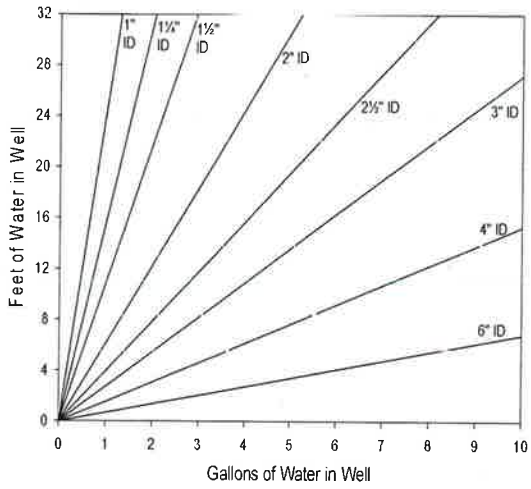
3. SAMPLE COLLECTION: Method: [redacted]

Sample ID	Container Type	No. of Containers	Preservation	Analysis Req.	Time
MW-11-GW-040115	1 L Amber	2	NA	SVOC	1015
	40 Vocs	3	HCl	VOC	
	Plastic	1	HNO_3	TAL Metals	

Comments

Signature Rob Papaz Date

Purge Volume Calculation



Volume / Linear Ft. of Pipe		
ID (in)	Gallon	Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

Time (24 hr)	Volume Removed (Liters)	Temp (°C)	pH	Spec. Cond. (µS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (ft)	Color/Odor
0950		14.19	8.96	0.196	2.97	-4.6	23.2	400	49.29	cl
0955		14.19	8.96	0.196	3.03	-4.5	19.8	400	49.30	cl
1000		14.24	8.93	0.204	3.20	-3.4	19.4	400	49.30	cl
1005		14.24	8.90	0.203	3.39	-3.5	16.5	400	49.30	cl
1010	9 Gal	14.14	8.86	0.205	3.86	-2.8	12.5	400	49.30	cl